Teacher Readiness:

Teacher attitudes, opinions and perspectives towards facilitating positive mental health in the

classroom

By

Jillian Diane Ball

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Abstract

Teachers require the skills and knowledge to recognize signs and symptoms of mental health problems, have knowledge about referral to appropriate services, and know how to support mental health in their classrooms. This mixed methods study examined teachers' perceptions of the need for mental health training, provided an opportunity to engage in a Mental Health Literacy (MHL) institute, assessed teachers' knowledge of mental health before and after engaging in the MHL institute, and allowed teachers to provide recommendations surrounding future mental health training. In this study, 136 teachers responded to the pre-test (with 116 teachers responding to all of the pre-test questions), 79 teachers requested to be added to the online institute, 36 teachers completed the post-test, and 23 teachers were able to be matched as completing the pre- and post-test. Of these 23 participants (19 were female, 3 male, and 1 chose not to identify), 10 identified as graduate students, and 13 as undergraduates. The participants engaged in an online MHL institute and completed a pre- and post-test surrounding their mental health knowledge, attitudes, and concerns. Compared with initial pre-test data, results demonstrated improvements in teacher knowledge, attitudes concerning mental health, and teacher efficacy. The findings of this study suggest that the participants recognize the need for mental health education but do not feel adequately prepared to recognize mental health problems or feel knowledgeable in how to support students with mental health concerns. Teachers in this study revealed the need for professional development addressing effective strategies, coping tools, and resources.

Keywords: mental health in schools, mental health literacy, and teachers' perceptions of mental health training

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Chapter 1: Introduction

Classroom teachers play a significant role in the lives of their students. Outside of the home, students spend a large portion of their day in school, making their interactions, experiences, and school environment a predictor of their well-being and success (Oberle & Schonert-Reichl, 2016). With the implementation of inclusion within public education, it is important that teachers be prepared to meet the needs of all students including those with mental illness and/or problems. Everyone has mental health just like everyone has physical health, but mental health is more than the presence or absence of disease or illness (World Health Organization, 2018). Mental health is defined as a "state of well-being in which an individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and is able to make a contribution to his or her community" (World Health Organization, 2018, Key Facts, para. 2).

For the purpose of this research, mental health literacy (MHL), mental illness, mental distress, and mental health problems (issues) are key terms used throughout the literature and need to be defined. MHL encompasses knowledge and skills to "increase the understanding of mental health and mental disorders, reduce stigma, help recognize and prevent mental disorders, and facilitate help-seeking behaviours" (Wei, Hayden, Kutcher, Zygmunt, & McGrath, 2013, p. 110). Mental illness is characterized by "clinically significant disturbance in an individual's cognition, emotion regulation, or behaviour that reflects a dysfunction in the psychological, biological, or developmental processes underlying mental functioning" (American Psychiatric Association, 2013, Definition of a Mental Disorder, para 2). Mental distress occurs when an individual does not have the ability to cope with a stressful event that threatens their physical or mental health, resulting in emotional turmoil (Drapeau, Marchand, & Beaulieu-Prévost, 2012).

Mental health problems span from a 'simple' problem to more complex concerns and how the person adapts to these changes. It can include the everyday worries people experience to more serious conditions such as depression, anxiety, or hallucinations (Mental Health Foundation, 2018). For example, in the case of the death of a loved one, not everyone will cope with grief in the same way, as some people may be able to cope on their own, while others may require further professional help (Kutcher, 2016).

One in five young people experience a mental health problem at any given time, with symptoms arising in childhood and adolescence for 70% of mental health and addiction issues (Government of Ontario, 2012). Teachers need to learn how to teach students who experience difficulties with their mental health, as it is estimated that by 2020, the prevalence of neuropsychiatric disorders in children will continue to rise, making them one of the five leading causes of childhood illness, disability and death (World Health Organization, 2001). According to *Children's Mental Health Ontario, Kids Can't Wait* (2018), the number of emergency department visits has risen by 63%, with a 67% increase in hospitalizations of Ontario youth/children experiencing mental health problems since 2006-2007.

With the rising prevalence of mental health problems in young people, teachers need to be aware of how to recognize and support students with mental health problems as it may impact their lives. Mental health problems can affect students by: affecting their emotional well-being, their ability to learn, and may cause them to drop out of school (Meldrum, Venn, & Kutcher, 2008).

Mental Health Problems

Society tends to focus on physical health rather than discuss mental health problems. According to LaFee (2013), people are concerned with being in good physical health, but shy

away from discussing mental health. Perhaps it is the stigma associated with mental illness or the lack of knowledge and understanding of mental health problems that lead people to avoid discussing mental health and focus only on physical health and illnesses.

Mental health problems cover a broad range of symptoms. Froese-Germain and Riel (2012) outlined some common types of mental health problems or illnesses in adolescents and children as follows: mood disorders, anxiety disorders, eating disorders, and substance abuse and dependency disorders. The *National Alliance of Mental Illness* (2018) estimates that 1 in 5 adolescents between 13 to 18 years of age will have a serious mental illness, broken down into: 20% living with a mental health problem, 8% having an anxiety disorder, 10% a behaviour or conduct disorder, and 11% a mood disorder. The Canadian Mental Health Association (2018) estimated that 10-20% of youth either have or will be affected by a mental illness or disorder with 3.2 million youths between the ages of 12 to 19 at risk of developing depression.

Teacher Readiness in Teaching Students with Mental Health Problems

Given the prevalence of mental health problems, at least one student in the average classroom is mentally ill (LaFee, 2013). Students spend a large portion of their lives in school, making schools the first and natural place to seriously support the factors that affect students' mental well-being (LaFee, 2013). Unfortunately, in the United States of America, only 20% of children with mental illnesses will be identified and provided services, and in Canada, 1 out of 5 children who need mental health services receive them (Canadian Mental Health Association 2018; LaFee, 2013). According to LaFee (2013), the remaining children are unlikely to receive any formal help. Raising awareness of the number of children who come to school with mental health problems and providing appropriate referrals and support is the best way to ensure that students achieve their potential in school and life (Rossen & Cowan, 2015).

It is important to detect and treat mental health problems as early as possible, and because of the high prevalence of early onset of mental health problems (70%), the Canadian Paediatric Society (2012), suggested that early detection, prevention and, intervention is more effective and less expensive than mental health treatments. Untreated mental health problems can have a significant impact on classrooms and school communities through: discipline and safety, disruptions in instructional time, and teacher stress; and can cause the individual student to experience difficulty following instruction, concentrating, engaging in school work, and maintaining self-control (Rossen & Cowan, 2015). Classroom teachers play a crucial role in promoting mental health for youth by supporting their students, recognizing difficulties, and being able to refer students to the appropriate services or resources if required (Meldrum et al., 2008). Teachers, when properly educated, can help detect problems early and make referrals that connect students with interventions.

Several studies have included surveys of teachers concerning their perceptions surrounding teaching students with mental health problems and found that teachers recognized the need for training in mental health but lacked confidence in supporting students with mental health problems (Hussein & Vostaris, 2013; McLean, Abry, Taylor, Jimenez, & Granger, 2017; Powers, Wegmann, Blackman, & Swick, 2014; Reinke, Stormont, Herman, Puri, & Goel, 2011). Teachers are often the first point of contact in referring students for interventions for mental health problems. Walter, Gouze, and Lim (2006) conducted a needs assessment of student mental health problems using survey data from 119 elementary school, classroom and special education teacher participants. The results suggested that teachers lack information and training, which hindered their ability to support students' mental health problems.

One American based survey of 292 early childhood and elementary teacher participants (classroom and special educators) from five school districts (rural, suburban, and urban) with experience ranging from 1-37 years, revealed that a large majority of the teachers surveyed recognized the need for mental health services and felt that it should be their school's role to offer such services (Reinke et al., 2011). When teachers in this study were asked if they had the level of knowledge required to meet the mental health needs of students in their classroom only 4 percent strongly agreed (Reinke et al., 2011). In another study, researchers interviewed with 32 teachers (19 women, 11 men), from 32 different schools in England. This study highlighted the need for teacher training to recognize and address mental health problems (Rothi, Leavey, & Best, 2008). Teachers felt burdened by students' mental health problems, lacked confidence in managing mental health problems in their classrooms, often had difficulty identifying students with mental health problems that may require interventions, and experienced discomfort in discussing mental health problems or emotional health with students (Andrews, McCabe, & Wideman-Johnston, 2014).

A review of the literature by Franklin, Kim, Ryan, Kelly, and Montgomery (2012) suggested a collaboration between teachers and mental health professionals and that teachers may have a significant role in the reinforcement of interventions as they can be delivered in the classroom over a longer period of time. As teachers see students every day, they should be given appropriate resources and supports to help the teachers recognize and identify possible mental illnesses in their students (Whitley, Smith, & Vaillancourt, 2012).

Local Context in Newfoundland and Labrador

The Newfoundland and Labrador Department of Education, Student Support Services Division states that to receive supports for an exceptionality for emotional, mental, and/or

behaviour disorders, a student must be diagnosed by and under the continuing care of an appropriate medical or mental health professional (Department of Education and Early Childhood Development, 2016). Unfortunately, mental health problems are not always diagnosed at a young age; medical personnel may not feel confident in making a mental illness diagnosis at a young age, as some behaviours in young children can be temporary or developmental in nature, medical personnel may require additional time to follow the child or allow them to age before determining whether or not a mental illness exists (Department of Education and Early Childhood Development, 2016).

The Premier's Task Force on *Improving Educational Outcomes in Newfoundland and Labrador* was conducted in the 2016-2017 school year and sought information from: students, parents, teachers, organizations, and the general public. The purpose of the task force was to review the current education system (including early learning, mathematics, reading/literacy, inclusion, mental health and wellness, and other areas), consult with stakeholders and provide recommendations to inform a new Education Action Plan (Government of Newfoundland and Labrador, 2017). Teachers employed within the Newfoundland and Labrador English School District (NLESD) were one of the primary stakeholders consulted as part of this review. The NLESD sent information to educators and parents on behalf of the task force and the Newfoundland and Labrador Teachers Association (NLTA) encouraged teachers to attend sessions and complete the teacher survey. Results from the task force found that stakeholders felt that too many students with mental health problems were not receiving the support and education that they deserve (Government of Newfoundland and Labrador, 2017). Student mental health problems and student wellness were among the top three issues raised by participants during consultations with the task force. Although professional development programs surrounding

mental health were developed and implemented by the NLESD, results of the task force consultations reported that more resources were required to meet the needs and support students with mental health problems in the province (Government of Newfoundland and Labrador, 2017). The task force report outlined several issues surrounding mental health services within the province of NL such as: inadequate school services, poorly defined district-based services, poor communication between departments, difficult referral process beyond the school, and long wait lists (Government of Newfoundland and Labrador, 2017). Essentially, teachers need to be equipped to meet the needs of their students. Most teachers who participated in the task force reported they did not have the knowledge or background information to successfully meet the mental health needs of their students while delivering a full curriculum to a wide range of student abilities in current classrooms (Government of Newfoundland and Labrador, 2017). The Premier's Task Force findings are in alignment with the World Health Organization's (2018) recommendations of mental health promotion through early childhood interventions and activities through schools, which promote a stable, protective, emotionally supportive learning environment.

Rationale for Study

Due to the high prevalence of mental health concerns in our country, it is important that teachers are prepared to support students with mental health problems. The Canadian Coalition for Children and Youth Mental Health is a network of 26 province wide groups in Ontario, consisting of teachers, social workers, hospitals, children's aid societies, psychologists, students and trustees, stated that the number one issue schools are facing is the mental health of students (Brown, 2011). The Canadian Teachers' Federation conducted a study surveying 3, 900 teachers across the country. The results indicated that problems such as: ADHD, learning disabilities,

stress, anxiety, depression, and eating disorders were pressing concerns identified among

teachers and that 87% of them did not feel they had the adequate training to support students

with mental health problems in school (Froese-Germain & Riel, 2012).

The rationale of the current study was to offer a MHL institute (*Facilitating Positive*

Mental Health with Teachers) developed by Dr. Stan Kutcher and other Canadian university

personnel to in-service teachers so that they can gain an understanding of mental health problems

and the impact it has on the education system. Educators may be the first people to recognize the

presence of a mental health problem and should be aware of the signs and symptoms of mental

health problems to refer students to the appropriate personnel and support those students in the

classroom (Marsh, 2016).

Research Questions

This study is driven by three research questions:

1. What is the knowledge base of teachers within the Newfoundland and Labrador English

   School District surrounding their knowledge and ability to support the mental health

   needs of the student population?

2. How did engaging in the MHL institute impact teachers and what are their perceptions of

   this institute?

3. What services, interventions, and support would teachers want offered to improve the

   current practices of teachers and the current education system for students and teachers

   who have mental health problems?

Overview of the Mental Health Literacy Institute

Teacher's participation in a MHL institute can have a positive impact on the school

environment and interactions within the building. Kutcher, Venn, and Szumilas (2009) outlined

several positive effects of the incorporation and promotion of MHL in schools such as enhanced mental health knowledge, change in student and teacher attitudes, decrease in stigma, and the identification of those at risk for mental health problems. However, most teachers, regardless of their level of education, background, or speciality, lack the necessary skills required to meet the mental health needs of students with mental health problems (Froese-Germaine & Riel, 2012). The MHL institute used in this study was developed because most Canadian Faculties of Education did not offer a MHL curriculum resource and the majority of Canadian teachers surveyed by the Canadian Teachers Federation Survey requested more knowledge about mental health and illness (Froese-Germain & Riel, 2012; Kutcher, 2016). This online MHL institute was developed to help address this gap for teachers currently working or studying in the education field.

This curriculum was offered to current in-service teachers, administrators, and guidance counsellors employed by the Newfoundland and Labrador English School District. The MHL institute was designed to improve teachers' knowledge of mental health, enhance understanding of student's mental health concerns, provide information on mental health self-care, and how to connect schools with mental health resources in the community (Kutcher, 2016).

The MHL institute consists of six modules, and within each module participants found PowerPoint presentations, video clips, surveys, activities, and fact sheets. The modules are titled as follows:

- Module 1: Introduction and background. This module provides an overview and definition of MHL and the interrelationship between the three mental health states: mental illness, mental distress, and mental health problems. It also focuses on Canadian

facts and statistics about mental illness and discusses why schools are an important venue in which to address MHL.

- Module 2: Stigma and mental health. This module focuses on the history of mental illnesses and the stigma attached to it. In the past, mental illness was looked at through a negative lens. In recent history, mental health was perceived negatively, and as something not to be discussed due to the stigma involved, but silence is not the answer, and only perpetuates the issues (Kutcher, 2016). Teachers need to be aware of the negative connotations and attitudes that they may portray when it comes to mental illness. Teachers play an important role in helping students change how people with mental illness are perceived and treated.

- Module 3: Understanding the human brain. This module focuses on normal brain development in various stages of life such as: in utero, childhood, and adolescence. It also explains the six main functions of the brain: thinking/cognition, perception/sensing, emotion/feeling, signalling, physical/somatic, and behaviour. It is important to understand how a brain functions and works because we cannot have good mental health without a healthy brain and we cannot understand mental health or mental illness unless we understand how our brain functions.

- Module 4: Understanding mental health, mental illness, and related issues. Module four discusses stress and the importance of learning how to deal with stress to be a functional adult. It also discusses mental illnesses and the purpose and types of treatment. For educators, it is important to remember that their role is to recognize that there may be a problem and refer the individual to the appropriate person, while supporting that student in the classroom. This module also explores the prevalence, symptoms, and treatment of

the following mental, emotional and behaviour disorders in young people: autism spectrum disorder, separation anxiety disorder, attention deficit hyperactivity disorder, social anxiety disorder, obsessive compulsive disorder, oppositional defiant disorder, panic disorder, depression, bipolar disorder, eating disorders, posttraumatic stress disorder, schizophrenia, self-harm, and suicide.

- Module 5: Caring for students and related issues. Module five continues to focus on stress, both positive and negative stress. It is important that teachers create environments where their students are neither under-stressed nor overstressed. This module also focuses on teacher resilience and teacher burnout.

- Module 6: Seeking help. Module six focuses on recognizing the signs that students who may be struggling with mental health problems may be displaying. This module also explores the different types of treatment and support for mental health problems and mental illnesses, as well as what to expect when a student is undergoing treatment. There is a focus on what teachers can do to help students undergoing treatment such as observe any changes in behaviour, reduce stigma in the classroom, keep communication open and provide accommodations if necessary.

Theoretical Framework

A theoretical framework provides a lens through which the researcher views the importance and significance of their study (Lederman & Lederman, 2015). This study drew on a variety of theories including: the competence enhancement model, the burnout cascade/stress contagion model, and stress buffering theories. Lack of educational resources, negative teacher-student relationships, and the classroom environment can evoke stress on both students and teachers. The stress exchanged between teachers and students can be cyclic in nature. By

offering a MHL institute, teachers can become more knowledgeable and improve their attitude towards mental health problems. Teachers can promote positive mental health and mental wellness in their classroom environment and teaching practice. Through stress-buffering and the competence enhancement model, the stress cycle between teachers and students can be significantly reduced or eliminated, breaking down the burnout cascade. By teaching people how to cope with stress, the negative effects of stress may disappear. This theoretical framework provided a rationale for the analysis of data gathered before and after the implementation of the MHL institute offered to teachers within the Newfoundland and Labrador English School District.

Competence Enhancement Model

The competence enhancement model is a preventative framework based on positive psychology developed around Caplan's work which focused on reducing mental illness and promoting mental health (Caplan & Grunebaum, 1967). Caplan's theory focused on three types of prevention: primary (reducing the incidence of mental health problems by modifying the environment, and teaching individuals how to cope with a variety of situations), secondary (reducing the duration of the mental health problem), and tertiary (focusing on reducing the impairment of the mental health problem) (Barry, 2001; Caplan & Grunebaum, 1967). The competence enhancement model also uses positive psychology (the person's strengths) to enhance competence and positive mental health in everyone rather than those with specific mental illnesses. The main idea is to view mental health from a positive rather than a negative lens (Barry, 2001). Mental health problems are often associated with negative connotations. Competence enhancement, like health promotion, focuses on the everyday life of the whole population instead of targeting people at risk for certain diseases (World Health Organisation,

1985). This approach aims to reduce mental health problems and promote mental health by focusing on the person's psychological strengths and resiliency rather than their problems (Barry, 2001). It "assumes that as a person becomes more capable and competent, their psychological well-being improves" (Barry, 2001, p. 29). Teachers who are socially and emotionally competent are more effective in managing their classrooms, more proactive, support their students, and in turn provide an enjoyable and enthusiastic teaching environment (Jennings & Greenberg, 2009). The MHL institute offered in this research provided in-service teachers with knowledge and resources to understand mental health problems and mental wellness in hopes to reduce the negative connotations and stigma that is often associated with mental health problems and mental health illnesses.

Burnout Cascade/Stress Contagion Theory

The term burnout was originally used to describe drug users because their only care and interest was related to drugs and being high (Skovholt & Trotter-Mathison, 2014). Herbert Freudenberger, a New York City practitioner, first used the term burnout in 1974 to describe staff working with drug addicts. The term became popular in the 1980s to describe emotional exhaustion and lack of willingness to work (Skovholt & Trotter-Mathison, 2014). "Burnout results from a breakdown in coping ability over time and is viewed as having three dimensions: emotional exhaustion, depersonalization, and feelings of a lack of personal accomplishment" (Jennings and Greenberg, 2009, p. 497). Key words associated with burnout include: fatigue, frustration, disengagement, stress, helplessness, hopelessness, emotional exhaustion, and cynicism (Skovholt & Trotter-Mathison, 2014). Christine Maslach defined burnout as "the dislocation between what people are and what they have to do. It represents an erosion in values, dignity, spirit, and will" (Skovholt & Trotter-Mathison, 2014, p. 148). She explained burnout as

a consequence of problems and their work environment identifying seven sources of burnout:

work overload, lack of control, insufficient reward, breakdown of community, unfairness,

significant value conflicts, and lack of fit between the person and the job (Skovholt & Trotter-

Mathison, 2014).

Figure 1. *The Burnout Cascade*

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┌─────────────────┐      ┌─────────────────┐      ┌─────────────────┐
│                 │      │                 │      │                 │
│ work enthusaism │ ───▶ │   exhaustion    │ ───▶ │ reduced activity│
│                 │      │                 │      │                 │
└─────────────────┘      └─────────────────┘      └─────────────────┘
         │
         ▼
┌─────────────────┐      ┌─────────────────┐      ┌─────────────────┐
│ emotional       │      │   breakdown     │      │                 │
│ reaction        │      │  (cognition,    │      │ degradation     │
│ (aggression,    │ ───▶ │  motivation,    │ ───▶ │ (lack of        │
│ negativity,     │      │  creativity)    │      │ socialization)  │
│ cynicism)       │      │                 │      │                 │
└─────────────────┘      └─────────────────┘      └─────────────────┘
         │
         ▼
┌─────────────────┐      ┌─────────────────┐
│ psychosomatic   │      │                 │
│ reaction        │      │                 │
│ (examples:      │ ───▶ │     despair     │
│ sleep problems, │      │                 │
│ stomach         │      │                 │
│ problems)       │      │                 │
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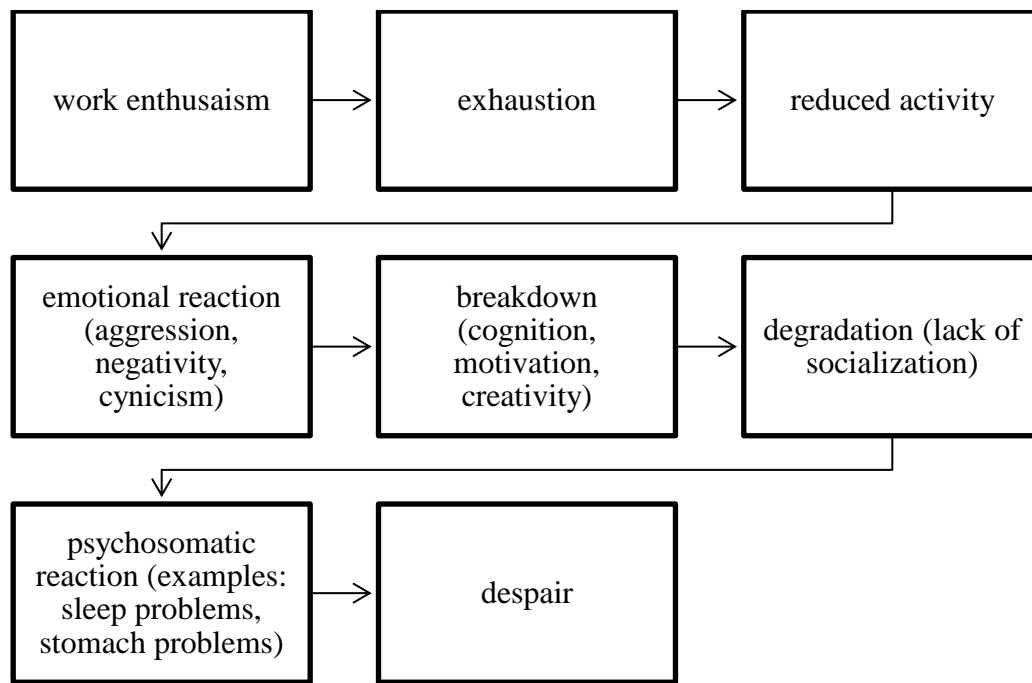
Figure 1. The burnout cascade. Adapted from "Burnout syndrome among teachers," by V. Arnaudova and A. Dordevic, 2014, *Teacher International Journal,* p. 138.

   Researchers have theorized the existence of a burnout cascade in which teachers' and students' stressful experiences are interconnected and cyclical (Oberle & Schonert-Reichl, 2016; Schussler, Jennings, Sharp, & Frank, 2015). The burnout cascade outlines several stages of burnout (see Figure 1). Just as students can flourish in a positive and supportive classroom setting, student health, success, and development can be jeopardized in stressful settings and prompt teachers' use of maladaptive, self-protective coping strategies, which can worsen the learning environment (Oberle & Schonert-Reichl, 2016). These results support the theory of the burnout cascade as the stress of teachers and students had negative effects on emotional reaction, caused breakdown, reduced activity, and work enthusiasm. Teachers need to learn how to

establish and maintain a classroom environment that will promote and support social, emotional, and academic growth (Oberle & Schonert-Reichl, 2016).

The stress contagion theory explains that stressful experiences are interconnected, what one stressed individual experiences can result in a spillover of stress to another within shared social settings (Oberle & Schonert-Reichl, 2016). For the purposes of this research, the spill over is focused on the cyclical nature of stress between students and teachers.

The negative effects and stress of burnout between teachers and students were evident in one Canadian study which used saliva cortisol levels of 406 students in Grade 4 to 7 and their teachers to show the link between classroom teachers' reported burnout levels and their students' physiological stress response (Oberle & Schonert-Reichl, 2016). The results showed that teachers' occupational stress is linked to physiological stress in their students. Research has expanded to demonstrate that negative, resource scarce classroom environments where teachers are not respected had an influx in student behavioural adjustment problems (Oberle & Schonert-Reichl, 2016). Jennings and Greenberg (2009) found that once the classroom climate began to deteriorate, student misbehaviours increased, and this resulted in emotionally exhausted teachers who were at risk of becoming cynical, callous, and feeling they had little to offer. This may result in teachers leaving the teaching profession or staying in a bitter, hostile environment until retirement (Jennings & Greenberg, 2009). Many teachers report high levels of stress in their occupation, which jeopardizes their ability to support students academically, socially, and emotionally (Oberle & Schonert-Reichl, 2016).

The MHL institute used in the current study helps support teachers with preventing stress and promoting mental wellness between themselves and their students. The MHL institute

provided teachers with the knowledge and support to help eliminate or lower the stress levels in themselves and their students, which in turn may stop the cycle.

Stress-buffering

The stress-buffering perspective states that social support buffers the relationship between stress and health (Brown & Lucksted, 2010). Social supports are particularly important for those with mental disorders who often lack social support and positive interactions (Ditzen & Heinrichs, 2014). Social support allows individuals to enhance their coping ability by eliminating or lowering the negativity surrounding stressful experiences and the impact those experiences have on mental health. This is made possible because social supports provide a positive effect on the individual; eliminating the stressful experience and helping the individual cope with the stressful experience (Brown & Lucksted, 2010). A study examined the physical effects of stress by focusing on blood pressure and heart rate during stressful situations. The results generally showed that positive social supportive behaviour had positive effects on physical health (reducing blood pressure and heart rate) linking socially supported individuals to lead healthier, happier lives (Ditzen & Heinrichs, 2014). Positive social interactions that facilitate positive mental health occur through enjoyable positive settings and social interactions (Brown & Lucksted, 2010). Stress-buffering educates teachers to eliminate or cope with the stress before it arises.

Stress-buffering ties the previous two models together. The competence enhancement model educates teachers on how to cope with stress, which can eliminate burnout as teachers feel supported in the school and have positive relationships to help them manage their stress levels. Stress-buffering provides a social support system which can be utilized to help with the social and emotional well-being of students and teachers. For example, teachers are in a profession

where they cannot just get up and leave their classroom if they begin to experience stress in their environment (Jennings & Greenberg, 2009). Teachers who have positive social supports in their personal or professional life may feel the support help alleviate some of the negative effects of their career such as anxiety or the physical effects of stress (Ditzen & Heinrichs, 2014). Stress-buffering and competence enhancement are preventive measures. By educating teachers about the social and emotional well-being of themselves and their students and providing them with the proper resources, tools, and support systems, they will be better equipped to handle the everyday stresses of teaching which may eliminate teacher burnout (Jennings & Greenberg, 2009).

Figure 2. Theoretical Framework of Teacher/Student Mental Wellness.
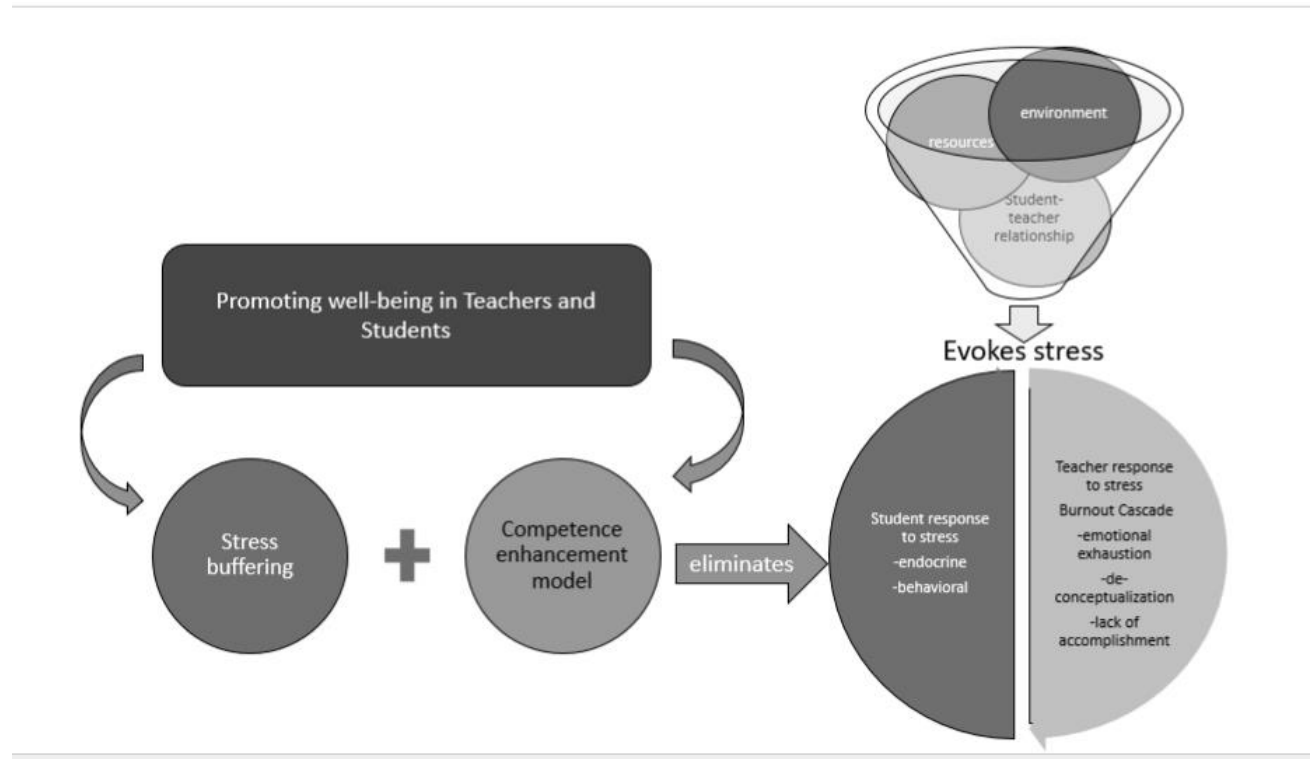
In order for teachers to understand how to support students with mental health problems, they must first have mental health knowledge, have positive attitudes and opinions towards individuals experiencing mental health problems, and recognize the need for professional development surrounding mental health of students and teachers (Atkins & Rodger, 2016). A review of literature was conducted on mental health of students and the attitudes and perspectives of teachers' supporting students with mental health needs. The literature review was used to guide the current research in understanding teachers' knowledge, attitudes, and perceptions towards facilitating positive mental health in the classroom.

Chapter 2: Literature Review

A review of the literature pertaining to teaching and mental health was conducted using the Memorial University of Newfoundland and Labrador online library database. The library search used the terms: 'teacher mental health', 'teacher burnout', 'students with mental health issues', 'mental health education', 'mental health in schools', 'resilience in mental health', 'mental health literacy', 'teacher preparedness', 'teacher perspectives on mental health', 'teacher education', and 'effective professional development' covering the period of 2012 to 2017. The purpose was to probe the most recent research through EBSCO host, Elsevier, ProQuest Education Database, Google Scholar, and Sage Premier. The intention was to obtain an overview of previous research published in North American periodicals relating to teachers' knowledge, attitudes, and perceptions regarding preparedness in teaching students with mental health problems.

A decision was made to also examine pre-service education programs in Canada and whether pre-service teachers felt the need to learn about mental health. An in-depth review of topics pertaining to the MHL institute was performed using search terms derived from the specific topics covered in each of the six modules used in this study. After reviewing the mental health institute, a further search was performed using the keywords 'mental health in children', 'mental health stigma', 'brain development in children', 'student mental health', 'mental health stigma', and 'mental health treatment for children'. Emphasis was placed on previous studies surveying teachers and their readiness to support students with mental health problems. Articles that focused on adult mental health or mental health concerns outside of the school setting were eliminated. Literature with a Canadian context was first examined and then expanded to include

North America and other countries based on their relevance of topics concerning the previously mentioned keywords.

The MHL institute is a web-based, self-paced curriculum consisting of six modules. It was offered to in-service teachers within the NLESD as it was identified that there was a lack of MHL curriculum within existing Bachelor of Education programs across Canada. Within Newfoundland and Labrador the Premier's Task Force noted student mental health wellness as one of the top three issues in education within the province (Carr, Wei, Kutcher, & Heffernan, 2017; Government of Newfoundland and Labrador, 2017). The MHL institute was offered to teachers in NLESD as it was found to have several positive implications when implemented in schools in other parts of Canada. Canadian research demonstrated positive effects on improved mental health knowledge, a decrease in mental health stigma, and an enhancement in help-seeking efficacy when MHL was implemented and promoted in schools (Carr et al., 2017; Kutcher & Wei, 2014; Pinfold, Stuart, Thornicroft, & Arboleda-Florez 2005;).

By offering a MHL institute in a simple, economical, and effective way, teachers can integrate mental health topics into existing curriculum rather than teaching mental health in isolation (Kutcher & Wei, 2014). This MHL institute was offered to teachers within the NLESD to help increase their knowledge and ability to support students with mental health concerns that may be in their classrooms. This MHL institute was developed to help inform teachers and provide background knowledge about various mental health problems. Decades of research and experience has "laid a solid foundation and framework for effectively providing mental health services in schools that protect student well-being, promote learning, and improve access" to mental health services (Rossen & Cowan, 2015, p. 13). The MHL institute used in this study

acted as a resource to promote MHL in schools. It was offered to in-service teachers to help

bridge the gap of mental health knowledge that pre-service programs appear to be lacking.

Pre-service Programs and Teachers' Perspectives on Student Mental Health

Canadian researchers (Rodger et al., 2014) conducted an environmental scan, interviews,

and focus groups that included teachers from New Brunswick, Quebec, Northern Ontario,

Southwestern Ontario, Alberta, and British Columbia. All focus groups and interview responses

indicated that after completing their Bachelor of Education Program, teachers did not feel

prepared to identify and support the mental health needs of the students in their classroom

(Rodger et al., 2014). Atkins and Rodger (2016) also completed a review of teacher education

courses available across Canada and found that teacher education programs were being called

upon to meet the needs of the community, including supporting students' mental health and

building resilience to stress and burnout in emerging teachers. Another study surveyed teachers

concerning their education and opinions based on their ability to support mental health problems

in the classroom. Seventy-five teachers from three school boards in Southwestern Ontario were

surveyed, and only 1.3 percent felt prepared upon graduation from their Bachelor of Education

program, while 5.3 percent indicated that their Bachelor of Education programs offered

mandatory mental health courses (Andrews et al., 2014).

The Faculty of Education at Memorial University of Newfoundland offers several

Bachelor of Education Degrees, including Primary/Elementary as a first degree,

Primary/Elementary as a second degree, Intermediate/Secondary as a second degree, and

Intermediate /Secondary conjoint with technology. For this research we focused on the

Primary/Elementary and Intermediate/Secondary programs. Students who are completing the

Bachelor of Education in Primary and Elementary are required to take three courses that will

help prepare pre-service teachers for teaching students with mental health problems (Education 3618 - the Nature of the Primary/Elementary School Child Development; Education 3619 - the Nature of the Primary/Elementary School Child, Learning and Cognition; and Education 4240 - Introduction to the Exceptional Learner). Pre-service teachers in the Intermediate/Secondary stream are also required to take Education 4240 as well as Education 4242 - Identification and Remediation of Learning Difficulties.

An examination of the Memorial University of Newfoundland and Labrador Academic Calendar (2018) was used to identify relevant courses in the Bachelor of Education programs to determine if any courses would cover topics of mental health. Each program's courses were broken down and the descriptions read to determine relevance to mental health in the classroom. Education 3618 - the Nature of the Primary/Elementary School Child Development course provides awareness and understanding of the origins of child behaviour and competence. It focuses on the development of the "normal" child and compares/contrasts the "normal" child with "exceptional" individuals (MUN Academic Calendar, 2018). Primary/Elementary pre-service teachers are also required to take Education 3619 - the Nature of the Primary/Elementary School Child, Learning and Cognition. This course introduces human learning, motivation, and cognition. The course focuses on typical development with some attention on the exceptional learner (MUN Academic Calendar, 2018). Pre-service teachers in the Primary/Elementary or Intermediate/Secondary stream are required to take Education 4240 - an Introduction to the Exceptional Learner. This course focuses on meeting the special needs of exceptional learners, issues of exceptionalities, and a consideration is given to selected categories of exceptionalities (MUN Academic Calendar, 2018). Pre-service teachers in the Intermediate/Secondary stream are also required to take Education 4242 - Identification and Remediation of Learning Difficulties.

This course focuses on the identification and remediation techniques to support students with learning difficulties (MUN Academic Calendar, 2018). While pre-service teachers will gain an understanding of brain development in the primary/elementary program, unless they have taken courses outside of the B.Ed. program with a focus on mental health, they may not be adequately prepared to teach students with mental health problems. Further training and professional development may be required once they enter their teaching profession.

Professional Development

Professional development should be offered to in-service teachers on mental health problems, disorders, and illnesses. Teachers need an awareness of the psychological development of children and adolescents because they have daily contact with students and are often the first person to observe the early signs of mental health disorders (Vieira, Gadelha, Moriyama, Bressan, & Bordin, 2014). It is not enough to simply give in-service teachers information on mental health or a one-day professional development session. The professional development has to be effective in teaching in-service teachers about mental health. One survey of 1, 000 teachers who participated in professional development, identified three core features for effective professional development: form, duration, and participation. The study found that professional learning opportunities were more beneficial to professionals if they veered away from the traditional approach and offered professionals more time, activities, content, and a longer period of engagement to participate, collaborate, and practice the skills learned in the workshop (Birman, Desimone, Porter, & Garet, 2000).

A comprehensive analysis of research conducted by the American Institutes for Research focuses on over 1, 300 students on the topic of professional development and learning outcomes found similar findings. The analysis determined that one-time workshops offered with no follow-

up were often a waste of time and money (Guskey & Yoon, 2009). The study found that effective professional development that included 30 or more hours of organized, purposeful, focused practices that can be adapted to teachers specific classrooms is more effective (Guskey & Yoon, 2009).

In 2012, the Canadian Teachers' Federation collaborated with the Mental Health Commission of Canada to conduct a national online survey that resulted in over 3, 900 teachers participating (Froese-Germaine & Riel, 2012). The results showed that approximately 70% of teachers surveyed had not received professional development to address student mental illness in their school and those that had received professional development indicated their desire to learn more (Froese-Germain & Riel, 2012). In addition, 87% of teachers surveyed felt they did not have the adequate training to support the mental health needs of those students with mental illnesses in their classrooms (Froese-Germain & Riel, 2012). This study further indicated priority areas for professional development including recognizing and understanding mental health problems in children, strategies for working with children with externalizing behaviour problems, and engaging effectively with families (Froese-Germain & Riel, 2012). In general, teachers hope to help eliminate stigma by having conversations about child and youth mental illness to continue to raise awareness about mental health problems and illnesses (Froese-Germain & Riel, 2012). In order for teachers to feel adequately prepared to recognize and support students with mental health problems, Bachelor of Education programs and professional development opportunities need to train teachers about the recognition of mental health problems, supports, and services available to children with mental illnesses or problems.

Mental Health Literacy

Schools are considered a starting point for providing services to students with mental health concerns. Teachers are at the forefront of witnessing the effects that mental health problems have on students, and teachers are on the front lines of recognizing mental health problems; however, teachers do not have adequate knowledge and resources to meet the needs of students within their classrooms (Rossen & Cowan, 2015). MHL incorporates the knowledge base of: mental disorders, mental health treatments, how to maintain mental health and wellness, the ability to decrease stigma, and help-seeking efficacy (Carr et al., 2017). Atkins and Rodger (2016) reviewed courses available in teacher education programs in Canada and interviewed teachers, teacher educators, and students attending teacher education programs, and found that many teachers reported not receiving any mental health education, but recognized the importance in learning about mental health to meet the needs of their students in regular classrooms.

Based on reports and programs such as: Evergreen, School-Based Mental Health and Substance Abuse Consortium, and Canadian Institutes of Health Research, there is an increasing awareness of the need to address the mental health of youth in the school setting (Kutcher & Wei, 2014). MHL education for teachers is particularly important for those working in middle and secondary schools, because diagnoses of mental health disorders usually occur between the ages 12 to 25 years, when students are in school or transitioning into post-secondary education or the workforce (Carr et al., 2017). For MHL to be effective for teacher candidates it must include: knowledge of common mental illness in children and their treatments; information of high risk students; signs and symptoms of mental distress; strategies for supporting students with mental health needs; opportunities to become in-tune with their own attitudes, beliefs, and knowledge about mental health to decrease stigma; and an understanding of fostering mental wellness

(Atkins & Rodger, 2016; Kutcher & Wei, 2014). The MHL institute offered in the current study included all criteria previously mentioned through power points, videos, literature and interactive discussions. Learners were educated on: mental health awareness, the connection between mental illness, mental distress and mental health problems, as well as understanding mental health problems and illness and their treatments. In addition, it examined how to reduce stigma in the classroom, and seek help.

MHL curricula have been implemented in classrooms to enhance the MHL and knowledge of students. A Canadian study incorporating MHL curriculum was reviewed for the impact of mental health knowledge and the effects the curriculum could have on mental health stigma. In this study a mental health curriculum guide was developed to enhance the MHL of students in Grades 9 and 10, was implemented in seven English school boards in Nova Scotia. Along with the guide, 86 educators from 37 schools in Nova Scotia received three, one-day training sessions on how to utilize the guide (Wei, McLuckie, & Kutcher, 2012). The 86 Grade 9 Health Living teachers had increased teachers' mental health knowledge, decreased stigma of mental health, and had enhanced positive attitudes on mental illnesses (Kutcher & Wei, 2014). Another study conducted on 114 students from 3 Canadian secondary schools tested student knowledge and attitude before and after teachers implemented the Mental Health and High School Curriculum Guide (Kutcher, Wei, & Morgan, 2015). Results showed "significant, substantial, and sustained improvements in student's knowledge and attitudes" (Wei, McLuckie, & Kutcher, 2012, p. 583).

A study on a MHL program in Japan was also reviewed to determine if similar findings would occur in other parts of the world as it included a MHL program offered to students of the same age group as those in Kutcher and Wei's (2014) study. The Japanese MHL program led by a teacher was offered to teach students about knowledge of mental illnesses. Participants in the

study consisted of 118 Grade 9 students who took part in two 50-minute sessions. The study

aimed to learn about mental health knowledge of participants and the students were asked to

answer true and false questions and questions on a case study before, immediately after, and

three months after the program was completed using a self-report questionnaire. The participants

had improved on their knowledge and positive attitudes towards people with mental illnesses

(Ojio et al., 2015). The Japanese and the Canadian studies had similar results regarding

improvement in knowledge of mental health and improved positive attitudes (Kutcher & Wei,

2014; Ojio et al., 2015).

The first module of the MHL institute included in this research study focused on defining

MHL and the interrelationship of mental health states such as: mental health, mental illness,

mental distress, and mental health problems. It also outlined facts about mental illness and

included information about why schools are an important venue in which to address MHL. A

review of the literature was conducted on mental health illness, prevalence rates, and supports

offered to students to support the information in the first module. "It has been reported that one

in five Canadians will experience a mental illness within their lifetime, while the remaining four

will be exposed to a friend, family member, or colleague with a mental illness" (Children's

Mental Health Ontario, 2011, as cited in Andrew's et al. 2014, p. 261). Research states that the

supports offered to 70 to 80% of students with mental health problems are received through

special education services within the school (Rossen & Cowan, 2015). A further look into the

local statistics of children with mental health problems in Newfoundland and Labrador was

conducted to determine the prevalence rates of mental health problems in children within this

province. According to the Newfoundland and Labrador Center for Health Information (2014),

the number of hospitalizations for children/youth with mental health related illnesses has been

relatively stable over the past decade; however, between 2012 and 2013, youth in Newfoundland and Labrador spent a total of 2, 972 days in hospital because of a mental health related diagnosis. This supports the notion that teachers should be knowledgeable about how to support students with mental health problems, as there are a number of students in this province who are attending schools with mental health problems.

The first module used in this study stated that untreated mental health problems and mental illnesses may lead to: learning difficulties, poorer academic achievement, dropping out of school, substance abuse, negative relationships with peers/teachers, and a greater likelihood of suicide (Kutcher, 2016). It is imperative to know how to support students with mental health problems because students with mental health problems will impact the school environment in several ways including discipline and safety, interruptions in instructional time, and family engagement, and can add to teacher stress (Rossen & Cowan, 2015). According to Children's Mental Health Ontario (2018), 20% of students in any "average" classroom will be experiencing a mental health issue that may impede their learning or behaviour.

A study conducted in Ontario interviewed 27 Superintendents of Education and asked them to complete a Likert scale survey. The results reported that educators agree that the school system cannot adequately respond to the mental health needs of the current student population (Santor, Short, & Ferguson, 2009). Mental health problems are not just a Canadian focus, the National Comorbidity Survey Replication of 9, 282 American respondents showed that 50% of all psychological disorders emerge before the age of 14 years (Kessler, Berglund, Demler, Jin, & Walters, 2005). It is clear that mental health has an impact on all areas of students and teachers' lives and that teachers are concerned about the emotional and mental health of their students and

how to provide support to these students (Kidger, Donovan, Biddle, Campbell, & Gunnell, 2009a).

Schools are an excellent place to address the mental health problems of students and educate students and teachers about mental health problems given the significant amount of time children spend there (Moon, Williford, & Mendenhall, 2017). Due to the prevalence of students with mental health problems, the literature review included a search on how teachers felt about their ability to support students with mental health needs. A study conducted at the University of Missouri, consisting of 292 participants, reported that not all teachers felt adequately prepared to effectively support students with mental health problems (Reinke et al., 2011). The results of an online survey suggested that while 89% of teachers agreed or strongly agreed that schools should be involved in addressing the mental health needs of children, only 34% of teachers felt they had the necessary skills to support these children (Reinke et al., 2011). One meta-analysis that included 20 studies conducted in the United States, from 1996-2008, showed that early prevention and intervention in schools (e.g., teaching positive behaviours) through school-wide positive behaviour support helped reduce future behavioural problems (Solomon, Klein, Hintze, Cressey, & Peller, 2011). One research study linked administrators who were well informed about mental health problems to overcoming and implementing successful mental health interventions into their school communities (Moon et al., 2017). Therefore, it is important that administrators and teachers recognize the need for implementing mental health awareness curriculum in their schools. These mental health programs should be school-wide encompassing students of all abilities and include programs, strategies, and services of mental health promotion and intervention (Franklin et al., 2012).

Stigma and Mental Health

  "Mental illness stigma is defined as the culmination of negative attitudes and beliefs that motivate the general public to fear, reject, avoid and enact behaviours of discrimination against people with mental illnesses" (Pinto, Hickman, Logsdon, & Burant, 2012, p. 49). It is important to realize that everyone has stigma. People need to become in tune with their own attitude towards mental health, as awareness can help us decide what we need to do to reduce our personal stigma, stigma with others and, with society as a whole.

  Education policies and rights have changed for students with exceptionalities over the years and inclusion has become a controversial topic in the education world (Bunch, 2015). With the implementation of inclusion in Canadian schools, students and educators are exposed to a variety of exceptionalities that were not apparent in classrooms in previous years. In order to understand why we must reduce stigma and become more accepting and understanding of everyone, we must first examine the history of education policies and rights for students with disabilities. A three-year study of the Commission by a variety of Canadian organizations including on meeting the needs of one million Canadian children with emotional and learning disorders was conducted and it was recommended that these children not be isolated and segregated into specialized classes or schools but train teachers on how to support these students in the regular classrooms (Laycock, 1970).

  In Canada, educational policies fall under each individual province and territory, meaning that each child's right to an education is based on the province or territory in which they live (Towle, 2015). For example, in Ontario up until the early 1950s, parents/caregivers were responsible for arranging and supplying education for children with special needs (Ontario Education, 2005). However, in 1975, the United Nations stated that disabled persons had the

same rights as everyone else with regards to their education, with 1977 marking a priority for deinstitutionalization (Hutchinson, 2017). The rights of students with exceptionalities continued to improve with the Canadian Human Rights Act of 1977, which stated that everyone has a right to an education and should not be discriminated against because of their physical or mental ability (Hutchinson, 2017). Up until the late 1980s, students with disabilities were either placed full-time or part-time in regular school settings, while other students with more severe needs were segregated either in special schools or special classes (Bunch, 2015). Since this current study is based on educators in Newfoundland and Labrador it is important to focus on the rights of education for students in this province. The province of Newfoundland and Labrador follows the Schools Act (1997) which states that everyone in the province has a right to access public education who is a Canadian citizen, child of a Canadian citizen, lawfully admitted to Canada, and between the ages of 5 and 21. In 2009, the *Inclusive Education Initiative* began in the province, helping to ensure all parties within the school felt safe, accepted, and included with the final schools joining the initiative by June 2017 (Department of Education, 2018). The *Inclusive Education Initiative* stresses that inclusion does not necessarily mean a student with exceptionalities is placed in the general classroom 100% of the day, but emphasises that learning for these students will be based on how to best meet their needs which may mean education in the least restrictive environment (Department of Education, 2018). The least restrictive environment refers to students with disabilities being educated in settings as close to the regular classroom as appropriate for the child (Rueda, Gallego, & Moll, 2000). Despite mandated education for all children in the least restrictive environment, there remain inadequacies with regards to students with mental health concerns. School mental health services focused on a narrow subset of students in an attempt to identify and isolate those with problems, and those

with more severe problems along with the educators and mental health professionals who supported these students were often segregated from the general education population (Rossen & Cowan, 2014).

A review of the literature was conducted to find studies that focused on attitudes towards mental health. Repie (2005) conducted a survey (*School Mental Health Issues Survey*) of classroom teachers, special education teachers, counsellors, and school psychologists. The survey included 413 participants, with representation from all 50 states and the District of Columbia, and the results showed that the present mental health services offered in schools through special education programs are generally only offered to those students already identified with mental health problems and they do not adequately meet the students' needs, resulting in families seeking services outside of the school with long wait lists (Repie, 2005). Similarly, in Newfoundland and Labrador, a student must be diagnosed with a psychiatric condition or mental condition by a health care professional to receive special education services. The Department of Education and Early Childhood Development (2016) further clarifies that health care practitioners are hesitant to make diagnosis of a mental illness such as (adjustment disorder, depression, bipolar disorder, anxiety disorder, obsessive compulsive disorder, conduct disorder, oppositional defiant disorder, personality disorders, addictions, and eating and feeding disorders) as medical personnel may require more time, or the child may need to age before a determination can be made as to whether or not a mental illness exists.

It is important to acknowledge the effect of mental health on the academic, social, and future life outcomes of individuals when thinking about mental health stigma. One needs to consider how students will be perceived by their teachers and peers and how perceived attitudes will affect their life. In the past people have often had negative attitudes and poor understanding

of mental health treatments and disorders, while awareness and understanding of the treatments have evolved over the years, peoples' perceptions have been slower to change (Meldrum et al., 2008). School-based anti-stigma activities should be introduced and promoted in schools. The implementation of school-based activities, anti-stigma, and MHL can have improvements on the knowledge base of mental health, decrease stigma and show positive attitudes towards those living with mental health problems (Meldrum et al., 2008).

Levitt, Saka, Romanelli, and Hoagwood (2007) utilized data from the National Survey of American Families and found that less than half of all children with identified mental health needs received appropriate care, despite advances in early identification and timely engagement in treatment. Gulliver, Griffiths, and Christensen (2010) conducted a systematic review of the research literature that investigated adolescent and young adults' perceived barrier to accessing services. Twenty-two published studies met the inclusion criteria and the results indicated young people felt embarrassed, and the stigma regarding mental health and their inability to recognize mental health symptoms often led them to not seek help and prefer self-reliance (Gulliver et al., 2010).

Stigma refers to the beliefs and attitudes about mental health problems and mental illnesses that lead to the negative stereotyping of people living with mental health problems and illnesses and to prejudice against them and their families (Mental Health Commission of Canada, 2018). Module two of the MHL institute addresses how to help decrease stigma in everyday life including classrooms by: continued learning, talking about and realizing that words have power, listening, and realizing that being silent does not neutralize stigma (Kutcher, 2016). Educating people on mental health, mental illness, and mental problems is more than teaching them what to look for and how to interact with people, it is also about teaching people how to talk about

mental health. Because stigma is viewed as a barrier to self-help seeking behaviours and mental health recovery, many international and national organizers have promoted anti-stigma platforms (i.e., Bell Let's Talk, Heads Together, Elephant in the Room, Say it Forward, Time to Change, Headstrong, and Opening Minds) (Froese-Germain & Riel, 2012).

In the classroom, stigma associated with mental illness can affect how everyone interacts and treats one another (Meldrum et al., 2008). This may include the use of derogatory language, avoidance or exclusion of people with mental health problems or illnesses, or a focus solely on the persons 'problem' or illnesses (Holley, Stromwall, & Bashor, 2012). A school-based mental health awareness program based in Alberta, Canada, targets young people and uses an anti-stigma intervention. Two goals of the program were to provide basic information on mental illness, and to tackle stigma and discrimination. This program was evaluated and the results suggested that mental health awareness programs are important as they provide young people with the knowledge and skills to protect their mental health, provide opportunities to build positive responses to emotional and behaviour problems, and promote supportive social and learning environments for the well-being of students (Pinfold et al., 2005). There should be a focus on anti-stigma programs in schools, as young people are the future generation of society. Anti-stigma programs and the focus of MHL to influence students' attitudes towards mental health should be started at a young age. Pinfold et al. (2005) suggest that young people are an attractive audience for changing attitudes surrounding mental health problems because they can be targeted before unhealthy opinions and perceptions can be fully developed. Young people hold the power to sustain and perpetuate stigma or eliminate it.

Brain Development

  The third module of the MHL institute focuses on brain development. A mental disorder is when the brain is not functioning the way it should (Kutcher, 2016). Mental disorders are usually caused by a combination of genetic and environmental factors that interact with each other over time (Kutcher, 2016).

  It is important that teachers know how to establish and maintain a positive environment for successful child development. "The ultimate aim of education is to promote student well-being, prevent the development or worsening of mental problems, and improve the effectiveness of education" (Fazel, Hoagwood, Stephan, & Ford, 2014, p. 379). Fazel et al. (2014) stated that the most common mental health problems in children that teachers encountered included: disruptive behaviour and anxiety disorders, such as oppositional defiant disorder, generalized anxiety, conduct disorder, depression, attention deficit hyperactivity disorder, and autism spectrum disorders.

  Teachers need to be aware of emotional development. Emotional development is the ability to identify and understand one's own feelings, read and understand emotional states in others, manage strong emotions, and regulate one's own behaviour (National Scientific Council on the Developing Child, 2004). The ability to manage and regulate emotions is more difficult for some children and may be an indication of future psychological problems (National Scientific Council on the Developing Child, 2004). The emerging literature suggests that emotional capabilities are as important within the school setting as physical health or cognitive abilities. Building social and emotional skills are just as important as cognitive skills in learning, as social and emotional skills help students sit still, focus, and have positive interactions with peers (National Scientific Council on the Developing Child, 2004). This further highlights the

importance of the classroom teacher's knowledge of normal brain growth patterns and development, as recognizing normal development can alert teachers to recognize potential concerns, warning signs, or problems. It is important that teachers create a classroom climate that enhances and supports the emotional development of children. Effective classrooms are defined "by the presence of supportive teacher-student interactions (instructional, emotional, and behavioural) that together create a classroom environment conducive to academic and social-emotional development" (Capella et al., 2012, p. 597).

Understanding Mental Health, Mental Illness, and Related Issues

According to the World Health Organization (2014), mental health is "a state of well-being in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community" (paragraph one). Mental health is present from childhood and is "fundamental to child health, well-being, and active participation in school, community, social, family networks, and leisure activities" (Schwean & Rodger, 2013, p. 137). Mental illness is defined as having an "alteration in thinking, mood or behaviour… associated with significant distress and impaired thinking, and can take many forms including: mood disorders, schizophrenia, anxiety disorders, personality disorders, eating disorders, and addictions" (Andrews et al., 2014, p. 262). Mental illnesses are medical illnesses; they are disturbances of usual brain function and should not be diagnosed by anyone other than a medical professional (Kutcher, 2016). With respect to mental illnesses, the role of the teacher is to have the knowledge to be able to identify possible signs or symptoms of mental health problems and mental illness, refer appropriately, and work effectively in the classroom and in collaboration with other professionals such as school

counsellors, psychologists, and mental health clinics, to assist and support the students who have been identified (Kutcher, 2016).

With the prevalence of mental health illnesses among children and youth, it is important for teachers to have an understanding of mental health and related problems. An American based longitudinal study of mental health problems and services among 1, 420 youth, who were 11 or 13 years of age upon commencing the study, showed that 75% of the children who were receiving mental health services, accessed them through the education system, therefore, recognition and referral by teachers is extremely important (Farmer, Burns, Phillips, Angold, & Costello, 2003).

Students' mental wellness, problems, or illnesses are integral to how they think, feel, interact, behave, and learn in the classroom. "The social, emotional, and behavioural components of mental health problems can negatively affect virtually all aspects of child development, including: school readiness, attendance, academic achievement, familial relationships, and school and peer based connections" (Millar, Lean, Sweet, Moraes, & Nelson, 2013, p. 104). Mental health problems can lead to difficulties in the classroom such as: difficulty following instructions, concentrating, problem solving, staying engaged and motivated, exhibiting self-control, absenteeism from school, regulating emotions, and maintaining friendships (Rossen & Cowan, 2015). A review of literature was conducted to determine the connection between mental health and behaviour in the school setting. A longitudinal study in Finland of 973 youth, aged 3, 6, and 9 over a 10-year span, found that early disruptive behaviour had long-lasting effects on grades (Alatupa et al., 2011). Another connection between mental health and school success is the link between depression and poor text comprehension and memory; research has also

demonstrated a high rate of co-occurrence between learning disabilities, depression, and anxiety (Schwean & Rodger, 2013).

Educators may incorrectly attribute behaviours of underlying mental health problems or illness to disobedience or noncompliance (Rossen & Cowan, 2015). If mental health problems are left untreated, students may become disruptive in class, bully other students, get poor grades, have an increase in absenteeism or drop out and give up on their education altogether (Andrews et al., 2014). The indirect costs to schools when they avoid addressing mental health problems include increased use of administration time due to disciplinary issues, academic failure, and an increase of one-to-on support that would have been more beneficial as an intervention (LaFee, 2013).

In module four of the MHL institute used in this current study, the participants learned about a wide range of mental illnesses and related problems, treatments, and the importance of language in regards to negative emotions and mental illnesses. Some of the common mental illnesses covered in this MHL institute include: autism spectrum disorder, separation anxiety disorder, attention deficit hyperactivity disorder, social anxiety disorder, obsessive compulsive disorder, oppositional defiant disorder, panic disorder, depression, bipolar disorder, eating disorders, post-traumatic stress disorder, schizophrenia, self-harm, and suicide.

Reinke et al. (2011) conducted an online survey for 292 teachers across 5 school districts in the United States. The results showed that while most teachers agreed that their role included implementing behavioural interventions, they perceived some of the associated practices of assisting with mental health problems in the school as falling under the expertise of another professional, such as a school psychologist. Similarly, in Southwestern Ontario, an online survey of 75 teachers showed that approximately 92% of the participants had experienced a student with

a mental health issue, whereas only 36% felt confident in their skills to do so, and approximately

86% of participants strongly agreed that this role should fall under the expertise of another

professional, such as a school psychologist rather than teachers (Andrews et al., 2014).

The Premier's Task Force on *Improving Educational Outcomes in Newfoundland and

Labrador* surveyed teachers in the province and found that teachers felt unprepared when trying

to deliver a full curriculum to a group of students with a wide range of abilities and attempt to

support the mental health needs of their students without the background to respond

appropriately (Government of Newfoundland and Labrador, 2017). In Newfoundland and

Labrador, school-based mental health services fall under the responsibilities of the school-based

guidance counsellors and district-based educational psychologists. Guidance counsellors and

educational psychologists are assigned to schools based on student population. However,

educational psychologists are assigned to the school district, and their job description does not

involve directly counselling students. In Newfoundland and Labrador, specific criteria must be

met in order for a student to receive supports regarding mental illness or mental health

conditions. For those students with mental health conditions, the students' educational

performance must be affected, the student must be seeing a health care professional for their

mental health condition, and a comprehensive assessment must be completed to inform program

planning (Department of Education and Early Childhood Development, 2016). The

responsibilities of guidance counsellors include: personal counselling, career development,

comprehensive assessment, and crisis intervention (Government of Newfoundland and Labrador,

2017). The Premier's Task Force data collection included "*a use of time*" survey for Guidance

Counsellors. The results indicated that guidance counsellors spend much of their time responding

to crisis, completing comprehensive assessments, writing reports, and attending meetings leaving

very little time to focus on responding to mental health needs or promoting classroom-based

mental health programs (Government of Newfoundland and Labrador, 2017). If students require

supports beyond the scope of a guidance counsellor, a referral to the regional health authority

must be made. Parents are then faced with a long wait list or they must seek help privately,

which may not be readily available or affordable (Government of Newfoundland and Labrador,

2017). One of the issues faced by clients of Eastern Health in Newfoundland and Labrador is the

wait time for specialized services, particularly those pertaining to mental health and addictions.

Eastern Health has developed a strategic plan for 2017-2020, to help decrease wait times for

outpatient child and adult psychiatry, as well as decrease wait times for selected community

mental health and addictions services (Eastern Health, 2017).

Teachers may feel powerless in the classroom when faced with students who have mental

health problems or illnesses, especially if they lack the knowledge of the type of illness or issue.

It is not the teachers' job to diagnose a mental health issue or illness, but they should be able to

recognize the signs, identify students who may be experiencing a mental health problem or

mental health disorder, and know which outside agencies to appropriately refer them to (Kutcher,

2016). Teachers can have an impact on changing views and opinions about mental illness and

mental health problems by providing a positive classroom environment and using positive

language. "One of the largest obstacles facing youth with mental illness is the associated social

stigma against people living with mental disorder" (Meldrum et al., 2008, p. 4). Teachers need to

be aware of the language they use in their classroom as well as the language and attitudes their

students have. Providing knowledge and starting a conversation to raise awareness is the first

step in changing attitudes towards mental health (Askell-Williams & Lawson, 2013). For

example, people often use mental illness terminology to inaccurately describe how they are

feeling. Someone may say they feel depressed, have anxiety, or have "OCD" [obsessive compulsive disorder] when really they are upset, nervous, like something overly clean or organized (Kutcher, 2016). It is important to try to avoid such language as it devalues the symptoms of the person who is actually experiencing depression, anxiety, or obsessive compulsive disorder. Misusing these words can undermine and belittle the experience of someone with a mental illness and indirectly promote stigma in classroom and social settings (Kutcher, 2016).

Caring for Students and Ourselves

Stress is defined as a normal response to environmental demands or pressures that threaten or overwhelm our coping strategies or well-being (Kutcher, 2016). Stress affects teachers, their classroom environments, and it can be passed on to their students. The burnout cascade model suggested that stressful experiences between teachers and students are cyclic, meaning one continuously affects the other (Oberle & Schonert-Reichl, 2016). Oberle and Schonert-Reichl (2016) showed that teachers' occupational stress is linked to students' physiological stress. These researchers measured the cortisol levels in students' saliva and compared the student cortisol levels to levels of teachers' burnout as measured by the Maslach Burnout Inventory. The cyclic manner of the burnout cascade also worked in reverse. The study showed that classroom environments where students had higher levels of cortisol, indicated stressful and challenging environments for teachers, resulting in difficult interactions with students, greater occupational stress, and higher rates of teacher burnout (Oberle & Schonert-Reichl, 2016).

Students' mental health problems were found to add to teachers' classroom challenges. With teachers already experiencing pressures of time management and large class sizes, there is

a fear that mental health problems will not be addressed until they impede effective teaching (Sisask et al., 2014). This added challenge, accompanied by shortage of resources, and the lack of knowledge of how to adequately teach students with mental health problems may lead to teacher burnout. In today's inclusive classroom, teachers are experiencing a variety of emotional needs in their students. This places increased demands on general classroom teachers and special education teachers (Koller & Bertel, 2006). Often students with emotional and behavioural problems are incorporated into regular classrooms with teachers without the support and teacher training required to meet the needs of the student(s) (Cappella et al., 2012).

"Teacher burnout is recognized as a prolonged exposure to emotional and interpersonal stressors on the job, often accompanied by insufficient recovery, resulting in previously committed teachers disengaging from their work" (Steinhardt, Smith Jaggers, Faulk, & Gloria, 2011, p. 420). Teachers need to be aware of not only their students' mental health problems but they also have to be equipped to proactively identify and intervene with their own mental health concerns (Koller & Bertel, 2006). The Maslach Burnout Inventory is used to measure three dimensions of burnout including: emotional exhaustion, depersonalization, and (lowered) personal accomplishment, in professions such as: social services, medicine, and mental health (Aloe, Amo, & Shanahan, 2014). According to one meta-analysis that examined 16 studies, burnout was found to be the highest in teachers when compared to social work, medicine, and mental health therapists (Aloe et al., 2014). The negative effects of burnout have been associated with increased absenteeism, poor job performance, and poor health outcomes among educators (McLean et al., 2017). Steinhardt et al. (2011) completed a research study that recruited public school teachers who had received a teaching award from an alumni association. In order to receive the award, teachers had to be full time, have a minimum of 10 years of classroom

teaching and experience, and were returning to teaching the following year. The study used three inventory scales, namely, the Teacher Stress Inventory, the Maslach Burnout Inventory-Education, and the Center for Epidemiological Studies Depression Scale to determine the level of burnout. The results support the relationship between work stress and teacher burnout. The results suggested that emotional exhaustion served as a significant mediator between chronic works stress and depressive symptoms (Steinhardt et al., 2011). The study also suggested that the "alleviation of stressors or the adoption of effective coping strategies could aid in reducing the prevalence burnout in the teacher population" (Steinhardt et al., 2011, p. 426).

A German study investigated the relationship between teachers' emotional exhaustion and students' educational outcomes (Arens & Morin, 2016). The study recruited 380 teachers and 7, 899 Grade 4 students and used a 4-point Likert scale to determine teachers' level of emotional exhaustion. The researchers were then able to connect the results of teachers' emotional exhaustion scale to the results of the *Progress of International Reading Literacy* results for the 7, 899 students of these teachers. The results showed that students taught by teachers who reported high levels of emotional exhaustion presented lower average academic achievement suggesting that teacher burnout is a cause of poor academic performance (Arens & Morin, 2016). Teachers who suffer from burnout or are emotionally exhausted and do not have the necessary skills to adequately provide a supportive learning environment, which may result in lower academic achievement, as well as negative consequences for the teachers themselves in terms of job satisfaction, physical complaints, intentions to leave the profession, and self-efficacy (Arens & Morin, 2016). Koller and Bertel (2006) suggested that the "incidence of teacher stress and teacher burnout may be dramatically reduced if teachers are better prepared to

face issues that contribute to the school climate, including student bullying, defiance, stress, anxiety, and depression, all of which relate to mental health problems" (p. 209).

MHL promotes self-reflection and identification of issues including stress. This is important for teachers as stress is the main reason cited for 35 to 50% of all teachers leaving the profession within the first 5 years of employment (Kutcher, 2016). A semi-structured interview of 40 second and third grade teachers in Alberta suggested that contract tensions, pressure to keep getting better at their jobs or to do more, and an inability to successfully balance their professional and personal life are some of the reasons why 40% of teachers leave the profession within the first 5 years (Clandinin et al., 2015). This is not just evident in Canada but also in the United States of America. A research study investigating why teachers leave the teaching profession, using data from the United States nationally representative *Schools and Staffing Survey* and its supplemental *Teacher Follow-Up Survey*, found teacher turnover was due to attrition (teachers who quit teaching altogether), or migration (teachers who move to teaching jobs in other schools) (Ingersoll & Smith, 2003). Teacher turnover is significantly higher for beginning teachers more so that seasoned teachers (Ingersoll & Smith, 2003). With so many teachers leaving it can have a negative impact on the school environment and student performance (Ingersoll & Smith, 2003). Exit interviews and the *Teacher Follow-Up Survey* were given to teachers who left their job the year before asking them to list (up to three) reasons for leaving the teaching profession. Some of these reasons for leaving the field included: working conditions, student discipline problems, lack of administrative support, poor student motivation, lack of teacher influence over school-wide and classroom decision making, to pursue a better job or another career, and job dissatisfaction (Ingersoll & Smith, 2003).

Another study conducted in Vancouver, Canada identified lack of support in the workplace, shortage of resources, time management pressure, and disruptive students as key contributors to teacher stress and burnout (Oberle & Schonert-Reichl, 2016). The role of the teacher encompasses many tasks including: instructional support, classroom management, planning, maintain positive relations, collaborating with parents and school officials, and keeping up to date with continuously changing curriculum and professional development (McLean et al., 2017). With inclusive classrooms, working conditions have changed and become more complex. Teachers are responsible for more than the delivery of curriculum and need to be prepared to support students from an academic, personal, social, and emotional perspective (Koller & Bertel, 2006).

The Canadian Teachers' Federation (2014) conducted a survey investigating teachers' stress and included teachers from across Canada. Figure 3 provides an overview of the top five stressors reported by teachers who participated in the survey. It is important to note that 26.3% of teachers who participated in this study felt that students' mental health was a significant cause of stress (Canadian Teachers' Federation, 2014).

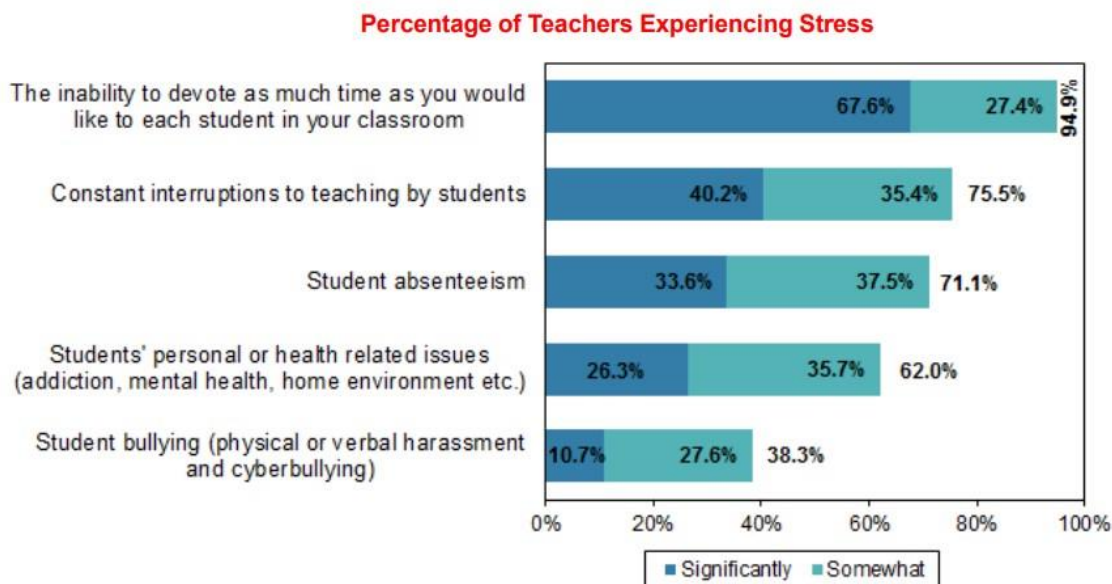*Figure 3*. Percentage of Teachers Experiencing Stress.

Figure 3. Percentage and reasons that teachers experience stress. Reprinted from "Highlights of the CTF survey on the quest for teacher work-life balance," by Canadian Teachers' Federation, 2014, p. 9. Retrieved from https://www.ctf-fce.ca/Research-Library/Work-Life-Balance-Survey-DW-CAPTO.pdf 9. Copyright 2009 by the Canadian Teachers' Federation.

The ideal classroom environment is one where students are neither under stressed nor overstressed and is an environment that fosters resilience and promotes positive mental health. This type of environment is needed for students to be able to flourish academically, socially, and emotionally. Mental health may be intertwined with academic achievement or failure; while academic achievement promotes good mental health, failure can cause students to display internal or external behaviours (Isaksson, Marklund, & Haraldsson, 2013). Thus, it is vital that students be equipped with the resources and ability to communicate their feelings, learn from their failures, build on resiliency through setbacks and failures, and build on their self-esteem. Students who are equipped with the resources and skills necessary to manage stress will be able to flourish academically, socially, and emotionally.

The MHL institute used in the current research outlined the following features of a mentally healthy classroom: academic engagement and efficacy, behavioural self-control, academic self-determination, and the establishment of effective relationships (Kutcher, 2016). Resilient students are reported to have positive attitudes; believe that they can succeed; can recognize and express their emotions appropriately; and are considerate of themselves and others (Smith-Harvey, 2007). The above characteristics are important in classrooms that promote positive mental health. Resiliency equips students with the ability to handle challenges and view difficult situations positively (Smith-Harvey, 2007). Schools can foster resiliency by: providing a caring, supportive learning environment; fostering positive attitudes; nurturing positive emotions; fostering academic self-determination and feelings of competence; encouraging volunteerism; teaching peace-building skills; and ensuring healthy habits (Smith-Harvey, 2007).

Teachers may have the largest impact on student functioning and should try to integrate "social and emotional interventions in ways that impact academic performance because they are involved with students for prolonged periods of time" (Franklin et al., 2012, p. 975). Mental health interventions have been shown to have a positive effect on student's behaviour, emotional well-being, interpersonal skills, the ability to cope with problems, which may lead to improvements in physical health, mental health, and academic performance (Reback, 2010).

Seeking Help

MHL is important for today's teachers and learners, as we need to be able to recognize, manage, and prevent mental health problems, while reducing the stigma associated with mental illness. Mental health problems are no longer seen as irrelevant and the education system is shifting away from the notion of being viewed as solely an academic environment (Whitley et al., 2012). Within the inclusive classrooms, there are a number of children and adolescents who

have mental health problems. Children's Mental Health Ontario (2018) reported that 20% of students in any general classroom will be affected by a mental health problem that impedes their learning or behaviour. It is important for teachers to understand and have the knowledge concerning mental illnesses in order for them to discern what symptoms require treatment and those that require support.

One study delivered a mental health professional development workshop over 2 hours in lecture format with PowerPoint slides to illustrate key facts to increase knowledge of mental health problems, and to provide information necessary for identifying and referring students. The results showed a confidence in referring mental health problems in students and illustrated that effective mental health training does not need to be elaborate or expensive (Powers et al., 2014). School-based implementation of mental health training and support for teachers have had positive effects on teaching and the classroom environment through: improved classroom climate; increased teacher sensitivity to student needs; improved behaviour management; and diminished teacher burnout, anxiety, and depression (McLean et al., 2017). Teachers can create supportive, positive, resilient classrooms that address students' mental well-being by incorporating MHL to encourage and support students on how to obtain and maintain positive mental health (Atkins & Rodger, 2016).

Mental health promotion goes beyond the promotion of good mental health by incorporating the prevention of mental health problems (Ekornes, 2015). One of the first steps in mental health promotion is raising awareness and shaping attitudes about mental health (Askell-Williams & Lawson, 2013). MHL addresses key signs that a student may be struggling with mental health problems, these include: behaviours or emotional states that are not age

appropriate, more intense or disturbing behaviours when compared to their peers, and behaviours that may be rapid or continue for much longer than usual for their age group (Kutcher, 2016).

Teachers need to facilitate classrooms that support positive mental health. The first step is being aware of potential mental health problems, the second step is bringing the concern to the appropriate school staff or outside agency. The teacher's role is to identify the signs or symptoms, document what they see, support the child in the classroom, and make the referral to the appropriate health care (Kutcher, 2016). Teachers are not responsible for diagnosing or treating children with mental health problems. Educational staff are responsible for the assessment of symptoms and functions through scales that measure behaviour in the classroom, modification of academic load or other academic accommodations, as well as communication and collaboration with healthcare providers and parents (Kutcher, 2016). School personnel have a role including: school-wide prevention and wellness promotion, identification and early intervention for at risk students, and intensive interventions for those with a diagnosis (Rossen & Cowan, 2015). Teachers spend countless hours with students each week, therefore their observations can be extremely helpful to health care providers in determining if treatments are effective (Kutcher, 2016). Collaboration between teachers, parents, and healthcare professionals is important for those students with mental health concerns.

Teachers are often first responders for identifying possible mental health problems, but many do not know what to do. Morton Sherman, who is a superintendent of 13, 100-student City Public Schools in Alexandria, Virginia, was quoted saying:

Beyond awareness, not a lot of attention has been paid to actual plans of action... I can find lots of material about what works in terms of effective reading or math, but I'd have

a really hard time finding anybody who can tell me the five or ten things I can do today to

specifically improve student mental health (LaFee, 2013, p. 26).

Students with mental illnesses who are undergoing treatment will need a supportive educational

environment, free of stigma, and possibly accommodations. Accommodations "are adaptations to

the learning environment which address particular student needs" (Department of Education,

2011, p.13). They can be physical arrangements, assistive technology, or particular instructional

strategies. Some accommodations that may be beneficial for students with mental illnesses or

mental health problems include: preferential seating, beverages in class, prearranged or frequent

breaks, early availability of course/unit outline, predictable or routine schedule, private feedback

on academic performance, extended time for assessment, quiet/alternate setting for assessment,

advanced notice of assignments, and written assignments in lieu of oral presentations or vice

versa (Canadian Mental Health Association, 2004).

Schools are recognized as a common and preferred location for mental health service

delivery. One American longitudinal epidemiological study of 1, 420 youths, between the ages of

11 and 13 at study entry, showed that 75% of these participants gained access to their mental

health services through the education system (Farmer et al., 2003). By allowing mental health

services in the school setting instead of the student having to go to an outside agency, more

students may be able to access the mental health supports that they need (Climie, 2015). For

those students who receive interventions in school, teachers should let students know they are

there for support if needed and allow an appropriate amount of time before they are expected to

return to class, to ensure they are emotionally ready to do so (Millar et al., 2013).

Educational policy in Canada is created by each of the individual provinces or territories,

with limited educational policy coming from the federal level (Climie, 2015). Each school

district, and more specifically each individual school, decides priorities and what to include in their school programming. Some administrators may decide to focus on mental health promotion while others may not see it as a concern or priority.

A review of the literature conducted by the current researcher suggests that pre-service programs are not adequately preparing teachers in mental health knowledge and awareness of some of the mental health problems that they will face once they enter the profession (Andrews et al., 2014; Froese-Germaine & Riel, 2012; Reinke et al., 2011; Rodger et al., 2014). This lack of mental health knowledge may lead to misunderstandings and stigma concerning mental health problems and may have an impact on one's beliefs and responses to individuals with mental health problems (Jorm, 2000). Teachers are requesting professional development, as outlined by the Premier's Task Force, as teachers do not feel they have the knowledge and background to respond appropriately to students' mental health needs (Government of Newfoundland and Labrador, 2017). In order to address the gap in the research, the current study focused on an online institute offered to in-service teachers to examine the impact of MHL on in-service teachers' knowledge, attitudes, and/or efficacy related to mental health promotion. The mixed methods research design, overview of participants, and methodology will be explained in detail along with data collection and analysis.

Chapter 3: Methodology

The Educational Intervention

This study utilized a mixed methodology; using pre-test and post-test design along with qualitative (open-ended) questions. Mixed methods research is a research design that utilizes both qualitative and quantitative forms of data to consider multiple perspectives, positions, and standpoints, to obtain a deeper understanding of the research (Aramo-Immonen, 2013; Johnson, Onwuegbuzie, & Turner, 2007). A mixed methods research design was utilized in this study as combining qualitative and quantitative data help interpret, clarify, describe, and validate the results (Johnson et al., 2007). This study utilized pre- and post-tests to determine knowledge, attitudes, and opinions of mental health before and after engaging in the MHL institute. The pre-tests were used to collect data before the intervention followed by the post-test, which measured the same attributes (Creswell, 2012).

Teachers' Preparation to Facilitate Positive Mental Health in the Classroom is a free online MHL institute developed by Dr. Stan Kutcher along with other Canadian university personnel. The MHL institute consisted of six modules: (1) introduction and background; (2) stigma and mental health; (3) understanding the human brain; (4) understanding mental health, mental illness, and related problems; (5) caring for students and yourself; and (6) seeking help. This MHL institute aimed to improve teachers' MHL, enhance teachers' ability to understand students' mental health concerns, provide information on mental health self-care, and promote understanding of how to better connect schools with community mental health resources. This MHL institute also outlined the roles of teachers with regards to students' mental health. Teachers were encouraged to engage in the MHL institute to promote an understanding of mental

health and mental illness, decrease stigma, and address the importance of positive mental health in students by being a role model (Kutcher, 2016).

Research Design

The current study was designed to offer a MHL institute to in-service teacher participants to examine teachers' perceptions of the need for mental health training, assess their prior and post knowledge of mental health before and after engaging in the institute, and allow them the opportunity to provide recommendations surrounding future mental health training. The study employed both pre- and post-test quantitative (true and false questions and Likert scale rating questions) and qualitative methods (open-ended questions in the post-test) to gain a better understanding of teacher knowledge, perceptions, attitudes, and opinions towards mental health in the classroom and to understand the participants' perspectives of the effectiveness of the delivery of the educational intervention used in this study - the online modules on mental health.

Teacher participants were asked to complete a pre-test prior to engaging in the *Teachers' Preparation to Facilitate Positive Mental Health in the Classroom* modules. Upon completion of the modules, they were asked to complete a post-test. The post-test included the same questions as the pre-test, and an additional ten Likert scale questions, as well as five open-ended questions that focused on teachers' perceptions of participating in the online institute. Qualitative open-ended questions were used to provide the voice of the participants as their words are used to allow their perspectives to be heard and allow the researcher to see the bigger picture (Creswell, 2012).

This mixed methods approach provided an in-depth understanding of teachers' perspectives in regards to teaching students with mental health problems, promoting a positive environment that supports the mental health of all students and staff, as well as evaluating the

method of delivery of the educational intervention. Quantitative data from the pre- and post-test were used to determine if participants' knowledge improved after engaging in the MHL institute by analyzing the same questions from the pre- and post-test. The research study set out to examine if participants improved their knowledge on the post-test, as they would have engaged in the MHL institute making them more aware and knowledgeable about the topics covered, and to examine if teachers' perspectives, attitudes, and opinions towards mental health changed after engaging in the study. The qualitative data allows for a rich depiction of whether the professional development method was effective, and if so, why it was effective.

Participants

A total of 136 teacher participants began the pre-test; however, only 116 responded to all questions. Of the 116 teacher participants who completed the pre-test, 79 teachers requested to be enrolled in the online institute, with a representation of all regions within the NLESD school board. After engaging in the MHL institute, 36 participants completed the post-test. Using the anonymous identifying question from both pre- and post-test, 23 participants were matched. Of the 23 participants (19 were female, 3 male, and 1 chose not to identify), 10 identified their highest degree was a graduate degree, and 13 identified undergraduate degrees were their highest degree. Participants were added to the MHL institute online course shell, staggered between December 5, 2017 and February 9, 2018. Participants were given until March 31, 2018 to complete the MHL institute and post-test.

Measures

This mixed methods study used pre- and post-tests to measure participants' knowledge prior to and after engagement in the MHL institute. The pre- and post-test also examined the impact of participating in a MHL institute on both teachers' attitudes and opinions about mental

health problems. The pre-test questions including demographic questions were developed by Dr. Stan Kutcher and Dr. Yifeng Wei (Appendix A, B, and C), and the questions were intended to evaluate the effectiveness of the institute as demonstrated by teachers responses to the pre- and post-test items. As this institute is currently being piloted with educators across the county, psychometric properties have yet to be established and factor structure internal consistency coefficients and reliability coefficients have yet to be reported on. A number of the post-test questions (Appendix D) utilized were taken directly from a Canadian study that focused on teachers' preparedness to assist their students' journey through secondary school with particular attention on students' mental health (Andrews et al., 2014). The questions were designed and utilized to examine teachers' perceptions of mental health in Ontario. Other qualitative open-ended questions developed by the researcher were employed in the current study to determine what the participating teachers in Newfoundland and Labrador thought about the online institute, what they would change, and what further instruction they sought in regards to professional development.

1) The first section of the pre- and post-tests asked participants demographic questions including the date of the test, gender, level of education, and prior learning about mental health. The participants were also asked questions that allowed the researcher to match their pre- and post-test responses while allowing the participants to remain anonymous.

2) The second section (delivered at both pre- and post-test), asked teacher participants 40 knowledge-based questions. At the pre-test phase these questions were used to assess participants' prior knowledge and at the post-test phase they were used to assess for knowledge acquisition or knowledge growth after participating in the MHL institute.

3) The third section (delivered at both pre- and post-test) asked participants about their attitudes towards mental health. An attitude is defined as a way of thinking about something, in a favorable or unfavorable way based on one's own beliefs (Richardson, 1996). The pre- and post-test questions were the same. The researcher was looking to determine if participation in the MHL institute impacted teachers' attitudes towards mental health issues or problems.

4) The fourth section (delivered at both pre- and post-test) asked participants about their opinions about mental health problems. An opinion is defined as one's preference based on personal judgement, which is not founded on fact, proof, or certainty (Laird, 1930). For example, if they were comfortable helping someone else regarding their mental health (Kutcher & Wei, 2016). The pre- and post-test questions were the same. The researcher was looking to determine if participation in the MHL institute impacted teachers' opinions about mental health.

5) The fifth section consisted of 15 questions and were administered during the post-test only. These questions were used to address how prepared teachers felt with regards to mental health problems after participating in the MHL institute, and to provide feedback on the MHL institute delivery. The participants were asked what they would like to see moving forward, how they enjoyed learning, and how this institute has impacted their ability to support students in their classrooms.

Pre- and post-test questions were chosen as a tool for the research because it is an economical and efficient way of gathering a large amount of data from participants (Creswell, 2012). The pre- and post-test questions were conducted through Survey Monkey, an online tool that enabled participants to remain anonymous, work at their own pace, and feel as comfortable

as possible responding to sensitive questions. One advantage to this type of research is that it allowed the researcher to gain extensive data quickly and inexpensively. One issue that Creswell (2012) outlined about web-based tools is that there may be technological problems. This was a factor in this research. While 136 participants began to complete the pre-test, only 116 responded to all of the questions, and 79 requested to gain access to the MHL institute. Eight participants stated (troubleshooting through email) that they had started the pre-test and it timed out, froze, or they couldn't complete it and had to begin again and 9 other participants needed help troubleshooting how to gain access to the course or issues within the course shell. This could explain the higher rate of responses to the actual number of participants being enrolled in the course and why some participants did not complete the institute or log in at all.

The pre-test consisted of closed-ended questions while the post-test had the same questions as the pre-test along with additional open-ended questions. Qualitative questions when combined with quantitative questions help build on the responses supporting theories, concepts and ideas, and explore reasons beyond the closed-ended questions (Creswell, 2012). The pre-test consisted of closed ended questions with a selection of responses to choose from ranging from true and false, to Likert scale response options. Closed-ended questions are practical in this research as all participants had the same response options and it was easier to compare the results of the pre- and post-tests. The more sensitive opinion-based questions on mental health problems were left to the end of the survey, as Creswell (2012) stated, sensitive questions such as questions relating to mental health problems should be asked with care and presented later in the questions as it gives the participant time to 'warm up' by answering neutral questions, such as demographic questions or closed ended questions. The remaining questions were used to obtain teachers' perspectives on the MHL institute, what they would change with regards to the delivery

of the mental health institute, future wants and needs, their preferred modality of learning, and how the MHL institute helped them support positive mental health in their classrooms and school.

Procedure/Methods

Ethics approval was first received from the Interdisciplinary Committee on Ethics in Human Research (ICEHR) at Memorial University of Newfoundland and Labrador. Once ICEHR approved the research project, a second application was made to the Newfoundland and Labrador English School District and approval was granted.

The Newfoundland and Labrador English School District (NLESD) is broken down into four regions: Labrador, Western, Central, and Eastern. The NLESD consists of 253 schools employing a total of 5, 181 teachers (Department of Education, 2017). For this study, contact was made via email to all principals of the 253 English schools in the province. A search through the NLESD website was performed, and a list of schools and administrators along with contact information was developed. On November 30, 2017, a blind carbon copy email was sent to all administrators in the NLESD highlighting my role as a thesis student and what the research entailed (See Appendix E). The email asked administrators to forward the email and attached recruitment script to all members of their staff (See Appendix F). Some administrators emailed back stating that they could not or did not wish to share the email with their staff. They did not elaborate on their reasons for this decision.

In the recruitment script, participants were given a link to Survey Monkey, where they could complete the pre-test. Those teachers who chose to participate in the study clicked on the link provided by the online survey tool, Survey Monkey, and were presented with a web page that fully described the study and included the informed consent document (See Appendix G).

Teachers who agreed to the informed consent were directed to the online pre-test. Once the pre-test was completed, teachers were directed to email the researcher to obtain access to the course shell.

Memorial University of Newfoundland and Labrador help desk was contacted to add participants to the course shell.

Table 1

Recruitment Timeline of Survey Completion and Course Access

Date	Surveys Completed	Requests for Access to Course Shell
November 30-December 7	79	33
December 8- 11	19	1
December 12-14	11	31
December 15-31	7	5
January 1-19	7	7
January 20-February 23	11	2
February 23-March 26	2	0
Total	136	79

Within a week of sending the recruitment email to administrators, a significant higher number of pre-tests were completed compared to the number of requests to gain access to the course shell. Table 1 outlines the trend in the higher number of pre-tests completed than requests to the course shell. A follow up email was sent to administrators, stating that participants needed to email the researcher to gain access to the course shell.

The modules used in this study required teacher participants to actively engage and complete one module before the next module unlocked. As of March 11, 2018, a number of participants had not logged in nor engaged in the curriculum within the institute. A follow up blind carbon copy email was sent to all participants in March, thanking them for participating in the research, reminding them that their usernames and passwords would have been sent via email through the MUN Help Desk (Appendix H). This email was used to determine why some

participants were not engaging. Some participants responded to the email stating that they experienced technical difficulties gaining access to the modules; others could not log in; some felt time constraints due to work pressures of report cards, parent/teacher conferences, and home life did not allow them to engage in the material as they originally intended; and others deleted the email from MUN thinking it was spam.

Data Analysis

Descriptive analyses of the research were conducted using paired samples *t*-tests and a theoretical thematic analysis of the open-ended questions. The researcher chose to code for a theoretical approach meaning responses were coded for a specific research question providing a more detailed analysis for a specific part of the data (Braun & Clarke, 2006). It was suggested that the McNemar test be used to interpret the data for the true and false questions. However, upon two one-hour statistical consultation sessions with Dr. Asokan Variyath, the Director of the Statistical Consulting Center at Memorial University of Newfoundland and Labrador, it was determined that the McNemar test would not be a good fit because the sample size was less than 25, n = 23. Dr. Variyath suggested the Exact Binomial test for each question in the true and false section, but cautioned that it may not show significance because the differences in pre- and post-test results were small. Binomial tests are used when the responses have two options, and can be used when there are just two nominal categories, in this case correct or incorrect response (Norris, Qureshi, Howitt, & Cramer, 2012). Further consultation was conducted with Dr. Stanley Kutcher, as the pilot MHL institute was developed by him and other university personnel, and he has conducted research similar to this MHL institute. Dr. Kutcher stated that it is not meaningful to conduct an analysis of question by question in this instance and suggested that the appropriate statistical test for this type of research and sample size was to conduct paired samples *t*-tests on

the means of the pre- and post-test results as it was the same participants who completed the pre- and post-test (Dr. Stan Kutcher, personal communication, December 8, 2018). Paired samples *t*-tests are used to compare two means that are from the same individual, object, or related units; the two means typically represent the same participants at two different times; in this study the pre- and post-test (Norris et al., 2012). The purpose of the test is to determine whether or not there is a statistical difference between the average score of each set of data (Norris et al., 2012). The Statistical Package for Social Sciences 21 was used to perform the paired samples *t*-tests with the level of significance set at $p<0.05$. Survey Monkey was able to match 23 pre- and post-tests based on the anonymous identifying questions, which allowed data for those specific surveys to be pulled and analyzed. The online tool was also able to generate the open-ended responses of 36 participants, which were then read, coded, categorized, and examined for specific themes relating to the research questions and similarities to prior research, then re-examined to ensure they made sense (Braun & Clarke, 2006). Analysis of paired samples *t*-tests of total scores of the true and false questions as well as Likert scale questions, and categories that were developed based on the open-ended questions used in the present study are described below.

Paired samples *t*-tests

Twenty-three participants could be matched to both pre- and post-test surveys using the identifying question of the last 4 digits of the participants' phone numbers. Responses for the 23 participants were pulled from Survey Monkey for both the pre- and post-test. Participants received a score out of 40 on the true and false questions, with a point given for each correct answer. Participants who responded with "I don't know" received an incorrect score for those questions. Paired samples *t*-tests were used to compare the overall test score of the true and false

questions of the 23 participants who could be matched on the pre- and post-test. The purpose of the paired samples *t*-tests comparing pre- and post-test true and false scores was to determine if there was any significant difference in teachers' knowledge prior to and after engaging in the MHL institute.

Paired samples *t*-tests were also run on the results of 13 questions in Section B (8 attitude questions) and C (5 opinion questions) of the pre- and post-test using an eight-point Likert rating scale. Participants were asked to choose from the following eight response categories: strongly disagree, disagree, disagree a little, not sure, agree a little, agree, strongly agree, and choose not to respond. All items were rated on an eight-point Likert scale from 1 (strongly disagree), 2 (disagree), 3 (disagree a little), 4 (not sure), 5 (agree a little), 6 (agree), 7 (strongly agree) and 0 or null response (choose not to respond). The researcher read the questions and coded them accordingly, reverse scoring was used for questions worded negatively. Participants received a score out of 56 on the attitude questions (Section B), and a score out of 35 on the opinion questions (Section C). Section B and C of the post-survey were grouped based on attitude and opinions of mental health and illnesses by the survey developers.

Qualitative Categories

The results of the additional questions that were solely in Section D and E of the post-test were analyzed and coded to support any patterns or themes based on the initial research questions and similarities to prior research (Braun & Clarke, 2006). The responses were analyzed and grouped together based on similar results and how the responses related to the research questions. The results for the open-ended questions were read and reread by the researcher to become familiar with what participants' responses were (familiarizing the data); a general code was given to similar responses in each question by extracting key words (generating initial

codes); these key words were then analyzed, grouped together and given a label or theme based on the purpose of the question and how it linked to prior research (searching for themes), then questions were reread to determine if anything interesting was reported that did not fit into a current code and to ensure the themes made sense with regards to the purpose of the research (reviewing themes) (Braun & Clarke, 2006). The coding was conducted by looking for "patterns of meaning and issues of potential interest in the data", in this case participants' perceptions of mental health, their preferred modality of learning, future needs, and how it related back to prior research (Braun & Clarke, 2006, p. 86). The 10 questions in Section D were pulled directly from Andrews and colleagues (2014) survey, and the same categories of teacher knowledge, teacher role, teacher education, and resources were utilized. Themes "capture something important about the data in relation to the research question, and represents some level of patterned response or meaning within the data set" (Braun & Clarke, 2006, p. 82). The responses in each question of Section E were analyzed based on the research questions and how they related to the delivery of the institute, future professional development needs, and teacher perceptions after engaging in the MHL institute and responses were coded with those things in mind. Emerging themes included: professional development structure, teacher's ability to support students with mental health problems, and focus of future mental health training.

The researcher explored the impact of the results in regards to knowledge and attitudes from the pre- and post-test responses. Paired samples t-tests were applied to assess and examine statistical significance for the true and false questions as well as the Likert scale questions. Statistical Package for Social Sciences (SPSS) 21 was used to perform all quantitative data analysis.

Chapter 4: Results

The responses to the pre- and post-test were analyzed using quantitative (paired samples *t*-tests) and qualitative methods (responses coded and themes identified). Data for the true and false questions were pulled for the 23 participants who could be matched after completing the pre- and post-test. Each correct question was given a point for a total score out of forty for the true and false portion of the survey. The pre- and post-test scores for the true and false questions were then entered into SPSS and a paired samples *t*-tests was used to determine if there was a significant difference. The Likert rating scale questions were broken down into two groups, attitudes and opinions based on the original survey grouping. All items were rated on an eight-point Likert scale from 1 (strongly disagree), 2 (disagree), 3 (disagree a little), 4 (not sure), 5 (agree a little), 6 (agree), 7 (strongly agree), and 0 or null response (choose not to respond). The researcher used reverse scoring for questions that were worded negatively. The results were given a total score out of 56 for attitude questions and 35 for opinion questions. Pre- and post-test scores were also examined using paired samples *t*-tests to determine significant differences. The researcher continued to examine the results by focusing on percentage of agreement and disagreement surrounding the themes teacher knowledge, teacher role, teacher education, and resources for teachers. Finally, results were read, reread, analyzed, coded, and grouped into respective themes of professional development structure, ability to support students with mental health needs, and mental health related training.

Data from the study were used to determine if teachers' knowledge, opinions and attitudes towards teaching and supporting students with mental health needs changed after engaging in the MHL institute. The pre-test yielded responses from 136 participants, with 36 participants completing the post-test. The results for the true and false questions were marked as

either correct or incorrect with responses of "I don't know" or "I choose not to answer" coded as

incorrect, for the 23 participants out of a total possible score of 40. The pre-test results show that

the 67.5% of the participants obtained an accuracy of 50% or higher on the true and false

questions in the pre-test, suggesting that participants had a strong knowledge base of mental

health. Only 36 participants completed the post-test, and the anonymous identifying question was

used from both surveys to match 23 participants from both the pre- and post-test data. All

participants stated that they had learned about mental health prior to this mental health institute.

Responses from those 23 participants were pulled from Survey Monkey and entered into SPSS

for data analysis of Section A, B, and C as they were the questions used in both the pre- and

post-tests.

Figure 4. *Participants' Overall Test Results for True and False Pre- and Post-Test.*
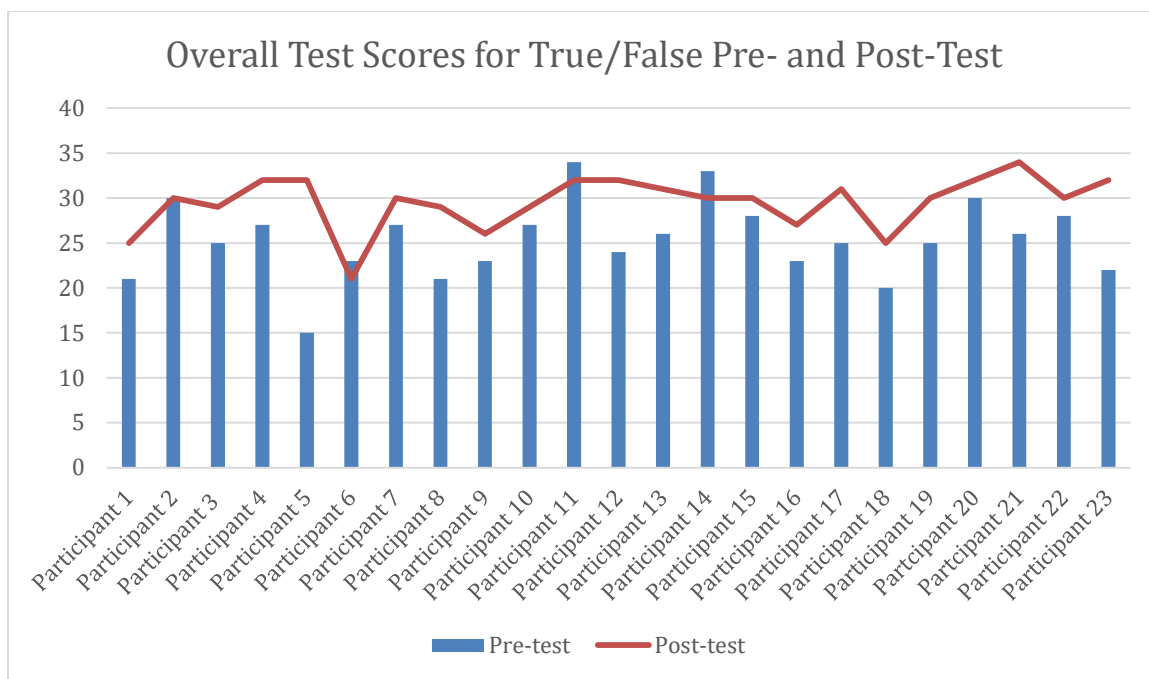
The purpose of the pre- and post-test true and false questions was to determine if participants had increased their knowledge after engaging in the MHL institute. It was expected that participants' responses would have improved, as demonstrated by the improvements of overall scores in the post-test, as they should have learned the correct responses through their engagement in the online mental health institute. Figure 4 shows the overall test scores in both the pre- and post-tests for the 23 participants that were matched on pre- and post-test results. The majority of participants test scores stayed the same or improved on the post-test.

Paired samples *t*-test was conducted on the pre- and post-test scores, showing a statistically significant difference. A paired samples *t*-tests on teacher knowledge of mental health revealed that teachers completing the post-test (M = 29.52, SD = 2. 98), had significantly higher scores than when they completed the pre-test (M = 25. 35, SD = 4. 28), *t* (23) = -4.61, *p* < .000. Mean scores were calculated out of a total score of 40. The Cohen's d statistic (1.13) indicated a large effect size (Cohen, 1988). Of the 23 participants, 20 received a higher score on

the post-test compared with the pre-test, suggesting that teachers learned from the mental health institute, as they improved their knowledge of mental health. The paired samples *t*-tests *t* (23) = -4.61 indicate there was significant difference of mental health knowledge in the pre- and post-test scores.

The results of section B and C used an eight-point Likert rating scale. The data were entered for 23 participants into SPSS using the values of 1-7, and 0 (choose not to respond). The value of 0 was chosen as a null response. Paired *t*-tests were conducted on pre- and post-test results for the 8 attitude questions and 5 opinion questions in sections B and C. A paired samples *t*-tests on teacher' attitudes of mental health revealed that teachers completing the post-test (M = 52.87, SD = 2.62), had significantly higher scores than when they completed the pre-test (M = 50.43, SD = 4.87), *t* (23) = -2.28, *p* < .033. Mean scores were calculated out of a total score of 56. The Cohen's d statistic (0.62) indicated a medium effect size (Cohen, 1988). The paired samples *t*-tests *t* (23) = -2.28 indicate there is a significant difference in the pre- and post-test scores, suggesting that after completion of the MHL institute, teachers' overall attitude of mental health improved, reducing stigma.

A paired samples *t*-tests on teacher' opinions of mental health revealed that teachers completing the post-test (M = 30.61, SD = 2.68), did not present a significantly higher score than when they completed the pre-test (M = 30.65, SD = 3.74), *t* (23) = .047, *p* < .963. Mean scores were calculated out of a total score of 35. The Cohen's d statistic (0.01) indicated a small effect size (Cohen, 1988). The paired samples *t*-tests *t* (23) = .047 indicate there is not a significant difference in the pre- and post-test scores, suggesting that after completion of the MHL institute, teachers' overall opinions of mental health did not significantly change.

The next section of the post-test survey used a five-point Likert scale (1 strongly

disagree, 2 disagree, 3 neither disagree nor agree, 4 agree, and 5 strongly agree). Based on themes that arose in the research by Andrews et al. (2014), the survey questions were organized into the same four themes. The four themes were: teacher knowledge, teacher role, teacher education, and resources. While previous survey sections results focused on the comparisons of scores from 23 participants who were able to be matched on the pre- and post-test, the following questions were only addressed in the post-test, and a total of 36 participants responded to the post-test questions.

Table 2

Teacher Knowledge – Post Test Questions

Survey items	Teacher knowledge				
	SD	D	N	A	SA
	(%)	(%)	(%)	(%)	(%)
1. I feel adequately prepared and qualified…	2.78	13.89	25	50	8.33
2. I would know what resources to access…	2.78	5.56	8.33	66.67	16.67

Note: SD=strongly disagree, D=disagree, N=not sure, A=agree, SA=strongly agree; n=36.

Full questions can be found in Appendix D.

Questions derived from "Mental Health Issues in the Schools: Are Educators Prepared?" by A.

Andrews, M. McCabe, and T, Wideman-Johnston, 2014, *The Journal of Mental Health Training,*

Education and Practice, 9(4), p. 267. Copyright 2014 by Emerald Group Publishing Limited

Teacher knowledge

Teachers showed a range of knowledge surrounding working with students with mental

health issues, after completion of this MHL institute (Table 2). A total of 36 teachers responded

to the post-test questions. While 50% agreed that they felt prepared and qualified to deal with

mental health issues they may be exposed to, 25% neither agreed nor disagreed with the

statement. In addition, approximately 83% of respondents identified (agreed or strongly agreed)

that they were familiar with resources and where to access these resources for their students with

mental health issues in the classroom.

Table 3

Teachers' Role – Post-Test Questions

	Teacher role				
Survey items	SD	D	N	A	SA
	(%)	(%)	(%)	(%)	(%)
3. Teachers should be aware of how to react…	2.78	0.00	2.78	36.11	58.33
4. Staff members have…	11.11	25.00	33.33	27.78	2.78
5. I have had to deal with an instance of…	2.78	5.56	2.78	58.33	30.56

Note: SD=strongly disagree, D=disagree, N=not sure, A=agree, SA=strongly agree; n=36.

Full questions can be found in Appendix D.

Questions derived from "Mental Health Issues in the Schools: Are Educators Prepared?" by A. Andrews, M. McCabe, and T, Wideman-Johnston, 2014, *The Journal of Mental Health Training, Education and Practice,* 9(4), p. 267. Copyright 2014 by Emerald Group Publishing Limited

Teacher role

Table 3 presents the key findings in relation to the teachers' role in supporting students with mental health issues in their classroom. The majority of teachers surveyed (94%) agreed or strongly agreed that teachers should be aware of how to react and refer students to services concerning mental health issues; while approximately 30% felt that they, and their colleagues, had the knowledge or skills necessary to recognize and support students with mental health difficulties. Most of the teachers surveyed (approximately 89% agreed or strongly agreed) have had to deal with an instance of student(s) with mental health issues in their class.

Table 4

Teacher Education Related to Mental Health – Post-Test Questions

Survey items	Teacher education				
	SD	D	N	A	SA
	(%)	(%)	(%)	(%)	(%)
6. I felt prepared upon graduating…	50	36.11	8.33	5.56	0.00
7. I have been prepared to deal…	22.22	22.22	30.56	22.22	2.78

Note: SD=strongly disagree, D=disagree, N=not sure, A=agree, SA=strongly agree; n=36.

Full questions can be found in Appendix D.

Questions derived from "Mental Health Issues in the Schools: Are Educators Prepared?" by A.

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Teacher education

As shown in Table 4, approximately 86% of teachers did not feel prepared upon

graduation with their Bachelor of Education degree to react/support students with mental health

issues. Furthermore, approximately 25% of teachers surveyed felt that their education or

professional development post-graduation prepared them to support mental health issues among

their students.

Table 5

Resources for Teachers – Post-Test Questions

Survey items	SD	D	N	A	SA
	(%)	(%)	(%)	(%)	(%)
8. If I had a student with a mental health…	2.86	5.71	11.43	57.14	22.86
9. I would know where to access mental…	2.78	11.11	11.11	52.78	22.22
10. My school has policies/procedures…	8.33	13.89	33.33	44.44	0.00

Note: SD=strongly disagree, D=disagree, N=not sure, A=agree, SA=strongly agree; n=36.

Full questions can be found in Appendix D.

Questions derived from "Mental Health Issues in the Schools: Are Educators Prepared?" by A. Andrews, M. McCabe, and T, Wideman-Johnston, 2014, *The Journal of Mental Health Training, Education and Practice,* 9(4), p. 268. Copyright 2014 by Emerald Group Publishing Limited

Resources

As displayed in Table 5, less than half of the participants (44%) stated that their school had policies or procedures in place for supporting mental health issues. However, about 75% of participants knew where to access mental health resources outside of their school if they were needed; while approximately 80% of participants knew which resources to access and where to find them to support a student with mental health issues in their classroom.

Qualitative Themes Overview

Section E of the post-test asked participants to respond to five open-ended questions regarding the delivery of the MHL institute addressing what information they would like if another professional development course was offered, and how this institute has impacted their ability to support the positive mental health of students in their classrooms. With few exceptions, the responses were typically one to two sentences each or short phrases with some participants providing more detailed responses. The responses were read, reread, analyzed, coded, and grouped together based on similar underlying categories. The categories were then analyzed with three main themes emerging. These were: professional development structure (key issues: structure and delivery), teacher ability to support students with mental health issues (key issues: resources and empathy), and mental health related training (key issues: need and focus).

Professional Development structure

Participants were asked: what things did you feel were done well/not well in this institute and what changes would you make to improve the delivery of this online institute, and what would be your preferred learning modality (online, face-to-face, one day workshops, ongoing support through mentorship, release time for engaging with teaching colleagues, professional learning circles etc.). Responses ranged from short phrases or a sentence, with some participants providing more detailed responses of three or four sentences. Two categories emerged in this theme: structure and delivery.

Structure. In general, most teachers felt the delivery of this MHL institute was well organized, informative, and provided good reference material and fact sheets. Forty-seven percent of the 32 teachers surveyed mentioned the multimedia approach, videos, real life examples, PowerPoints, or fact sheets when they stated what things they felt were done well in

this institute. Respondents noted they enjoyed the multimedia approach and use of real life stories from real people. Participants stated that the "multimedia approach kept the material interesting" (participant 1); "there was a good balance of text, video, graphs and tables" (participant 2); "I liked the real-life examples" (participant 3); and "videos were interesting and pertinent" (participant 4). A common theme from participants was the use of quizzes throughout the modules, as one teacher stated, "it put things into perspective" (participant 5). Of the 32 respondents who responded to the question, "What things were done well/not well in this institute?" only four had negative responses. One participant had "difficulty navigating the course" (participant 6); another "did not like the layout" (participant 7); and another felt "there is lots of information to digest which is overwhelming at times" (participant 8).

Delivery. A total of 27 participants (9 participants skipped this question) recommended changes to improve the delivery of this mental health institute. While several stated that they enjoyed the institute and would not recommend any changes, others suggested more quizzes on all modules, less density in the material, and release time from teaching to have an opportunity for face-to-face time "which rarely happens" (participant 6) as "doing the institute alone online, made the activities feel rather useless" (participant 9). With respect to the preferred learning modality, most teachers preferred an online institute as it is self-paced, did not interfere with personal schedules, and allowed those in rural communities the opportunity to avail of the mental health institute. Approximately 50% of participants preferred online learning with participants saying: "definitely online due to my geographic location but also for convenience and flexibility to be able to do it when I have the time and not have another thing to schedule" (participant 5); and "I prefer online and learning at my own pace as many other teachers, scheduling can sometimes be a bit tricky" (participant 11). Approximately 39 percent of participants stated they

would prefer a combination of professional development. Participants noted: "I prefer online learning, but also face-to-face with the opportunity during/throughout the learning to implement and test the material" (participant 2); and asked for, "ideally, a combination of a workshop and release time" (participant 17).

Teacher Ability to Support Students with Mental Health Issues

Participants were asked: how has participating in this institute impacted your ability to support the positive mental health of the students with whom you work? Responses varied in length from one to four sentences. Two categories emerged in this theme: resources and empathy.

Resources. Teachers reported that they felt better prepared to support students with mental health problems in their classroom after completing the institute. Several teachers noted that this institute provided them with the needed background knowledge on various mental health problems, as well as provided a resource to refer to in the future. Several different participants stated: "I feel better prepared to help a student if I feel they are experiencing mental health issues" (participant 13); "I feel more informed, calmer, and more confident" (participant 14); "it has given me a greater understanding of mental health issues in my class and a glimpse from the perspective of the students" (participant 16). Several respondents stated that they were better equipped to recognize mental health problems in their classrooms. One participant reported that the institute was "very informative and provided assistance with where to get help for students" (participant 16). Others noted, "I feel better able to identify someone who may be struggling" (participant 12), and "it [mental health institute] has provided me with valuable information that will hopefully help me, help someone in need" (participant 17). Teachers noted they have better knowledge to support their students and themselves and have gained confidence

in how to address students and families with mental health problems or through the referral process. One participant surmised these findings in saying, "taking the time to participate in this institute has provided me with the MHL knowledge to better support my students as well as myself" (participant 18).

Empathy. Teachers noted that the institute has provided a positive influence on their teaching and opened their eyes to the myths and stigma surrounding mental health problems in their schools. "I did not realize how much incorrect information/inaccurate knowledge I had about mental health until this institute" (participant 19); "I really enjoyed the additional information I gained and some myths that were clarified regarding mental health" (participant 20); and "I will try to avoid labeling student" (participant 12). Several teachers responded by saying that as a result of participating in the online institute they: "have a better understanding of their students' needs" (participant 4); are able to "empathize with students who are struggling with their mental health" (participant 21); are "more aware of how I act in the classroom" (participant 21); are "better adapted to support students with mental health issues" (participant 13); and noted that "the institute made them feel calmer, informed, and more confident" (participant 14). One teacher said the institute had increased and refreshed their knowledge and made them more accepting of all students and individuals, as you never really "know what any one person is going through on a given day" (participant 6).

Future Mental Health Focus for Training

Participants were asked, "What would you like more information on if another professional development course were to be offered?" The responses were analyzed and coded into two categories: need and focus.

Need. The need for more mental health training emerged as a common theme in the open-ended responses. Over half of the participants responded that they would like more professional development on MHL. With respondents making comments such as: "more information on teachers' mental wellness" (participant 16); "teacher burnout and self-care" (participant 19); "being able to help students with mental health issues and developing strategies to help them cope and handle stress" (participant 5); "more in-depth information on certain mental health disorders and the warning signs" (participant 20); and several teachers stated "strategies for helping kids deal with anxiety" (participant 17), as some felt teachers "think anxiety is a new buzz word" (participant 22). Several of the teachers were happy that this institute was offered to teachers with all years of experience - from new teachers to veteran teachers in the field.

Focus. As teachers reported they perceived the need for further professional development in mental health, they were asked to elaborate on what topics they would like covered in the future. Of the 18 participants that suggested a topic for a future professional development, half of them (9 participants) requested strategies or tools to help students with mental illness. Other topics surrounding mental health that teachers were interested in seeking additional professional development included: coping skills for students with mental health problems, teachers' mental wellness, developing strategies and coping mechanisms surrounding student stress, how to create mentally healthy and inclusive classrooms, hands on/practical strategies for real life scenarios, more in-depth information on certain mental health disorders as well as their warning signs, and strategies to help students cope with anxiety.

This study focused on offering a MHL institute to in-service teachers to determine the knowledge, attitudes, and opinions of teachers within the NLESD with regards to teaching and supporting students with mental health needs. The results were examined in relation to relevant

literature and further analyzed to gain further knowledge on teachers' knowledge and attitudes when supporting students with mental health problems or illnesses in the classroom. The researcher further analyzed the data to identify implications of the findings and recommendations for future research and practice.

Chapter 5: Discussion

This mixed methods study investigated teacher knowledge, attitudes, and opinions of mental health before and after they engaged in a MHL institute. Several key findings emerged through the responses to the pre- and post-test survey. Participants appeared to be well informed, based on the high accuracy rate of correct responses on the pre-test. When the mean scores of pre- and post-test results were compared, significant improvements were found on the knowledge based true and false questions. After engaging in the MHL institute, significant findings were found in the data pertaining to: knowledge of mental health and attitude of mental health (reducing stigma). Participants had strong opinions with regards to their knowledge, role, education, and knowledge about accessible resources, meaning they strongly agreed they did not have the knowledge from their education programs to support the needs of students with mental health problems, but felt it was part of their role as a teacher and knew where to access appropriate mental health resources. The themes that emerged from the qualitative open-ended questions surrounded: professional development structure, teachers' ability to support students with mental health problems, and future mental health training focus. Teachers in this study reported the need for more support in meeting the needs of their students in the classroom, as well as the need for added knowledge surrounding mental health problems and strategies for helping meet the needs of those students who have mental health problems.

The participants were enrolled in the online institute at staggered dates between December 7, 2017 and February 23, 2018. The level of engagement was analyzed for the 36 participants who completed the MHL institute. The researcher examined the activity level of the 36 participants who completed the online institute and calculated the number of hours of completion. While the amount of time spent engaging in the institute ranged from approximately

2 hours to 15 hours, the researcher found that participants spent an average of 5 hours 21 minutes engaging with the MHL institute. The updated version entitled *Teach Mental Health* offered through University of British Columbia estimates 6-8 hours of engagement (University of British Columbia, 2018).

Pre- and Post-Knowledge of Mental Health

According to the results of the 23 participants who were able to be matched on their pre- and post-tests, participants overall scores either stayed the same or improved. The pre-test scores had an accuracy rate ranging from 38-85% to 63-85% on the post-test. The high accuracy rate in the pre-test suggests that participants had a strong knowledge base surrounding mental health prior to engaging in the institute. This could be because all participants stated in the demographic questions of the pre-test that they had learned about mental health and mental illness before taking part in this study.

A Canadian study conducted by Atkins and Rodger (2016) had similar findings to support this current research. Atkins and Rodger (2016) found that overall grades for a mental health course offered to Bachelor of Education students were relatively high (approximately 90% final grade) meeting the objective of understanding mental health. Other Canadian researchers offered a one-day professional development session to 60 educators enrolled in the Faculty of Education at the University of British Columbia (Carr et al., 2017). The professional development session guided them through the *Mental Health and High School Curriculum Guide.* Participants completed a pre-test, post-test, and a three-month follow up test. The results demonstrated a significant and substantial improvement in mental health knowledge, decreased stigma, enhanced help-seeking intent, and these improvements were sustained over time (Carr et al., 2017).

Participants who completed the professional development offered in the study conducted by Carr et al. (2017) showed improvements in mental health knowledge comparing the pre- and post-test, just as participants in the current study improved their knowledge on mental health questions after engaging in the MHL institute. This suggests that offering a MHL online institute can improve participants' mental health knowledge, which may lead to a decrease in stigma and enhance help-seeking intent for students, peers, friends, and themselves (Carr et al., 2017).

Attitudes and Help-Seeking Intent

Section B and C of the pre- and post-test used an eight-point Likert Scale to compare responses based on strongly agree, agree, agree a little, not sure, disagree a little, disagree, strongly disagree, or choose not to respond. Paired-samples *t*-test were conducted to compare the means of pre- and post-test responses of participants and positive significant findings were found on the attitude questions with no statistically significant differences on the opinion based questions. Upon completing the institute, participants had a more positive attitude towards people with mental health problems, decreased their stigma, and were more willing to offer, suggest, or seek help for mental health related problems. This is supported by participants' responses to an open-ended question surrounding how the online MHL institute has impacted their ability to support positive mental health in their students. Participants' responses showed improvements in attitudes and a decrease in stigma, with participants reporting that: "I did not realize how much incorrect information/inaccurate knowledge I had about mental health until this institute" (participant 19), "some myths were clarified regarding mental health" (participant 20), "I will try to avoid labeling student" (participant 12), and "I am more aware of how I act in the classroom" (participant 21)."

According to Wahl (2003), stigma has deep roots developed during childhood. Wahl (2003), examined research on depictions of mental illness in children's media and found that most mentally ill characters displayed in children's movies or television shows were portrayed negatively with traits such as: failing to meet goals, violent behaviour, socially unconnected, unresponsive to treatment, and slang such as 'crazy', 'psycho', or 'lunatic' were used in place of professional labels. This misinformation and portrayed attitudes can lead children to develop negative attitudes and stigma towards people with mental health problems, which will only grow over time if they are not educated on the matter (Pinfold et al., 2005).

A Canadian study aimed at delivering a program to 1, 501 students promoting MHL and challenging negative stereotypes resulted in an improved attitude concerning mental health (Pinfold et al., 2005). This Canadian study offered a MHL program to students in rural and urban Canada, and used pre- and post-tests to determine factual recall and attitudes of students. The results determined that the MHL program produced positive changes in attitudes and perceptions of people with mental health problems (Pinfold et al., 2005). The findings obtained from the study conducted by Pinfold et al. (2005) support this current study, as results indicate that positive attitudes and a decrease in stigma can occur by raising awareness and educating people about mental health problems (Pinfold et al., 2005). The MHL institute changed some participants' attitudes towards mental health by informing them about myths and providing them with information that clarified inaccurate information they held prior to engaging in the institute.

With regards to help-seeking behaviour and participants' opinions, the current study showed no significant improvements in teachers' confidence and comfort level in helping, suggesting, or seeking help for others or themselves if they felt it was needed. However, the mean pre- and post-test scores for the opinion based questions were high in both the pre-test (M

= 30.65), and the post-test (M = 30.61). A previously mentioned Canadian research study

focusing on pre-service teachers at the University of British of Columbia, demonstrated positive

findings in regards to the follow-up survey administered after engaging with the *Mental Health

and High School Curriculum Guide*, as there was a significant positive difference (increase) in

help-seeking intentions compared to the pre-survey (Carr et al., 2017). This suggests that after

completing the mental health professional development guide, participants had improved

knowledge and improved confidence to suggest someone close to them obtain the proper care

concerning their mental health needs. In this current study, results could suggest that participants

already felt comfortable and confident supporting and suggesting someone close to them obtain

the proper care concerning their mental health needs. The limited amount of time spent engaging

in the MHL institute could also be a factor in the results.

Prior research suggested that after engaging in MHL, participants have shown

improvements in: mental health knowledge, an increase in positive attitudes surrounding mental

health, and were more likely to seek help regarding their own mental health and those of their

friends, families, and peers (Carr et al., 2017; Kutcher & Wei, 2014; Pinfold et al., 2005).

Overall, the results comparing the pre- and post-test of the 23 NLESD participants suggest that

teachers learned from the MHL institute and improved their mental health knowledge and

attitude surrounding mental health (reducing stigma). This suggests that offering a professional

development learning opportunity on mental health to educators may help bridge the gap with

regards to the lack of MHL in Bachelor of Education curricula across Canada. By improving the

knowledge of educators on mental health problems, stigma may decline, and help-seeking

behaviours may increase as teachers are more equipped with the knowledge to support students

with mental health concerns, and gain confidence in helping or suggesting the appropriate services to help them (Carr et al., 2017).

Teacher Knowledge, Role, Education, and Resources

The 10 Likert scale questions used in the post-test of this research were directly taken from the survey questions reported in Andrews et al. (2014). These questions were utilized to determine the experiences and thoughts of participating teachers within Newfoundland and Labrador concerning their knowledge of mental health, role as a teacher, education, and resources to access. It is important to note that because these questions were presented only in the post-test, all 36 participant responses were used.

Teacher knowledge. The first category is teacher knowledge. Teachers from the NLESD who participated in this study were asked two questions that fit this category and the responses were scored on a five-point Likert Scale ranging from strongly disagree, disagree, not sure, agree and strongly agree. In this study, the responses of 36 participants from the NLESD showed similar viewpoints to the 75 participants in Southwestern Ontario (Andrews et al., 2014). Teachers within the NLESD were asked if they felt adequately prepared and qualified to support any mental health problems they may be exposed to and 58% or respondents either strongly agreed or agreed. This is supported by findings from a study conducted in Southwestern Ontario where sentiments expressed by teachers were similar, as approximately 30% of participants strongly agreed or agreed to feeling prepared and qualified to support students with mental health problems (Andrews et al. 2014). In addition, the majority (84%) of the participants within the NLESD identified that they knew which mental health resources to seek if they should require them. This did not align with the findings from Andrews et al. (2014), in which approximately half of the participants did not know where to acquire such resources if they needed them. These

results suggest that participating Newfoundland and Labrador educators may feel more prepared and qualified to support mental health problems and know where to find appropriate resources. It is important to note again that this may be because all participants in the current study stated they had received some form of mental health training prior to taking part in the MHL institute when responding to the demographic question at the beginning of the survey, or that the participants chose to participate in this MHL institute because they had ongoing interest in MHL that motivated them to take part in the study. The study conducted in Southwestern Ontario study did not provide participants with a MHL institute prior to responding to the survey. This suggests that the MHL institute offered to educators in Newfoundland and Labrador helped them feel prepared in supporting students with mental health problems and informed them as to where to access resources to support students with mental health problems in their classroom.

Teacher role. Three questions were asked surrounding teachers' role in supporting mental health problems in students. While approximately 89% of participants agreed or strongly agreed that they had been involved with an instance of student(s) with mental health problems, the majority (approximately 94%) felt that teachers should be aware of how to react and refer students to mental health services, and approximately 33% could neither agree or disagree that staff or themselves had the knowledge and skills to recognize and support students with mental health needs. Similar results were found in the study conducted by Andrews et al. (2014), where the majority of teachers felt that they should be aware of how to support students with mental health problems, and have been involved in doing so, but were unsure of whether staff knew how to do so. These findings are not surprising as the Canadian Mental Health Association (2018) estimated that 10 to 20% of youth either have or will be affected by a mental illness or disorder. The results of this study show that the participants had a high percentage of agreement that they

should be aware of how to react and refer students to services regarding mental health problems but felt that they did not have the necessary knowledge and skills for recognizing and supporting these students. The professional development opportunity for pre-service teachers in the Faculty of Education program at the University of British Columbia reported an urgency from participants to support students who were experiencing mental health difficulties (Atkins & Rodger, 2016). This supports the current study as educators feel the need to be prepared and knowledgeable about supporting students with mental health problems.

The Premier's Task Force supports the findings of the current study as teachers who were surveyed ranked student mental health and wellness as one of the top three issues in schools today and further elaborated that they are ill equipped with the knowledge and background to support these students' mental health needs (Government of Newfoundland and Labrador, 2017). Reinke et al. (2011) found similar results when participants reported that not all teachers felt adequately prepared to effectively support students with mental health problems.

Teacher education. Teachers were asked if they felt prepared upon graduating from their Bachelor of Education program in regards to mental health problems in their students. Only six percent of participants in the NLESD agreed. Rodger et al. (2014) had similar findings, in which the focus group and interview participants indicated that their Bachelor of Education programs did not adequately prepare them to identify and support the mental health needs in their classrooms once they began teaching. Upon graduation, teachers are given the opportunity to further their learning through teacher training, additional education, and professional development. When participants were asked if they were prepared to support students with mental health problems through their teacher training, 25% of participants in the NLESD agreed or strongly agreed. This research supports the need for Canadian post-secondary institutions to

incorporate MHL education within their Bachelor of Education programs as well as the need for school districts to offer more professional development on mental health problems within schools. These results suggest that more must be done to educate teachers on mental health. This aligns with research conducted by Stormont et al. (2011), Reinke et al. (2011), and Andrews et al. (2014), who indicate that there needs to be distinct ties between what teachers will experience in the classroom and those presented in their education programs.

    Resources. Results indicate that 80% of participants within the NLESD who completed the survey would know which resources to access and where to find them if they had a student with a mental health issue. Participants in the NLESD also felt confident in where to access mental health resources outside of the school. These findings did not align with Andrews et al. (2014), as less than 50% of participants knew which resources to access and where to find them both in and outside of the school. Participating teachers in the NLESD may have had a higher knowledge base surrounding mental health services and resources as they had engaged in a MHL institute and all stated through the survey that they had received some form of mental health training before taking part in this study. Participants in NLESD were somewhat aware of the school policies and procedures in place for supporting students with mental health problems (approximately 45% agreeing with, and approximately 33% neither agreeing nor disagreeing). Andrews et al. (2014) had similar findings to this study, with less than 50% agreeing to be knowledgeable surrounding policies and procedures in place for supporting mental health concerns in students. These results suggest that educators employed under the NLESD know where to find resources, both inside and outside of the school, to help support their students who may be experiencing mental health problems. However, less than half of the participants were aware if their school had specific policies or procedures in place for supporting mental health

problems. This suggests that while mental health professional development helps educators become aware of how to help students individually, they may not be aware of or following school board policy, and a focus on policy and procedures may need to be incorporated into teacher training.

Qualitative Themes

Several themes arose out of the responses to the open-ended questions at the end of the post-test. The emerging themes were: professional development structure, teacher's ability to support students with mental health needs, and the recommended focus on future mental health training.

Professional development structure. Traditionally, teachers receive their education through a post-secondary institute and follow up with professional development opportunities once in the teaching field (Andrews et al., 2014). Participants in this study stated that they enjoyed the MHL institute, and the online format, as it provided teachers located across the province with equal opportunity to take part in this professional development offering. Other reoccurring comments surrounded the online format as it allowed teachers to work at their own pace, access the material at any time or anywhere, and provided participants in rural areas with the opportunity to take part in the institute. Participants' responses align with another study that found teachers often did not continue to further their teacher training beyond their education degree through professional development opportunities due to cost, travel expenses, and location (Andrews et al., 2014).

The multimedia approach and real life examples were frequently mentioned as positive aspects of the structure of the online institute. Previous research found similar findings, as educators appear to prefer professional development opportunities that are directly connected

with their teaching experiences and needs, and people tend to be more empathic and understanding of individuals living with mental illness and problems when they have the opportunity to meet, interact with, or see that person (Atkins & Rodger, 2016; Postholm, 2014).

Teacher ability to support students with mental health needs. Another common theme that arose from the research surrounded the notion of teachers' abilities to support students with mental health needs. The general consensus from participants was that the MHL institute provided them with the knowledge base to boost their confidence in being more aware of students mental health needs, understanding what everyone in their classroom may be experiencing, and knowing how to support students who have mental health difficulties. The findings of this study suggest that although teachers have taught students with mental health problems, and they feel that they should know how to react and refer students to services when faced with a mental health issue, they do not feel prepared in how to do so. Participants stated that their Bachelor of Education degree and ongoing professional development opportunities did not and does not offer enough information for them to feel confident in supporting and teaching students with mental health problems. This is paralleled by prior research which found that 70% of teachers had received no professional development on student mental health, and that 87% of teachers surveyed felt that the lack of training on supporting students with mental health illness is a potential barrier to providing mental health services schools (Froese-Germain & Riel, 2012).

Future mental health focus for training. Atkins and Rodger (2016), found that MHL for teacher candidates must include: knowledge of common mental illnesses, strategies and tools to support students with mental health, case examples of at risk students and mental distress, and an understanding of own attitudes, perceptions, and beliefs. The results of the qualitative open-ended questions, posed at the end of the post-test survey in this current research, requested future

professional development in the format outlined by Atkins and Rodger (2016). Participants in

this mental health study stated that they would like "actual coping skills for students" (participant

23); "strategies/resources for classroom teachers" (participant 1); "practical ideas and strategies

for teachers" (participant 2); and "more in-depth information on certain mental health disorders

and the warning signs" (participant 20). This finding is supported by past studies where teachers

indicated they were not prepared to support students mental health needs and had a desire to

receive training on strategies that would help them support students with emotional, behavioural,

and social difficulties as they feel mental health is an emerging topic in education, and have

learned about mental health mainly through on the job experience or discussions with colleagues

(Andrews et al., 2014; Atkins & Rodger, 2016; Reinke et al., 2011). Overall, teachers in this

study are requesting further professional development on practical strategies to help them

support and recognize students with mental health problems.

Implications of the Findings

Previous researchers reviewed Faculty of Education programs across Canada and results

indicate that Bachelor of Education programs do not offer courses to highlight mental health

problems in students and how to support these students (Atkins & Rodger, 2016; Carr et al.,

2017). The findings of this study support the need to address MHL in pre-service teacher

programs, as well as providing professional development opportunities for in-service teachers.

Although participants in the current study agreed that teachers should be aware of how to react

and support students with mental health needs, and the majority of participants had taught a

student with mental health problems, approximately 58% of the participants felt adequately

prepared and qualified to do so, with approximately 86% stating that their Bachelor of Education

program did not prepare them for mental health problems in their students. These results suggest

that more mental health training should be offered to teachers to help bridge the gap between material presented in their post-secondary studies and issues and concerns that they will be faced with once they take the lead in their own classrooms.

Results of this current study indicated that the participants had knowledge about mental health prior to enrolling in the study, as indicated by the demographic question on the pre-test. The participants' responses to the post-test questions pinpoints a desire for more training and knowledge on specific areas of mental health such as: anxiety, signs and symptoms to help identify potential mental health problems, practical strategies to support students with mental health problems, and useful strategies to help care for their own mental health. Further mental health programs should be implemented to help teachers learn to support the mental health needs of their students while promoting the positive mental well-being of students and staff.

Alternative Explanations of the Findings

While the results suggest that most participants knowledge improved or stayed the same on the knowledge based true and false questions, three participants had lower results on the post-test. Responses to the pre-test demonstrated an initial high level of accuracy, as demonstrated with 63% accuracy on the pre-test compared to 74% accuracy on the post-test. Participants took an average of 71 days to complete the online institute. The amount of time between completing the pre- and post-test could account for some of the improvements in the post-test results. Spector (1981) stated that a shortcoming of pre- and post-test design is that you cannot take into account that some other factor is responsible for the changes between the pre- and post-test results. Participants may have learned about mental health through their own research, education, or professional development that they took part in during this study.

A further look into the engagement of the online institute showed that participants spent an average of 5 hours and 21 minutes completing the course, given that some participants stated that the suggested 20 hours was a grave understatement, the amount of time engaging in the course may suggest that many participants skimmed the information and did not spend enough time engaging in the information to improve their knowledge base. Some of the participants stated that, "unfortunately, I don't feel like I learned a lot of things I didn't already know" (participant 7). Others said the issue with the online institute was "there is lots of information to digest which is overwhelming at times" (participant 9); and "information on the brain was a bit heavy and I can't see me really using that information in my teaching" (participant 24) meaning they may have skimmed some topics, or it was too much information to take in. Other participants said, "due to time restraints and being so busy as a teacher, I wished I had more time to go at a slower pace and take the time to absorb all the information and watch all of the videos in their entirety" (participant 25), and "some modules were too wordy or lengthy," (participant 11). Another participant said the density of the course was an issue "it says how it is a 20-hour course, but I feel that is a grave underestimation. To properly get through all materials, I feel the course would need 40 hours" (participant 26). One participant further explained that, "module 6 was very wordy and I felt less involved as reading through" (participant 22).

Participants had until March 31, 2018 to complete the pre- and post-test and MHL institute. Of the 23 participants who fully participated in the research, only 3 completed the pre- and post-test in under 2 months. The average length of time participants took to complete the pre-test, mental health institute, and post-test was 71 days. The results also show that over half of the participants (15 people) did not complete their post-test until March month. This could suggest why some questions showed little growth or a decline in correct responses, as

participants may have forgotten what they learned in the institute from the time they started engaging in the material to the time they completed the post-test. This is supported by the research that suggests professional learning opportunities are more beneficial if they veer away from the traditional approach and offer professionals more time, activities, content, and a longer period of engagement to participate, collaborate, and practice the skills learned in the workshop (Birman et al., 2000).

The pre-test response rate was higher than the post-test response rate, with 116 participants completing all of the questions on the pre-test, 79 participants enrolling in the course, 52 participants engaging in the course, and 36 participants completing the post-test. While some participants withdrew from the course due to workload, personal matters, or time constraints, others chose not to engage in the material at all. It cannot be determined why 37 participants decided to complete the pre-test, but not enrol in the curriculum, nor can it be determined why 27 participants asked to enrol in the course and never logged in. Of the 52 participants who engaged with the course material, only 36 completed the post-test and completed the entire mental health institute. Some of the participants stated that the curriculum was "wordy" (participant 11), or that the "20 hours was a grave underestimation" (participant 26), this could be why others did not complete the course and post-test. One participant stated that at times they felt "overwhelmed" with all of the information (participant 23). Participants may have opted out of engaging and completing the pre- and post-test because they felt overworked, experienced burnout, or felt they could not devote enough time to explore the curriculum while working full time, meeting the needs of their students, and maintaining a personal/family life. Steinheirdt et al. (2011) stated that teacher burnout results in disengagement from work and is caused by "prolonged exposure to emotional and interpersonal stressors on the

job" (p. 420). Disengagement from the MHL institute could have been a result of teacher burnout. Another reason could have been lack of motivation to complete an online course. Participants may have chosen not to engage in the course because they had difficulty navigating through the course shell. Some people find it difficult to be motivated to use the Internet as a mode of learning, or they may lack the necessary skills and knowledge to use it effectively (Bagnell & Santor, 2015).

Limitations to the Study

While the findings from this research inform the need for professional development concerning mental health problems, it is important to note that the sample size is limited to a small percentage of teachers within the Newfoundland and Labrador English School District. Therefore, the identified need for training may be reflective of the perceived needs of teachers in this study, but may not be representative of all teachers within Newfoundland and Labrador. In the 2016-2017 school year, there were 5, 222 full time teachers employed with the NLESD (Department of Education, 2017). While over 100 participants completed the pre-test, only 2.2% of the teaching population was represented in completing all questions in the pre-test. With 52 participants engaging in the mental health online institute, less than 1 percent of the teaching population in Newfoundland and Labrador was represented. It is possible that educators who did not participate in this research have views that were not adequately represented in this study. The low percentage of participants may be due to the method of recruitment. Administrators may have deleted the e-mail or felt it was unimportant or taxing on teachers who already juggle numerous responsibilities. A face-to-face meeting might have provided different results. As administrators choose what they will promote and what they deem is important for their staff to learn, administrators may not have seen the relevance of a MHL institute to teachers in their

school community or they may have felt that their staff was already adequately informed on mental health and chose to promote other professional development initiatives that they felt were more appropriate or suitable for their school community (Climie, 2015). Andrews et al. (2014) found that teachers did not take or plan on taking any additional courses on mental health unless it was something they were faced with. This could explain why the participant rate was low in this study, as teachers may not feel the need to learn about mental health because they feel that it is not an issue in their classroom at this time.

While this research is supported by the findings of teacher surveys in the Premier's Task Force, which listed student mental health and wellness as requiring immediate and substantial attention, the findings may not generalize to all teachers in the NLESD (Government of Newfoundland and Labrador, 2017). Survey data only provide a glimpse into the perspectives of respondents, and although open-ended qualitative questions did allow for a more in-depth understanding of educators' viewpoints, the data was limited to a small population (36 participants) who completed the open-ended questions. Lastly, the survey did not ask which grade levels participants worked with. Therefore, the results may not be representative of all grades - Kindergarten to Grade 12. There is no way to determine if primary, intermediate, and secondary teachers took part or which grades had the most focus. The survey did not ask what area of the province participants worked in; therefore, there is no way to determine if participants were in rural or urban communities.

Research has been conducted on implementing MHL curriculum in the school setting for students. A study that mirrors this current research implemented conducted a pre-test of knowledge and attitudes before and after implantation of a MHL curriculum guide to students and found "statistically significant, substantial and sustained improvements in student's

knowledge and attitudes" of the 112 students that were able to be matched (Kutcher, Wei, &

Morgan, 2015). The studies mirror one another in such that similar content is offered to teachers

and students. In the Kutcher, Wei, & Morgan (2015) study, a MHC guide was implemented to

junior high students face to face. The current study also implemented curriculum developed by

Kutcher and colleagues addressing similar content, however this content was offered to

educators and offered in an online professional development. While the current study did have

statistical significant gains in knowledge and attitude, the opinion-based question was not

significant. This might have been different if there was a larger sample size or if participants

spent more time engaging with the institute. Future studies need to engage with a more

representative sample size and determine if additional time spent engaged in the MHL institute

has a significant positive impact on educators knowledge, attitude, and opinions.

Recommendations for Further Research

Although teachers perceived the need to promote the mental health and wellness of their

students, many feel inadequately prepared to do so. Only six percent of the participants in this

study felt prepared upon graduation from their Bachelor of Education program to support

students with mental health problems in the classroom. This finding supports the environmental

scan, focus groups, and interview conducted with teachers in New Brunswick, Quebec, Northern

Ontario, Southwestern Ontario, Alberta, and British Columbia, in which it was unanimously

determined that the B. Ed. Programs did not adequately prepare teachers for identifying and

addressing the mental health needs that they would encounter in their classrooms (Rodger et al.,

2014). This suggests that a call to action needs to happen among Canadian post-secondary

education programs to include mental health education in their Bachelor of Education programs

for future education students, as well as a call to action among school boards across the country

to offer more professional development for in-service teachers on mental health problems in the K-12 classroom. The challenges that teachers face with regards to mental health in Canadian children/youth and the impact they have on learning and the classroom environment suggests that mental health should be addressed in education (Atkins & Rodger, 2016). This is important as teachers have daily contact with students, build and establish relationships with students, and are often the first people to observe the early signs of mental health disorders (Vieira et al., 2014). Teachers are encouraged to help reduce stigma by continuing or starting a conversation surrounding child and youth mental illness and mental health; however, they need the proper training and resources to be able to do so effectively (Froese-Germain & Riel, 2012).

The role of the teacher with respect to mental illness is not to diagnose a mental illness, but to have the knowledge to identify possible mental health problems and mental illnesses, refer appropriately, and work effectively in collaborating with other professionals such as school counsellors, psychologists, and mental health clinicians, to assist and continue to support students who have been identified (Kutcher, 2016). After completing this MHL institute, it is evident that teachers are asking for more professional development surrounding mental health problems. The post-survey pinpoints a clear need for connecting teacher training to the specific areas of challenges that they encounter in their classrooms and schools. Only 31% of participants had the knowledge or skills to identify or recognize possible mental health problems, with 25% feeling prepared to do so with their teacher training, and 58% feeling prepared and qualified in supporting students with mental health problems. Considering that serious mental illnesses are most likely to be diagnosed between16 to 24 years of age, educators should know how to support students with mental illnesses and help students access to the appropriate supports (Andrews et al., 2014).

The services that students receive as a result of being identified with an emotional and/or behavioural exceptionality vary widely across the provinces and territories in Canada (Whitley, 2010). It is imperative that educators know how to support and recognize students with mental health illnesses in their classroom, as students in Newfoundland and Labrador must be diagnosed with a mental condition by a health care practitioner to receive special education services, and many health care practitioners are hesitant to make a diagnosis of mental illnesses as mental health illnesses are not always clearly diagnosable and doctors may not feel confident in the determination of whether or not a mental illness exists at a young age (Department of Education, 2016). Therefore, the support of students with emotional or behavioural problems falls on the classroom teacher. It is important to understand and obtain knowledge concerning mental illnesses that require treatment and how to support these students in the classroom. It is important to note that it is not the teachers' job to diagnose the student, but they should be able to recognize the signs and know who to refer the student(s) to both within and outside of the school. Even if a child is diagnosed and receives special education supports, teachers need to be trained on how to support and meet their needs, as the needs of students with mental health problems are often more complex and require more than changes to the educational programming (Whitley, 2010). Because teachers do not feel prepared in supporting students with mental health problems in their classroom, they may feel extra stress or burnout in their job. Research reports that teachers who have incorporated MHL into their classrooms, and have received mental health training and support have had positive outcomes in the classroom such as improvements on: classroom climate, behaviour management, and lowered the effects of teacher burnout, anxiety, and depression (McLean et al., 2017).

Most participants stated that they would prefer a blended model for further learning regarding MHL. While some stated an online self-paced institute was more beneficial due to their geographic locations, others felt the mixture of online and face-to-face would be more beneficial. Atkins and Rodger (2016) offered a MHL course online to pre-service teachers and found that this modality provided comfort for anonymous participants to disclose personal or sensitive information, while building a community amongst participants. A past study resulted in teacher candidates reporting that they learned about mental health symptoms mainly through practicum experiences and discussions with colleagues, rather than through formal teacher training in faculties of education (Bryer & Signorini, 2011). This supports the importance of mental health training for in-service teachers.

With regards to the delivery of the institute, several participants enjoyed the multimedia approach with videos of real life people living with mental health problems. Participants felt the multimedia approach kept the material interesting and relevant. This supports Atkins and Rodger (2016) who stated that people are more understanding and empathic when they have a connection or meet someone living with a mental illness. Face-to-face opportunities as part of the learning experience would allow educators to be part of a community that can support and discuss mental health needs. Good teachers can increase their competence by co-operating with colleagues during professional development. This is otherwise known as 'adaptive expertise', meaning teachers can continuously learn from others (Postholm, 2012). Whitley, Smith, and Vaillancourt (2012) noted that teachers tended to choose programs recommended by colleagues through professional learning communities instead of scientific based evidence. A follow-up opportunity would be beneficial to teachers who had participated in the study to ensure they retain what they learned. It is impractical to expect teachers after completing one workshop to

change the school system (Whitley et al., 2012). Similar studies have shown decay in knowledge over time and suggest that continuous training or refresher training may produce long term results (Carr et al., 2017). These refreshers could be delivered through continuous learning, mentorship, or by building professional learning communities where educators can observe others, discuss, reflect on various interventions and strategies, and share this knowledge with other schools (Whitley et al., 2012).

Future research studies may opt to implement various data recruitment strategies. A face-to-face with administrators on the importance of addressing MHL in schools may have had an ongoing impact in regards to the ability to obtain participants and potentially impact their knowledge. Educational leaders are surrounded by mental health problems on a daily basis through special education referrals, behaviour problems, school violence, bullying, drop-outs, or low achievement (Whitley, 2010). Unfortunately, most schools do not take a preventative approach, rather they provide support or intervention happens when a problem arises (Koller & Bertel, 2006). By focusing on administration and allowing them to realize the importance of mental health education for their staff members, staff personnel may be more willing to participate in such professional learning developments in the future.

In Canada, all educational policy is created within the provinces and territories. More specifically, administrators can decide what educational priorities they will deem as important for their school (Climie, 2015). Staff members are more motivated and willing to incorporate practices when they are involved in the decision-making and development of the schools' mission statements (Whitley, 2010). Moreover, administrators who were well-informed about mental health problems are more likely to overcome and implement successful mental health interventions in their school communities (Moon et al., 2017). Without the support and

endorsement of the school administrator, evidence-based practices are typically not integrated or supported in the school. Goddard and Hart (2007) indicated that board and school policies are key to supporting administrators in developing inclusive schools for all students. This includes students with mental health problems. Administrators align their professional development with school development plans and current provincial standards. Therefore, teachers would gain more support for mental health education if it aligns with their school development as well as school board policies.

Overall, the participants who engaged in the MHL institute had a positive response to the delivery of the institute and information provided. Participants showed an improvement in their knowledge in regards to select true and false responses after engaging in the MHL institute and completing the post-test. Results of the *t*-test for the Likert scale questions showed significant improvements in areas surrounding stigma, and attitudes. There was a high percentage of teacher participants in NLESD who identified that they were familiar with the appropriate resources they should require if needed, and this finding did not align with other research in Canada. This may suggest that the participating teachers in Newfoundland and Labrador gained this information through engaging in the MHL institute offered online. There was a general consensus through the current NLESD study and other Canadian research that a void exists both in teacher education and in the teaching profession regarding the lack of mental health instruction. Educators are requesting and seeking professional development concerning mental health and wellness to help fill this gap (Government of Newfoundland and Labrador, 2017).

Summary

With the development of inclusive education, the role of the school has changed significantly, and educators now have to face many issues within the classroom in addition to delivering the curriculum and promoting academic growth in their students. The mental health of students is one of these growing concerns. According to the Government of Canada (2006), the majority of mental illnesses have their onset during childhood or adolescent. Given that students spend half of their waking hours in schools, educators need to become well versed in recognizing potential mental health problems, supporting students with mental health problems, and advocating for them. Of Canadians aged 15 or older who have reported having mental health care needs in the past, one third of them reported that their needs were not fully met (Sunderland & Findlay, 2013). Of children who have mental disorders, an estimated 75 percent of them do not access specialized treatment services (Waddell, McEwan, Shepherd, Offord, & Hua, 2005).

According to the Newfoundland and Labrador Medical Association (2010), Newfoundland and Labrador is "currently functioning with less than 25% of the recommended number of Child/Adolescent psychiatrists", and the province has the highest percentage of cases where patients are waiting more than a year to receive psychiatric treatment (p. 3). The number of mentally ill children in Canada's child population is about 20 percent, with a total of 1.2 million young Canadians living with anxiety, attention deficit, depression, and addiction (Newfoundland and Labrador Medical Association, 2010). It is important to meet the needs of children with mental health problems while they are young, because the implications can be profound if they are not successfully supported in early childhood or onset. Untreated childhood problems can lead to problems in adulthood (such as unemployment or criminal behaviour), suicide, and/or substance abuse, not to mention the long-term costs on other services such as:

criminal justice, special education, foster care, and income support (Newfoundland and Labrador Medical Association, 2010). With the long wait times, and limited access to mental health care, it is time that the education system responds by providing clearly established protocols, training, and programming that links teachers' knowledge and practice to practical applications concerning student mental health and wellness.

With inclusion, more and more children with emotional needs are being placed in general classroom, placing demands on the classroom teacher and special education services (Koller & Bertel, 2006). In-service and pre-service teacher training should be delivered to school staff to provide the support and information needed in recognizing the signs and symptoms of mental health difficulties, interventions to use, and resources that can help support these students (Meldrum et al., 2009; Ontario Healthy Schools Coalition, 2008; Ontario Ministry of Children and Youth Services, 2006).

The health of a person does not stop at the shoulders, and mental health is just as important as physical health (LaFee, 2013). According to the Schools Act (1997), everyone in Newfoundland and Labrador has a right to access public education who is a Canadian citizen, child of a Canadian citizen, lawfully admitted to Canada, and between the ages of 5 and 21. Therefore, the role of an educator is to provide an education to those with mental health problems, in an inclusive setting, that is void of stigma. It is also the responsibility of the educator to understand the connection between mental health problems and how it may affect the student's ability to learn and function in the classroom (Andrews et al., 2014).

The findings of the current study support the literature review, as the findings highlighted that although teachers are aware that mental health problems are a concern in today's classrooms, many feel they are not adequately trained to recognize or support students with

mental health problems. Many teachers are lacking the knowledge, skills, and resources to support students with mental health problems (Reinke et al., 2011). Training needs to occur through professional learning communities within the schools. A past study of 30 American schools showed that teachers prefer formal education that is directly connected to teaching experiences and needs (Postholm, 2014). Instruction on mental health for educators needs to be directly linked to what teachers are experiencing in their classrooms. In responding to the post-test of this study, participants stated that additional practical strategies for students with mental health problems and anxiety would benefit their teaching practice. In striving to meet the professional learning needs of teachers within the NLESD, professional development must be aligned with individual teacher growth plans, school development plans and tied in with provincial standards (Philpott, Furey, & Penney, 2010).

With the focus of mental health and wellness in the Premier's Task Force on *Improving Educational Outcomes in Newfoundland and Labrador*, administrators within the NLESD should align their schools with a focus on training their staff around various mental health problems, supports, and resources. Future research is needed on teachers' preparedness to facilitate mental health practices in their classroom, as the number of participants in this study did not represent a large enough portion of teachers within Newfoundland and Labrador to generalize the findings. However, the results are supported by the Premier's Task Force, which states that, "too many students with mental health needs and academic challenges are not receiving the support and the education they deserve" (Government of Newfoundland and Labrador, 2017, p.3).

Not only is MHL vital for supporting students with mental health problems, but it also beneficial in promoting and supporting the mental well-being of educators. Teacher well-being is just as important as the mental health of students. Teachers cannot support and care for their

students if they are not taking care of their own mental health. Teacher mental health is equally as important as student mental health, as teachers who have mental health problems can suffer from stress, absenteeism, and other health problems (Atkins & Rodger, 2016). A 2009 study in England, examining emotional health and well-being found that teachers: "feel burdened by students' mental health needs, lack confidence in managing mental health related problems in the classroom… experience discomfort in discussing mental or emotional health with students compared to other health topics" and overall felt inadequately prepared to effectively support students with mental health problems (Kidger et al., 2009b, p. 922). Mental health curriculum for teachers would provide a natural bridge to reach as many students within the school system as possible (Atkins & Rodger, 2016). The results are robust enough to suggest that professional development on MHL should be implemented for in-service teachers.

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Appendix A

Mental Health Literacy Curriculum Resource Survey

Knowledge Questions[1]

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.			
2. Mental illnesses are usually caused by the stresses of everyday life.			
3. Mental health problems will be experienced by almost everyone during the course of their life.			
4. Mental distress is rare.			
5. A person can have good mental health and a mental illness at the same time.			
6. Mental illnesses are mostly unrelated to other health conditions, such as diabetes or heart disease.			
7. People with mental illness rarely, if ever, get better.			
8. Self-stigma is often the result of personal weakness of people with mental illness.			

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[1]Reprinted from "Mental Health Literacy Pre-Service Curriculum Resource (MHL-CR) Survey" by S. Kutcher and Y. Wei, 2016. Copyright 2016 by Dr. Stan Kutcher.

9. It is important to apply evidence-based approaches to stigma reduction programs and use those for which good evidence of positive impact exists.			
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.			
11. Treatments for mental illnesses are not as effective as treatments for other illnesses, such as diabetes and arthritis.			
12. Students with mental illness usually are not able to achieve academic success.			
13. Pruning, the destruction of parts of the brain, is a normal part of brain development during adolescence.			
14. Epigenetics is the study of how different brain parts malfunction.			
15. Mental health is brain health.			
16. Most behaviors that a person exhibits are not based on how their brain functions but instead reflect how they have been parented.			
17. The pre-frontal cortex develops before the limbic system matures.			
18. Brain development occurs over time, as a result of a complex interaction between the genes in the brain and the environment the brain experiences.			

19. According to the Yerkes-Dodson law, there is an optimal level of anxiety that improves our performance.			
20. Mental distress, mental health problems, and mental illness are always caused by a negative event.			
21. There is no valid scientific evidence supporting the claim that Autism Spectrum Disorder (ASD) is caused by vaccines or diet.			
22. Eating a balanced diet and getting regular exercise are sufficient treatments for mental illness.			
23. When someone has an Anxiety Disorder, his or her brain is responding to legitimate threats in the environment.			
24. Someone with Panic Disorder can anticipate when a panic attack is likely to occur.			
25. Sometimes separation anxiety is developmentally appropriate.			
26. A diagnosis of Oppositional Defiant Disorder (ODD) or Conduct Disorder (CD) helps us to understand *why* someone acts a certain way.			
27. Students who self-harm are usually suicidal.			
28. Asking a student that you know well if he or she is thinking about suicide is unlikely to trigger a suicide attempt.			
29. The parasympathetic nervous system is involved in ramping up the body's stress response.			

30. The presence of a responsible, supportive, and caring adult is one of the more important protective factors against the potential negative impacts of overwhelming stress for young people.			
31. It is very important for schools to teach students about the harmful effects of daily stress so that they can grow up to become more resilient people.			
32. Faulty logic is one example of a behavioral and emotional response to a stressor.			
33. Most students will experience toxic stress daily.			
34. A mentally healthy classroom is one in which the teacher works to try and make sure that the environment is stress-free.			
35. A family doctor is not trained in the diagnosis and treatment of mental illnesses and should therefore refer young people who have a mental illness to a psychiatrist or psychologist for treatment.			
36. Case Studies and Case Reports provide stronger research evidence than Randomized Controlled Trials.			
37. When examining research about a treatment, statistical significance is more important than clinical significance.			
38. A treatment provider's experience is the gold-standard in determining what treatment your student should receive.			

39. ALL of the following are important roles that a teacher can take regarding mental health for students: identification of students at risk for a mental disorder; providing a diagnosis for parental consideration; providing information on academic achievement to the health care team.			
40. The overall purpose of treatment for mental illness is to cure the illness.			

Appendix B

Mental Health Literacy Curriculum Resource Survey

Attitude Questions[2]

For each of the following statements please mark an **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							

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[2] Reprinted from "Mental Health Literacy Pre-Service Curriculum Resource (MHL-CR) Survey" by S. Kutcher and Y. Wei, 2016. Copyright 2016 by Dr. Stan Kutcher.

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 C

Mental Health Literacy Curriculum Resource Survey

Opinion Questions[3]

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							

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[3] Reprinted from "Mental Health Literacy Pre-Service Curriculum Resource (MHL-CR) Survey" by S. Kutcher and Y. Wei, 2016. Copyright 2016 by Dr. Stan Kutcher.

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 D

Select Likert Scale Questions[4]

1. I feel adequately prepared and qualified to deal with any mental health issues I may be exposed to as a teacher.

2. I would know what resources to access if I have a student with mental health issues in my classroom.

3. Teachers should be aware of how to react and refer students to services when faced with a mental health issue in their students.

4. Staff at my school (including myself) have the knowledge and skills for recognizing and supporting students facing mental health difficulties.

5. I have had to deal with an instance of student(s) with mental health issues.

6. I felt prepared upon graduating from my Bachelor of Education with regards to mental health issues in my students.

7. I have been prepared to deal with mental health issues among students through my teacher training (education, professional development).

8. If I had a student with mental health issues in my classroom, I would know which resources to access and where to find them.

9. I would know where to access mental health resources outside of my school if I needed to in order to assist a student with mental health difficulties.

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[4] Reprinted from "Mental Health Issues in the Schools: Are Educators Prepared?" by A. Andrews, M. McCabe, and T, Wideman-Johnston, 2014, *The Journal of Mental Health Training, Education and Practice,* 9(4), p. 267-268. Copyright 2014 by Emerald Group Publishing Limited

10. My school has policies/procedures in place for dealing with mental health issues.

Appendix E

Recruitment E-mail

Good evening,

I am an Instructional Resource Teacher within the Newfoundland and Labrador English School District as well as a graduate student at Memorial University of Newfoundland. I am completing my Masters in Special Education and I would like you to pass along this email to your staff to assist me with my thesis project. I am recruiting teachers, principals and guidance counselors to participate in a mental health literacy online course titled Teachers' Preparation to Facilitate Positive Mental Health in the Classroom. I have attached all necessary information in this email and you can contact me with any further questions.

Thank you in advance,

Jillian Ball

jillianball@nlesd.ca

Appendix F

Recruitment Script

(To emailed to teachers in the Newfoundland and Labrador English School District.)

You are invited to take part in a research project entitled "Teachers' Preparation to Facilitate Positive Mental Health in the Classroom."

Participation in this institute is designed to provide professional development to support your teaching practice; however, your participation in this study is voluntary, and will have no impact on your employment status. The survey can be accessed at:

https://www.surveymonkey.com/r/YHB3L5X

Upon completing the survey you will be entered into a draw to win $100.00, and upon completing the institute you will be entered into a draw to win an iPad.

We are offering this institute because teachers receive minimal preparation in understanding or recognizing mental health concerns, as well as purposefully promoting positive mental health among their students. The current study attempts to address this training and research gap by piloting an education institute on Mental Health Literacy.

This institute is intended to provide educators with professional development to equip them with knowledge and skills to support their students with diverse learning needs. It is intended to help educators understand the complexities of behaviour and learning challenges as they relate to mental health.

Participation in this Mental Health Institute is intended to support your ability to facilitate positive mental health as an educator. Participation consists of completing two 15-minute surveys, and enrolling in an online institute and completing the quizzes and self-assessment, which will take under 20 hours of your time.

The institute covers six modules, which address topics such as: stigma and mental health; the human brain; understanding mental health, mental illness and related issues; and caring for your students and yourself. You will be asked to complete the modules sequentially; complete quizzes for each of the five modules and complete a self-assessment. Quiz responses, the self-assessment, and other information (such as how often you logged into the course and what information you accessed) from the online modules will be accessible to the researchers and this information will be used as part of the data to determine course engagement. A certificate of completion will be provided upon completing all of the modules and the self-assessment associated with the Mental Health Literacy institute.

The material will be presented through a flexible, modular, interactive Desire2Learn (D2L) course shell. Material will be presented in multiple modalities (such as case studies, video clips, links to further resources, journal articles, and interactive forums), and emphasis will be placed on common classroom scenarios, interactions between colleagues, stigma of acknowledging a mental health problem, mental health myths, roles and responsibilities of experts in the field, and first-person accounts of experiences with mental illness. You will have until March 31, 2018 to complete the modules and surveys. Once you have completed the survey please email me at jillianball@nlesd.ca to be entered into the course shell. Your pre- and post-survey data will remain anonymous.

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

Letter of Information and Informed Consent Form

Title: Teachers' Preparation to Facilitate Positive Mental Health in the

Classroom

Researcher(s):   Gabrielle Young, Assistant Professor, Faculty of Education, Memorial

University of Newfoundland (gabrielle.young@mun.ca)

Greg Harris, Professor, Faculty of Education, Memorial University of

Newfoundland (gharris@mun.ca)

Rhonda Joy, Associate Professor and Interim Associate Dean, Faculty of

Education, Memorial University of Newfoundland (rjoy@mun.ca)

Sharon Penney, Associate Professor, Faculty of Education, Memorial

University of Newfoundland (scpenney@mun.ca)

Jillian Ball, graduate student, Faculty of Education, Memorial University

of Newfoundland, IRT teacher with NLESD (jillianball@nlesd.ca)

You are invited to take part in a research project entitled "Teachers' Preparation to Facilitate

Positive Mental Health in the Classroom."

This information is part of the process of informed consent. It should give you the basic idea of

what the research is about and what your participation will involve. It also describes your right

to withdraw from the study. In order to decide whether you wish to participate in this research

study, you should understand enough about its risks and benefits to be able to make an informed

decision. This is the informed consent process. Take time to read this carefully and to

understand the information given to you. Please contact the researcher, Gabrielle Young

(gabrielle.young@mun.ca), if you have any questions about the study or would like more

information before you consent.

It is entirely up to you to decide whether to take part in this research. If you choose not to take part in this research or if you decide to withdraw from the research once it has started, there will be no negative consequences for you, now or in the future.

Introduction to the researchers and the purpose of the study:

Dr. Gabrielle Young and Dr. Sharon Penney primarily teach and conduct research within the area of Special Education, and Dr. Greg Harris and Dr. Rhonda Joy primarily teach and conduct research within the realm of Counseling Psychology. As the investigators of this study, we invite you to participate in a research study examining the degree to which a Mental Health Literacy institute impacts teachers' preparation to facilitate positive mental health.

This institute is intended to provide you with professional development to equip you with the necessary knowledge and skills to support some of the underlying causes of difficulties in school and understand the complexities of behavioural and learning challenges.

What you will do in this study and compensation:

You will receive an e-mail inviting you to participate in the project. You can choose to participate by clicking on the link provided by the online survey tool, *Survey Monkey*, and you will be presented with a webpage that fully describes the study and includes the informed consent document which is included below.

Teachers who consent to participate will be presented with a survey, which will take approximately 15 minutes to complete. Upon completing the survey, your contact information will be entered into a draw to receive $100, and you will be entered into the online institute. You will be provided with the opportunity to complete a second survey towards the end of the academic semester, and your contact information will be entered into a draw to receive $100

upon doing so. **Upon completing the institute you will be entered into a draw with a chance to win an iPad.**

Length of time:

Participation in this study will consist of completing two 15-minute surveys, and enrolling in an online institute focusing on Mental Health Literacy, which will take under 20 hours to complete. The institute covers six modules, which address topics such as: stigma and mental health; the human brain; understanding mental health, mental illness and related issues; and caring for students and yourself. Participants will complete the modules sequentially and complete the quiz response within each module. Quiz responses, the self-assessment, and institute related data will be accessible to the researchers and used to determine engagement with the material and a certificate of completion will be provided upon completing the institute.

The material will be presented through a flexible, modular, interactive Desire2Learn (D2L) course shell. Material will be presented in multiple modalities (e.g., case studies, video clips, links to further resources, journal articles, interactive forums etc.), and emphasis will be placed on common classroom scenarios, interactions between colleagues, stigma of acknowledging a mental health problem, mental health myths, roles and responsibilities of experts in the field, and first-person accounts of experiences with mental illness.

Withdrawal from the study:

Your decision to participate in this study has no impact on your employment status. Your participation is voluntary, and you can withdraw from the institute at any point in time, and doing so will not have any negative implications for you now or in the future.

While you must complete the modules sequentially, you can choose the degree to which you engage in the online institute, with no impact on yourself or your employment status.

You may choose to respond to some survey questions, but not others, or can withdraw from the study by closing the page and exiting out of the survey at any point in time. Incomplete survey data will not be saved.

You will be able to withdraw from the survey up until you hit submit. Only the participants who submit surveys will receive information on how to access their $5 honorarium. Once you submit, the data cannot be removed because it will be anonymized and cannot be removed after it is aggregated.

Possible benefits:

This institute will equip educators to be more responsive to the mental health of all students. The curriculum in the Mental Health Literacy institute is presented from a Canadian perspective and focuses on how mental health is assessed and how students with exceptionalities can be supported in inclusive classrooms. Emphasis will be placed on supporting mental health within the curriculum as opposed to an intervention for at-risk youth.

Possible risks:

Participation in this Mental Health Institute is intended to support your ability to facilitate positive mental health in the classroom. Participation consists of completing two 15-minute surveys, and enrolling in an online institute, which will take under 20 hours of your time. Participants should be aware of the suggested time requirements for this online institute. In addition, the material presented in the institute could cause discomfort or anxiety, particularly for anyone who may have experienced similar situations or have difficulty maintaining positive mental health.

Participants will have the opportunity to discuss feelings and concerns that arise from participating in this research study. While your feelings and concerns are important to us as

researchers, we are unable to provide on-going counselling support. Should participating in this study cause continued difficulties; you are encouraged to contact:

1) Your family physician or primary care physician for follow-up services.

2) 24 hour Mental Health Emergency Services, Eastern Health, (709) 737-4668 or toll free 1-888-737-4668

3) 24 hour Walk-in Crisis Services, Psychiatric Emergency, Health Sciences Centre

4) 24 hour Walk-in Psychiatric Assessment Unit, Waterford Hospital, Waterford Bridge Road, St. John's, NL

Anonymity and Confidentiality:

Anonymity refers to protecting participants' identifying characteristics, such as name or description of physical appearance. The survey data will be anonymous. If you consent to participate, you will be prompted to create a unique code prior to completing the survey. While the data from this research project will be published and presented at conferences, the data will be reported in aggregate form, so that it will not be possible to identify individuals. Moreover, the survey data will be stored separately from the instructional material, so it will not be possible to associate a name with any given set of responses. If you would like to participate in a follow-up study once you begin teaching, the researchers may know your identity.

The ethical duty of confidentiality includes safeguarding participants' identities, personal information, and data from unauthorized access, use, or disclosure. Participants for this research project will be current teachers within our province, and as such, many of you know each other, and so it may be possible that you may be identifiable to other people on the basis of what you have said. As researchers, we will undertake to safeguard the confidentiality of the online discussion forums, which will be used to pose questions or concerns in regards to the institute,

determine the time spent engaging in the modules, and provide a thematic analysis of the information learned from the modules, but cannot guarantee that other members of the group will do so. As participants, we ask that you respect the confidentiality of the other members of the group by not disclosing the contents of this discussion outside the group, and be aware that others may not respect your confidentiality.

Recording of Data:

Fluid Surveys is an online survey creation tool that is created by Canadians, and previously stored all survey data in Canada. Fluid Surveys enables anonymous surveys in which no personally identifying information or IP addresses is collected from respondents. Fluid Surveys privacy policy can be accessed at: http://fluidsurveys.com/canada/data-privacy-canada/ Only the researchers involved with the project will have access to the data. All data will be kept on password-protected devices, and the survey data will be stored separately from the D2L course shell housing the Mental Health Institute.

Storage of Data:

Data will be kept 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 is no longer required and the findings have been published, all data will deleted from the investigators computers.

Reporting of Results:

Results from this stud will be shared in aggregate form through peer-reviewed publications and conference presentations. Findings will also be shared with the Faculty of Education at Memorial University and research summaries will be made available on faculty websites for the researchers

of this study. In addition, data from this study may be analyzed as part of graduate student

research, and upon examination, will be publically available at the QEII library.

Questions:

You are welcome to ask questions at any time before, during, or after your participation in this

research. If you would like more information about this study, please contact Gabrielle Young

via e-mail (gabrielle.young@mun.ca) or by phone (709-864-4413), or Jillian Ball via email

(jillianball@nlesd.ca) or by phone (709-690-9353).

Your survey data will remain anonymous. Thank you for completing the survey, in order to gain

access to the course shell please email me at jillianball@nlesd.ca .

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 H

Follow up E-mail

Dear Participants,

I would like to begin by thanking you all for signing up and consenting to the research project

entitled Teachers Preparation to Facilitate Mental Health in the Classroom. A number of you

have already completed the course and post-survey. This is just a reminder to you all that your

accounts have been set up through Memorial University of Newfoundland and Labrador. You

would have received an email from MUN stating your Bright Space username and password

which allows you to gain access to the course. I just wanted to remind you that the deadline to

complete the institute is March 31, 2018. The post-survey has been posted within the course

shell. If you have any further questions or concerns regarding this research please do not hesitate

to ask me. If for some reason you would like additional time to engage in the institute past the

March 31st deadline please let me know as I know this is a busy time of year with report cards

and interviews.

Thank you,

Jillian Ball

jillianball@nlesd.ca

Appendix I

Ethics Approval

MEMORIAL
UNIVERSITY

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:	**20181072-ED**
Approval Period:	October 31, 2017 – October 31, 2018
Funding Source:	Not Funded
Responsible Faculty:	Dr. Sharon Penney Faculty of Education
Title of Project:	*Teachers preparation to facilitate mental health in the classroom*

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

October 31, 2017

Ms. Jillian Ball
Faculty of Education
Memorial University of Newfoundland

Dear Ms. Ball:

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,

Russell J. Adams, Ph.D.
Chair, Interdisciplinary Committee on
   Ethics in Human Research
Professor of Psychology and Pediatrics
   Faculties of Science and Medicine

RA/lw

cc: Supervisor – Dr. Sharon Penney, Faculty of Education
       Associate Dean, Graduate Programs, Faculty of Education

Appendix J

Curriculum Vitae

Jillian D. Ball
Conception Bay South, Newfoundland and Labrador, Canada
jillianball@nlesd.ca

Education:

2013-2014	University of Saskatchewan Post Degree Certificate in Special Education
2007-2008	Memorial University of Newfoundland and Labrador Bachelor of Education Primary/Elementary
2004-2007	St. Mary's University

Experience:

2017-2018	St. Andrew's Elementary Instructional Resource Teacher (grades 1, 3, and 4)
2014-2018	Upper Gullies Elementary Instructional Resource Teacher (grades 1-6)
2013	Villanova Junior High Instructional Resource Teacher (grades 5, 6 and 8)
2008-2013	Newfoundland and Labrador English School District Substitute teacher (kindergarten-grade 9)

Licences/Certification:

August 2014	Newfoundland and Labrador Teaching certificate Level 6
August 2008	Newfoundland and Labrador Teaching certificate Level 5
October 2016	Non-Violent Crisis Intervention Training

Professional Learning Communities Related to Mental Health:

2018	Workshop on Mental Health and Teachers (NLTA)
2017	Positive Mental Health (Clinical Social Worker and Janeway Outpatients Psychiatry

Appendix K

TCPS 2: Core Certificate

PANEL ON RESEARCH ETHICS
Navigating the ethics of human research

TCPS 2: CORE

Certificate of Completion

This document certifies that

Jillian Ball

has completed the Tri-Council Policy Statement:
Ethical Conduct for Research Involving Humans
Course on Research Ethics (TCPS 2: CORE)

Date of Issue: **9 September, 2017**