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Mental Health Literacy and Ontario Secondary School Curriculum

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Abstract

Student centered mental health initiatives have seen a rise in implementation as the mental health risks for adolescents and young people are becoming more recognized. However, regardless of these initiatives, youth continue to demonstrate poor mental health which can result in stigmatizing attitudes and behavior, low self-esteem, poor help-seeking behavior, and increased suicide risk. To explore the disconnect between the goal of educational initiatives and their current demonstrated outcomes, this dissertation utilized social constructivist learning theory and school-based mental health literacy to conduct a content analysis of curriculum documents and textbooks in use within Ontario high schools. This case study examined the official Ontario high school curriculum, to answer the following questions: 1) How much exposure do Ontario high school students have to mental health information in the classroom? 2) What is the nature of mental health education within Ontario high schools? The results indicated that Ontario high school students are exposed to very little mental health content within the classroom, with mental health incorporated courses accounting for only 5.1% of the entire curriculum, and mandatory mental health education accounting for 0.004%. The results also indicated that mental health content offered in Ontario high schools may be out-of-date as the average age of content is seven years old come the 2020 - 2021 school year. Additionally, the curriculum focuses almost primarily on substance-use and addiction while oversimplifying other aspects of mental health and mental illness and does not address the most common mental health issues affecting youth. Overall, the findings from this examination of the Ontario high school curriculum demonstrates that mental health is not incorporated comprehensively nor is it multidimensional in nature and that much work needs to be done to ensure that youth are receiving a well-rounded, well informed, and effective mental health education.

Keywords: mental health literacy, curriculum, education, youth mental health

Lay Abstract

Student centered mental health initiatives have seen a rise in implementation as the mental health risks for adolescents and young people are becoming more recognized. However, regardless of these initiatives, youth continue to demonstrate poor mental health which can result in stigmatizing attitudes and behavior, low self-esteem, poor help-seeking behavior, and increased suicide risk. To explore the disconnect between the goal of educational initiatives and their current demonstrated outcomes, this dissertation utilized social constructivist learning theory and school-based mental health literacy to conduct a content analysis of curriculum documents and textbooks in use within Ontario high schools. This case study examined the official Ontario high school curriculum, to answer the following questions: 1) How much exposure do Ontario high school students have to mental health information in the classroom? 2) What is the nature of mental health education within Ontario high schools? The results indicated that Ontario high school students are exposed to very little mental health content within the classroom, with mental health incorporated courses accounting for only 5.1% of the entire curriculum, and mandatory mental health education accounting for 0.004%. The results also indicated that mental health content offered in Ontario high schools may be out-of-date as the average age of content is seven years old come the 2020 - 2021 school year. Additionally, the curriculum focuses almost primarily on substance-use and addiction while oversimplifying other aspects of mental health and mental illness and does not address the most common mental health issues affecting youth. Overall, the findings from this examination of the Ontario high school curriculum demonstrates that mental health is not incorporated comprehensively nor is it multidimensional in nature and that much work needs to be done to ensure that youth are receiving a well-rounded, well informed, and effective mental health education.

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Glossary

Mental Health: A state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community.

Mental Illness: A mental illness is a condition where significant behavioural or psychological symptoms occur in an individual that cause distress in daily life and affects the well-being and productivity of persons.

Mental Health Literacy: The knowledge, beliefs, and attitudes an individual or group have towards mental health and mental illness.

The Mental Health and High School Curriculum Guide: A non-official, nor mandatory, curriculum tool to discusses mental health.

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Chapter 1: Introduction

Youth mental health initiatives are of current interest within education in Ontario, Canada. This is demonstrated through recent government funding for student mental health initiatives, the inclusion of mental health information into components of curriculum, and the development of The Mental Health and High School Curriculum Guide (CBC News, 2019; Kutcher & Wei, 2017; Ontario, 2009a, 2009b, 2013, 2015b). However, it is important to consider whether or not mental health educational practices are sufficient in providing students with appropriate and accurate information for the world in which we live. As school settings have become a more recognized and utilized avenue for mental health literacy, this prompts discussion about mental health literacy and education (CBC News, 2019; Kieling et al., 2011; Koller, 2006; Kutcher & Wei, 2017; Ontario, 2009a, 2009b, 2013, 2015b; Teen Mental Health, 2008; UCLA School Mental Health Project, 2009; Wei, Kutcher, & Szumilas, 2011).

Mental health literacy represents the knowledge, beliefs, and attitudes an individual or group have towards mental health (Jorm, 2000). The goal of mental health literacy, as defined by Jorm (2012), Kutcher, Wei, and Coniglio (2016), and Kutcher, Bagnell, and Wei (2015) is to create an understanding of how to obtain and maintain positive mental health; understand mental disorders, including symptoms, causes, risk factors, cognitive and biological vulnerabilities, and treatment; decrease stigma related to mental disorders; and enhance help-seeking efficacy, including knowing when and where to seek help and improve mental health care and self-management. The literature has demonstrated that good mental health literacy can help to eliminate stigma surrounding mental health, promote positive mental health, and encourage help-seeking behaviour (Jorm, 2012; Kutcher et al., 2015a; Kutcher, Wei, & Morgan, 2015b; Pinefold, Stuart, Thornicroft, & Arbdeda-Florèz, 2005; Santor, Short, & Ferguson, 2009).

Adolescents and young people between the ages of 15-24 are at the highest risk of being affected by mental illness (Kessler et al., 2005; Kirby, 2013; Pearson, Janes, & Ali, 2013). Approximately 75% of mental disorders have their onset during childhood and adolescence, and in Canada it is estimated that 10 – 20% of youth are affected by a mental illness (Canadian Mental Health Association, 2020a; de Girolamo, Daganio, Cocchi, & McGorry, 2012; Gore et al., 2011; Government of Canada, 2006; Malla et al., 2018). In 2017, 39% of Ontario high school students reported moderate-to-serious levels of psychological distress and 17% reported serious

levels of psychological distress (Canadian Mental Health Association, 2017). Higher incidence of mental health issues among youth means that this population are not only the most likely to experience a mental illness, but they are also likely to know and respond to someone who is experiencing it (Gallagher, 2013; Kessler et al., 1994; Kessler et al., 2007; Kessler et al., 2010; Pearson et al., 2013). Moreover, the literature demonstrates that this at-risk population also have poor mental health literacy. Youth do not have a total understanding of mental health; hold poor attitudes towards, and endorse harmful misconceptions about, mental health; feel they lack knowledge regarding all aspects of suicide; and do not feel they know early warning signs of common mental health issues (Benzie, 2019; Boyson & Vogel, 2008; Knighton & Currie, 2010; Kutcher et al., 2015a, 2015b; Kutcher & Wei, 2014).

Poor mental health literacy is mental health beliefs, and knowledge, that conflict with core concepts and empirical research in the discipline of psychology (Hamza & Wickman, 2008; Taylor & Kowalski, 2004). In youth, it has been linked to an increase in stigmatizing attitudes and behaviours, low self-esteem, low self-worth, decreases in help-seeking behaviour, and increases in suicidal behaviour (Eisenberg et al., 2009; Hinshaw, 2006; McGorry, Purcell, Goldstone, & Amminger, 2011; Mental Health Commission of Canada, 2012; Rüsch, Angermeyer, & Corrigan, 2005; Scheffer, 2003; Story, Kirkwood, Parker & Weller, 2016). Beliefs begin to develop throughout childhood and adolescence and are suggested to be solidified by young adulthood (Griggs & Jackson, 1988; Hinshaw, 2006; McCutcheon, 1991). Previous research has demonstrated that once psychological beliefs, correct or incorrect, have become solidified, they are near impossible to dispel, as early as the first year of undergraduate studies (Best, 1982; Gregg et al., 2001; Griggs & Jackson, 1988; Kowalski & Taylor, 2001; Landau & Bavaria, 2003; McKeachie, 1960; Vaughn, 1977). However, recent studies have demonstrated that when these misconceptions are addressed in adolescence and childhood, there are significant decreases in misconception endorsement, both short term and long term (Gregg et al., 2001; Kutcher et al., 2015b; McLuckie et al., 2014). It is suggested that the impact of mental health literacy educational interventions decreases with age as misconceptions become more rooted (Gregg et al., 2001). The literature states that early intervention, or preventative approaches to mental health, are key for enhancing and developing mental health literacy, decreasing negative mental health outcomes and increasing early identification (Canadian Mental Health Association, 2020b; Kelly, Jorm, & Wright, 2007). Youth mental health literacy and their

response to each other may be vital in creating an understanding of mental health both while they are young and as they grow older.

It is important to understand mental health literacy in an educational context. It has long been argued that the most ideal location to address mental health literacy in youth is within the school, as students spend 30+ hours a week in the classroom, and schools have continually played a pivotal role in health promotion globally (Keiling et al., 2011; Koller, 2006; Teen Mental Health, 2008; UCLA School Mental Health Project, 2009; Wei et al., 2011). Furthermore, a school setting allows for mental health information to accompany other curricula that already addresses aspects of health (Wei et al., 2011). Implementation into the official curriculum is important, as this venue encompasses the information that is intended to be taught and includes subject curricula, textbooks, and/or other classroom resources (Kelly, 2009; International Bureau of Education, 2018a). As well, according to Wei and Kutcher (2014), the utilization of the already existing curriculum for mental health literacy allows for these interventions to be, "student -, teacher-and administration-friendly, easily integrated into the school curriculum, sustainable, and inexpensive to apply. Further, this approach facilitates horizontal integration across existing human services systems and builds upon the professional capabilities of teachers" (para. 5). Previous research demonstrates that curricular approaches to mental health literacy are successful (Gregg et al., 2001; Kutcher et al., 2015b; McLuckie et al., 2014; Wei et al., 2013), however, Kutcher and Wei (2014) stress that it is important to integrate mental health literacy into the curriculum in a multidimensional manner, discussing all characteristics of mental health literacy, as opposed to early approaches that are one-dimensional and focus solely on one component.

The mental health literacy movement started in the mid-nineties with Dr. Anthony Jorm and colleagues in Australia. Over the past 23 years the movement has continually grown in recognition, and in Canada, this growth as been most evident in the last decade. While mental health literacy began gaining traction in Canada predominantly through non-profit organizations, recognition is now being seen across various out-of-school and in-school contexts. The predominant educational approach to mental health literacy in Ontario occurs within the official curriculum via the implementation of mental health information into pre-existing courses (Ontario 2009a, 2009b, 2013, 2015b). This study investigates the official Ontario high school

curriculum and corresponding textbooks and how, through these avenues, the province of Ontario is addressing mental health literacy in the classroom. The main purpose of this study is to better understand how the current curriculum is addressing the topic of mental health literacy, through curriculum guidelines and recommended textbooks. This study has implications for all individuals involved in the development and upkeep of the Ontario high school curriculum, teachers, and researchers on the implementation of mental health education to meet curricular and pedagogical goals that align with the characteristics of mental health literacy.

Research Questions

This study addresses the following research questions:

1. How much exposure do Ontario high school students have to mental health information through the official curriculum?
2. What is the nature of mental health education in the official Ontario high school curriculum?

Mental health education in Ontario is implemented through ministry initiatives, with the inclusion of mental health information in pre-existing courses. This study investigates the high school courses that include mental health information, along with their mandatory textbooks. The literature informs this research through discussion on stigma associated with mental illness; mental health misconceptions, their sources, and addressing them in the classroom; mental health literacy of Canadians; and mental health education in Ontario.

Research Problem and Statement

As the implications of poor mental health literacy in youth become more recognized, the government of Ontario has implemented student-centered mental health initiatives, the province has integrated mental health into the already existing curriculum in response, and a non-official curriculum tool, The Mental Health and High School Curriculum Guide has been developed, outside of provincial initiatives (Kutcher & Wei, 2017; Ontario, 2019; Ontario, 2020a; Ontario Ministry of Education, 2009a, 2009b, 2013, 2015b). However, even with these initiatives in place, Ontario youth and recent high school graduates still demonstrate poor mental health literacy overall (Gagnon, Gelinas, & Friesen, 2015; Kutcher et al., 2015b; Manser, 2016; McLuckie et al., 2014; Wei et al., 2013). Additionally, Canada continues to have the third

highest rate of youth suicide in the industrialized world and suicide continues to be the leading cause of death among First Nations youth in Canada and the second leading cause of death overall for young people 15-19 across the nation (Canadian Mental Health Association, 2020a, 2020b; Public Health Agency of Canada, 2016). Furthermore, a study of Ontario high school students found that 80% of respondents do not know the warning signs for suicide, 88% do not know where to go for mental health support services, and 78% do not know the early signs of common mental health problems (Benzie, 2019).

Recent student-centered mental health initiatives implemented by the province of Ontario include the placement of mental health workers in high schools; well-being and mental health programs throughout district school boards; earlier and faster mental health and addictions supports in schools; raising public awareness and education about youth suicide; and the *Open Minds and Healthy Minds* approach which aims to provide faster access to mental health services, early identification, and closing critical service gaps for vulnerable children and youth (Ministry of Health, 2011; Ontario, 2019; Ontario, 2020). While the province's acknowledgement and action towards youth mental health has increased over the past decade, the focus has predominantly been on providing more support systems and has not focused as much on the enhancement of mental health literacy. Previous research has demonstrated that poor mental health literacy and stigma are the biggest barriers for help-seeking behaviour, therefore, scholars have suggested that regardless of the amount of support systems put into place, if youth do not have adequate mental health literacy, they are less likely to use these supports (Furnham, Cook, Martin, & Batey, 2011; Gagnon et al., 2015; Gulliver, Griffiths, & Christensen, 2010; Story et al., 2016).

The Mental Health and High School Curriculum Guide (The Guide) was developed by Dr. Stan Kutcher in partnership with the Canadian Mental Health Association (Teen Mental Health, 2008). The guide was developed by mental health and education experts in response to the, "increasing awareness of the importance of health literacy as a necessary foundation for improving health, extrapolated into the area of youth mental health" (Kutcher et al., 2015b, p. 581). The Guide is currently the only evidence-based curriculum resource available for educators to use for the enhancement of mental health literacy of high school students (ages 13 to 15) (Kutcher et al., 2015a; Kutcher et al., 2015b; Teen Mental Health, 2018). While The Guide has

demonstrated significant long-term enhancement of mental health literacy (Kutcher & Wei, 2014; Kutcher et all, 2015b; McLuckie et al., 2014), it remains a non-official curriculum tool in which teachers may or may not choose to use in their classrooms. While the guide is approved for use in schools in Ontario, it is not mandatory nor apart of the official curriculum. As The Guide is not a permanent part of the Ontario high school curriculum, it is difficult to determine its influence on overall youth mental health literacy.

Mental health information is implemented into the Social Sciences and Humanities, Technological Education, and Health and Physical Education curriculums in Ontario high schools (Ontario Ministry of Education, 2009a, 2009b, 2013, 2015b). These curriculums were updated in 2009, 2013, and 2015, respectively. Specifically, the Social Science's and Humanities and the Health and Physical Education courses were updated to include more mental health information in response to the growing acknowledgement of youth mental health issues (Ontario, 2015; Ontario Ministry of Education 2013, 2015b). The official Ontario high school curriculum is the only constant resource for mental health literacy that students interact with in a school setting. The curriculum influences teachers' lesson plans, textbooks, and other classroom resources (Kelly, 2009; International Bureau of Education, 2018a). As such, this prompts discussion about the nature of mental health content and students' overall exposure to that content. Previous research has demonstrated that curricular approaches to addressing mental health literacy in youth, that are multidimensional and comprehensive, are effective for enhancement and that early intervention in childhood and youth is key (Canadian Mental Health Association, 2020b; Gregg et al., 2001; Kelly et al., 2007; Kutcher & Wei, 2014; Kutcher et al., 2015b; McLuckie et al., 2014; Wei et al., 2013). Therefore, it is important to explore whether or not mental health education taught in Ontario high school classrooms is sufficient in terms of providing students with the appropriate and accurate information to achieve the goals of mental health literacy.

There is currently no research available regarding the implementation of mental health literacy into Canadian official curriculums. A case study on mental health literacy-based curriculum initiatives, specifically focusing on official curriculum is warranted. This is to better understand how current curriculum is addressing mental health in the classroom in a Canadian context.

Why There Is a Need for this Research

In this dissertation I seek to inform individuals responsible for the development of curriculum. Scholars have stressed that importance of multidimensional, comprehensive, and early interventions of the enhancement of mental health literacy (Canadian Mental Health Association, 2020b; Gregg et al., 2001; Kelly et al., 2007; Kutcher & Wei, 2014; Kutcher et al., 2015a, 2015b; McLuckie et al., 2014; Wei et al., 2013). This study can be helpful to those involved in curriculum development to understand what the goals of mental health literacy are, how current curriculum approaches are succeeding, or failing, to address these goals, and how to best address the goals in the classroom. Furthermore, this study can inform teachers who seek to educate students on mental health about how their courses may or may not be addressing mental health literacy comprehensively.

Classroom learning is cited as one of the primary sources of mental health misconceptions (Cutler et al., 2009; Dole, 2000; Qiant & Guzzettii, 2000; Stanovich, 2009; Taylor & Kowalski, 2004). As well, textbooks and other course materials are suggested to be the most valuable part of students' knowledge construction and teachers continue to rely on them for some or all of their content (Goodlad, 1984; Stern & Roseman, 2004). Findings from this study can be helpful as teachers will then have the appropriate information about the goals of mental health literacy, which goals are currently addressed in their courses and which are not, and how they can best incorporate these goals into their lesson plans. As well, the findings will inform individuals responsible for the development and instruction of mental health curriculum of any disparities occurring between curriculum documents and textbooks. These findings may be helpful for future selection of textbooks pertaining to mental health in terms of the nature of the content, how much content is discussed, and how current textbooks address the goals of mental health literacy. Lastly, this research will add further insight of Canadian mental health education to the literature.

Organization of the Thesis

The thesis is organized into seven chapters. Chapter 2 focuses on the review of literature: curriculum and its role within the mental health literacy movement; relevant research on addressing mental health in the classroom; current educational approaches to mental health literacy occurring within Ontario high school education; mental health and the stigma associated

with it; mental health misconceptions and their sources; and relevant research on Canadian mental health literacy and the mental health literacy of youth. Chapter 2 will also shed light on gaps within the current literature.

The theoretical and curricular frameworks are discussed in Chapter 3. This chapter reviews Social Constructivist Learning Theory and School-Based Mental Health Literacy, Jean Piaget's Theory of Cognitive Development, Len Vygotsky's Social Constructivist Theory, and prior knowledge and learning. These frameworks are used as a critical lens to analyze and interpret the data. Chapter 4 focuses on the methodology used to conduct this study, including the research design, research questions, trustworthiness and reliability, data collection, curriculum document and textbook data sources, data organization, data analysis, and curriculum and textbook analysis.

The results are presented in Chapter 5, addressing both research questions and focusing on curriculum documents and textbooks. In Chapter 6, the discussion, the results are discussed in more detail, connecting the findings to previous literature, and the theoretical and curriculum frameworks. Lastly, Chapter 7, the conclusion, focuses on the implications of the study for research, teaching, and curriculum development; limitations of the study, and conclusions and future research.

Chapter 2: Literature Review

In this chapter I first explain the components of curriculum, discuss curriculums relationship to mental health literacy, and detail current mental health literacy approaches within the Ontario education system. I then discuss mental illness and the effects of stigma, and synthesize literature on misconceptions, stigma, and mental health literacy. This review is helpful in understanding the processes of stigma and misconceptions, the challenges facing mental health education, and the success of implemented mental health literacy initiatives.

Curriculum

Curriculum is often described as, "something that is planned and expected to be taught and learned" (Frey, 2020). Additionally, it is understood as the sum of student experiences occurring within the education process (Kelly, 2009; Wiles, 2008). Curriculum has been described as intended, operational, hidden, and excluded (Frey, 2020; Dewey, 1902; Eisner, 2002; Kelly, 2009). The intended curriculum is characterized by the subjects that will be taught; the knowledge and skills that students are expected to acquire (Kelly, 2009; International Bureau of Education, 2018a). The hidden curriculum is characterized by learning that occurs unintentionally via norms, values, and beliefs conveyed within the classroom (Giroux & Penna, 1979; Kelly, 2009; Martin, 1983;). The operational curriculum is characterized by events occurring in the classroom between educators and students and between students themselves; it refers to how curriculum is taught within the classroom (Eisner, 2002; Hayden, 2006). Lastly, the excluded curriculum is characterized by subjects or topics not included in the curriculum (Dewey, 1902; Kelly, 2009; Smith, 2000). In this study, I focused on the concept of the intended curriculum, to examine the content that students are expected to acquire pertaining to mental health. In the following section, I explain this key concept.

Intended Curriculum

The terms intended curriculum and explicit curriculum are used interchangeably throughout the literature. For the purpose of this paper I will be using intended curriculum, which is described as an official plan to guide districts, schools, and educators on what is to be taught and how it is to be taught (Eisner, 2002; Morris & Adamson, 2010). It encompasses the knowledge, understanding, skills, values, and attitudes that students are expected to develop and

acquire, as well as how these will be assessed (International Bureau of Education, 2020). The intended curriculum is designed to encompass the information deemed most important for students to know. The Ontario Ministry of Education (2020) states that it develops curriculum policy documents that, "identify what students must know and be able to do at the end of every grade or course in every subject" (para. 1). In partnership with education departments, the intended curriculum is also developed by specialists, textbook publishers, master teachers, and university consultants (Brooks, 1986; Kelly, 2009).

Curriculum development aims to provide students with an integrated and relevant learning experience that will enhance their learning, growth, and development (Centre for University Teaching, 2009). According to Cho and Allen (2005), current theories of curriculum have emerged from "instrumental rationality". This philosophical perspective separates means from ends to maximize efficiency and effectiveness" (p. 105). The most recognizable example of this is Ralph, W. Tyler's (1949), Tyler Rationale, a series of four fundamental questions that address the purpose, planning, organization, and evaluation of curriculum. His rationale is technical in nature where predetermined objectives control pedagogy and evaluation (Cho & Allen, 2005). Tyler's Rationale is a, "persistent theoretical formulation in the field of curriculum" (Kliebard, 1970, p. 259), an influential text in the field of curriculum (Shane, 1981), and still used as a reference today for curriculum development (Cho & Allen, 2005; Cruickshank, 2018). When developing the intended curriculum, the Ralph Tyler (1949) suggests that the following questions must be addressed:

1. What educational purposes should the school seek to attain? (defining appropriate learning objectives).
2. What educational experiences can be provided that are likely to attain these purposes? (useful learning experiences).
3. How can these educational experiences be effectively organized?
4. How can we determine whether these purposes are being attained? (evaluating the process and revisiting the areas that were not effective).

Furthermore, Morris and Adamson (2010) suggest that the intended curriculum must specifically address what knowledge is most worthwhile, why this knowledge should be taught, and how it can be learned. These questions relate to curriculum content, its purpose, and organization,

however, these can be addressed in various ways, depending on the educational philosophy applied (Ornstein, 1991).

Educational Philosophies

An educational philosophy provides a framework for the organization of schools and classrooms; it provides guidance on the purpose of education, which subjects are of value, and which method and materials to use, and gives an understanding into how students learn (Eisner, 2002; Ornstein, 1991). According to Hopkins (1941), "[p]hilosophy has entered into every important decision that has ever been made about curriculum and teaching in the past and will continue to be the basis of every important decision in the future" (as cited in Ornstein, 1991, p. 102). It is believed to be the beginning point of curriculum development and influences subsequent decisions throughout the process; it shapes the role of education through the development of curriculum (Goodlad, 1979; Smith, Stanley, & Shores, 1957). There are four educational philosophies argued to have had the greatest impact on Western education: perennialism, essentialism, progressivism, and reconstructionism (Ornstein, 1991).

Perennialism. Perennialists believe that education should encompass rigorous studying of ideas and truths within Western culture that have lasted centuries; they value knowledge that transcends time (Ornstien & Levine, 2008). This philosophy focuses on past studies and the mastery of facts and timeless knowledge (Ornstein & Hunkins, 1998). Those who adhere to this philosophical stance believe education should use universal truths and ideas to guide students' thought processes and create an understanding and appreciation of the great works (Ornstien & Levine, 2008). According to Orenstein and Hunkins (1998), perennialism aims to "educate the rational person; to cultivate the intellect" (p. 56). Key perennialists include Mortimer Adler and Robert Hutchins, who promoted a curriculum that focused on the common and essential nature of humans (Hutchins, 1953; The Editors of Encyclopedia Britannica, 2020).

Essentialism. According to Orenstein and Hunkins (1998), essentialism aims to "promote the intellectual growth of the individual; to educate the competent person" (p. 56). Essentialism is a philosophy focused on teaching basic skills (Orenstein & Hunkins, 1998; Ornstien & Levine, 2008). Its proponents aim to teach students the essential skills (reading, writing, and arithmetic) and essential subjects (English, Arithmetic, Science, History, and Foreign Language) through traditional approaches (Orenstein & Hunkins, 1998). This theory

posits that the value of any knowledge is based on the need for that knowledge to become a productive member of society (Ornstein & Levine, 2008). Key essentialists include William Bagley and E.D. Hirsch. Bagley argued for a curriculum that placed importance on teaching the ideals of community; he valued knowledge as knowledge and not as an instrument (Bagley, 1934, 1938). E.D. Hirsch argues for a fact-based approach to education; he is a proponent of the back-to-basics movement and believes that the role of education is to provide students with core knowledge (Language Arts, World History, American History, Geography, Visual Arts, Music, Mathematics, and Science) (Hirsch, 2007; Hirsch, Kett, & Trefil, 1988; Mackley, 1999).

Progressivism. Progressivists posit that knowledge is ever-changing and must continually be redefined and rediscovered (Eisner, 1979; Ornstien & Levine, 2008). Furthermore, within this philosophy, the value of knowledge is determined by the learner's interest in that knowledge (Ornstein & Levine, 2008). According to Ornstein and Hunkins (1998), progressivism posits that education should promote democratic social living, and, that knowledge is a living-learning process that leads to growth and development. A progressive-centred curriculum will often focus on students' needs, interests, abilities, and experiences, as they believe that effective learning only occurs when one considers the information relevant to their life (Ornstein & Hunkins, 1998; Ornstien & Levine, 2008). According to Eisner (1979), "[p]rogressivism in education has had two related but distinguishable streams. One of those was rooted in a conception of the nature of human experience and intelligence, the other in social reform … Progressivism focuses on both the personal and the political" (p. 67). John Dewey is a key progressivist who argued that education was a social and interactive process, that schools were agencies of social reform, and that children should interact with and experience that curriculum (Dewey, 1897, 1900, 1902, 1916, 1938).

Reconstructionism (Social Reconstructionism). Social reconstructionism is focused on social change, and is based within the belief that society can be reconstructed through education (Ornstein & Hunkins, 1998). This philosophy suggests that learned skills and subject matter need to address problems in society; learning is an active process that should focus on the present and future society (Ornstein & Hunkins, 1998). Key social reconstructionists include Paulo Freire and Theodore Brameld. Freire argued that education should treat students as co-creators of knowledge; he believed that education should be used to undermine power dynamics and the

process of colonization that occurs within the classroom (Diaz, n.d.; Paulo, 2000). Theodore Brameld (1965) believed that education could be used to transmit culture and to also modify it; he believed that the educational system should be democratic and address controversial topics.

Philosophies and Key Theorists That Influenced the Current Study

Canada is facing a youth mental health crisis as rates of mental illness and suicide among young people continually increased over the past decade (Canadian Mental Health Association, 2020a, 2020b; de Girolamo et al., 2012; Gore et al., 2011; Government of Canada, 2006; Malla et al., 2018). In turn, mental health has continued to garner more attention within the government and throughout educational practices (Kutcher & Wei, 2017; Ontario, 2019; Ontario, 2020; Ontario Ministry of Education, 2009a, 2009b, 2013, 2015b). As the school setting has become a well recognized environment to address mental health, it is important to understand the role of education. Mental health is a state of well-being (World Health Organization, 2020), and though not a skill itself, it encompasses knowledge and skills to maintain positive mental health (Jorm, 2012; Kutcher et al., 2015a; Kutcher et al., 2015b; Santor, Short, & Ferguson, 2009; Wei, 2015; Kutcher et al., 2016; Kutcher et al., 2015a), therefore, both progressivism and reconstructionism approaches to education are well suited.

John Dewy. John Dewey was an American philosopher, psychologists, and educational reformer who is well regarded as a primary figure within the philosophy of progressive education (Ryan, 1995; Violas, Tozer, & Senese, 2004). He argued that the classroom was not only for knowledge construction but also a place to learn how to live in the world around us; he believed that education was a social and interactive process, therefore, the school itself could become an agent of social reform (Dewey, 1897, 1900, 1902, 1916, 1938). Dewey believed that in order for knowledge construction to be effective, students needed to be able to relate new information to their prior experiences, creating a deeper connection to the content (Dewey, 1902). He advocated for an educational structure that valued both the content to be learned and the interests and experiences of the learners (Dewy, 1902, 1916).

Theodore Brameld. Theodore Brameld was a philosopher and an educator who supported reconstructionism. In his view, education was meant to transmit culture and to modify culture (Brameld, 1965). Brameld posited that reconstructionism is a 'crisis philosophy', in that, when a society is facing a crisis it must use education to modify the culture and innovate new

understandings to eliminate the initial predicament (Brameld, 1965). He believed that students should be exposed to controversial topics in society and that these topics should play a large role in education (Brameld, 1965).

This approach to education and curriculum development is most prominent through the work of Maxine Green and aesthetic education. Her philosophy posits that the purpose of education and curriculum is to awaken society and use educational objectives to nurture intelligence to continue to build a just and compassionate world; that education should provide learners with the information, abilities, and sensitivities to critically examine the world around them; and that curriculum should be humanitarian in nature, that learning should move people to critical awareness and encourage a conscious engagement with the world (Greene, 1995). Both Dewey and Brameld acknowledge that education has a significant role in how we influence society. The goal of mental health literacy educational approaches is to provide society with not only the skills to obtain positive mental health, but also the knowledge to change how society views mental illness (Jorm, 2012; Kutcher et al., 2016; Kutcher et al., 2015a). Mental health literacy education is a response to the mental illness crisis occurring worldwide, and is a reflection of society needing to modify the culture surrounding mental illness; these approaches are focused on both providing knowledge for a better understanding of mental health and the skills needed to live in the world around us. Both Dewey and Brameld advocated for schools to be the agents of social reform, and the mental health literacy movement is continuing this argument (Keiling et al., 2011; Koller, 2006; Teen Mental Health, 2008; UCLA School Mental Health Project, 2009; Wei et al., 2011). Through the implementation of a humanitarian curriculum that places equal emphasis on skills and abilities and social awareness and compassion, this movement has moved the argument forward, from a focus on education as a whole to a focus on specific curricular approaches that reflect curriculum's responsibility to cover a wide range of concerns (Kutcher et al., 2015a, 2015b; Morris & Adamson, 2010; McLuckie et al., 2014; Kutcher et al., 2015a; Kutcher et al., 2016; Wei et al., 2012).

Addressing Mental Health Literacy in the Classroom

Mental health misconceptions are often discussed in the literature under the term psychological misconceptions. For the purpose of this paper, and to avoid confusion, I will be using the term mental health misconceptions. The literature highlights that mental health

misconceptions persist after standard instruction in post-secondary introductory psychology courses (Best, 1982; Gardner & Dalsing, 1986; Gregg et al., 2001; McKeachie, 1960; Vaughn, 1977). In response, researchers began exploring source monitoring and refutational teaching strategies (Bransford, Brown, & Cocking, 2000; Guzzetti, 2000; Hughes, Lyddy, & Lambe, 2013; Kowalski & Taylor, 2009, 2004; Taylor & Kowalski, 2002). Source monitoring strategies ask students to carefully scrutinize the sources of their misconceptions (Landau & Bavaria, 2003), while refutational strategies bring misconceptions to the light and then immediately refute them using empirical evidence through essays, lectures, and/or readings (Bransford et al., 2000; Guzzetti, 2000; Hughes et al., 2013; Kowalski & Taylor, 2009, 2004; Taylor & Kowalski, 2002). Landau and Bavaria (2003) found that source monitoring did not reduce the number of misconceptions held by students and that students become more confident in their misconception endorsement. Whereas, Guzzetti (2000), Miller, Wozniak, Rust, Miller, and Slezak (1996) and Kowalski & Taylor (2009) found that refutational readings, essays, and lectures succeeded in eliminating misconceptions, especially when used in combination with one another.

Although refutational teaching strategies demonstrate promising results for the elimination of mental health misconceptions, there is still the possibility of students regressing back to their original endorsements. Gregg, Winer, Cottrell, Hedman, and Fournier (2001) and Winer, Cottrell, Gregg, Fournier, and Bica (2002) examined the effect of refutational teaching strategies on the emission theory of vision for college students, eighth graders, and fifth graders. Their studies demonstrated that refutational strategies had short-term effects for all groups, however, long-term effects only occurred in the fifth-grade group. The authors suggest that these results reflect the lessening impact education has on misconceptions as we age, as misconceptions become more rooted and difficult to dispel (Gregg et al., 2001; Winer et al., 2002).

Early research found that high school psychology courses had little effect on misconception endorsement, and sometimes caused endorsement to be greater (Benjamin, Fawl, & Klein, 1977; Griggs, Jackson, & Meyer, 1989; McCutcheon, 1991). These results were suggested to reflect discrepancies in the purpose of psychology at the high school and post-secondary levels, as high school teachers state their courses are personality-development or interpersonal-social in focus, as opposed to the scientific-experimental focus of some post-

secondary courses (Griggs & Jackson, 1989; McCutcheon, 1991; Ragland, 1987; Scheirer & Rogers, 1985). As Gregg, Winer, Cottrell, Hedman and Fournier (2001) and Winer, Cottrell, Gregg, Fournier, and Bica (2002) demonstrated that refutational teaching strategies were more impactful in youth than adulthood, recent research has demonstrated significant short-term and long-term misconception elimination when high school psychology content is taught through refutational and comprehensive approaches (Kutcher & Wei, 2014; Kutcher et al., 2015a, 2015b; McLuckie, 2014).

Kutcher and Wei (2013), Kutcher, Bagnell, and Wei, 2015, and McLuckie, Kutcher, and Wei (2014) evaluated teacher and student mental health literacy before and after the implementation of The Mental Health and High School Curriculum Guide. All three studies found that misconception endorsement decreased, and mental health literacy increased, short-term and long-term for both students and teachers. While these studies suggest that this approach to challenging misconceptions may be beneficial for youth and adults, the literature stresses that early intervention for mental health literacy can significantly decrease the development of misconceptions in the first place (Canadian Mental Health Association, 2020b; Kelly et al., 2007).

Mental Health Education in Ontario

The Ontario Ministry of Education have set a goal to promote well-being and wellness throughout many facets of the high school curriculum. The aim of promoting wellness among students is to give youth the skills they need to become healthy, active, and engaged citizens (Ministry of Education, 2016). Mental health, safe and accepting schools, healthy schools, and equity and inclusive education are the four key areas the ministry is focusing on to promote wellness and well-being (Ministry of Education, 2016). It is important to note that wellness is a broad definition, defined by the World Health Organization (2006) as:

> [t]he optimal state of health of individuals and groups. There are two focal concerns: the realisation of the fullest potential of an individual physically, psychologically, socially, spiritually, and economically, and the fulfilment of one's role expectations in the family, community, place of worship, and other settings. (p.5)

While all areas of well-being and wellness are important to daily life, my study focuses on mental health, specifically the high school courses in which mental health is a component. These courses are as follows:

- Grade 9 Healthy Active Living Education
- Grade 10 Healthy Active Living Education
- Grade 11 Healthy Active Living Education
- Grade 11 Health for Life
- Grade 12 Healthy Active Living Education (Ontario, 2015b)
- Grade 11 Raising Healthy Children
- Grade 11 Introduction to Anthropology, Psychology, and Sociology (University Preparation)
- Grade 11 Introduction to Anthropology, Psychology, and Sociology (College Preparation)
- Grade 11 Dynamics of Human Relationships
- Grade 12 working with School-Age Children and Adolescents (Ontario, 2013)
- Grade 10 Health Care (Ontario, 2009a)
- Grade 12 Child Development and Gerontology (Ontario, 2009b)

The current approach to mental health education through the official curriculum in Ontario is to implement mental health information into pre-existing courses (Ontario, 2009a, 2009b, 2013, 2015b).

In Canada there is one non-official mental health curriculum guide, The Mental Health and High School Curriculum Guide (Teen Mental Health, 2018). While other mental health programs in Ontario, such as School Mental Health ASSIST, aim to promote better mental health awareness and promotion within schools, The Mental Health and High School Curriculum Guide focuses on a school-based mental health literacy approach where both teacher and student mental health literacy are addressed through a classroom resource delivered via multiple modules (Teen Mental Health, 2018). This guide is taught by classroom teachers of health or human courses, who received training to improve their own mental health literacy (Kutcher et al., 2015a). It is taught consecutively over a period of 8 to 12 hours and includes six modules: addressing stigma,

understanding mental health and mental illness; specific mental disorders typically with an onset during adolescence; lived experiences of mental illness; help-seeking and support; and importance of positive mental health (Kutcher & Wei, 2014).

While The Mental Health and High School Curriculum Guide is not a permanent part of the Ontario high school curriculum, it has been tested in 1000 high school's nation wide, including Toronto, Ontario and Nova Scotia. It has been shown to have significant effects on student mental health literacy even after a three-month follow up, and is currently available to all teachers online free of charge at teenmentalhealth.org (Kutcher & Wei, 2014; Kutcher et al., 2015a; McLuckie et al., 2014). However, as this guide is not a permanent part of the official curriculum it was not included in this study. The purpose of this study was to analyze mental health content that students are consistently exposed to, therefore, The Mental Health and High School Curriculum Guide was not included as the use of this tool is subjective of individual teachers.

Curriculum is dynamic and everchanging, continually being influenced by societal norms, practices, and dominant voices in society (Frey, 2020). It not only represents the attitudes and beliefs of society, but remains a vital component of the education system, as a tool for educators and a means to teach information imperative to understanding the world around us (Goodlad, 1984; International Bureau of Education, 2020; Stern & Roseman, 2004; Zhang, 2012). Thus, a case study on mental health literacy education is warranted to shed light on the intentions and dispositions shaping mental health education in Ontario.

Mental Illness

Mental health is a state of well-being, it is our emotional, psychological, and social well-being and it affects how we think, feel, and act; handle stress; relate to others; and make choices (Canadian Mental Health Association, 2020; Mental Health, 2020). The ability to cope with everyday life stresses, work productively, have a strong sense of purpose and one's self, have strong relationships, and contribute to one's community are all characteristics of good mental health (Canadian Mental Health Association, 2020; World Health Organization, 2014). A mental illness is a condition where significant behavioural or psychological symptoms occur in an individual that cause distress in daily life and affect the well-being and productivity of persons (American Psychiatric Association, 2013). Individuals may experience disability or impairment

of functioning, and the illness may cause the individual increased pain, disability, death, or an important loss of freedom (American Psychological Association, 2013). Contemporary medicine acknowledges a relationship between mental and physical illnesses (Kendall, 2001). Neither the brain nor the body develops an illness alone. When a person is sick, both an individual's psyche and physical well-being are involved. Kendall (2001) argues that it is not possible to have an independently defined group of symptoms for either mental illness or physical illness. Many symptoms that occur during the onset and management of mental illness are physical symptoms and vice versa (Kendall, 2001). For example, an individual diagnosed with depression will often experience physical symptoms such as low energy, aches and pains, and weight change (American Psychological Association, 2013), while fear and other emotional factors play large roles in physical illnesses such as asthma or hypertension.

The connection between physical and mental symptoms was demonstrated in Smith and Jameson's (2012) examination of the psychological and cognitive effects of the common cold. Participants reported feeling less alert and to be in a more negative mood while dealing with a cold. Furthermore, participants show slower reaction times, slower task-completion, and an impaired ability to learn new information, compared to their base-line scores acquired before the onset of a cold. It is suggested that the cold bacteria interfered with the neurotransmitter activity in the brain, resulting in the cognitive effects demonstrated (Smith & Jameson, 2012). Similarly, individuals diagnosed with cancer will often experience both physical and mental symptoms throughout their diagnosis and treatment. An individual may feel fear, anger, sadness, heightened anxiety, and/or heightened symptoms of depression, among many other psychological symptoms (American Cancer Society Medical & Editorial Content Team, 2016; Canadian Cancer Society, 2018). Additionally, a patient may feel exhausted, experience nausea and vomiting, fertility problems, sexual problems, hormonal changes, and/or sleep issues among many other possible physical symptoms (Canadian Cancer Society, 2018; Cancer Institute NSU, n.d.).

As well, most mental illnesses share many environmental risk factors with noncommunicable medical disorders, such as childhood and intergenerational trauma, social and material deprivation, parental substance abuse, and parental history of mental illness (Dallam, 2001; Mattejat & Remschmidt, 2008; Smith & Wilson, 2016; Sommer et al., 2015). Mental illness can be debilitating, and scary, and symptoms span both mental and physical illnesses.

These disorders and symptoms can have a negative, and sometimes crippling, effect on one's life, how we think about ourselves, or how we interact with others (Canadian Mental Health Association, 2020a.).

Stigma Related to Mental Illness

Stigma is characterized as negative attitudes and behaviour directed towards individuals with a mental illness diagnosis (Canadian Mental Health Association, 2018a). Individuals with a mental illness are often faced with both social and personal stigma (Davey, 2013). Social stigma and personal stigma are closely related, but how the individual perceives them is different. Social stigma is the negative beliefs that the public holds of individuals with a mental illness. An example of social stigma is the common belief that individuals with a mental illness are violent, incompetent, and weak (Corrigan & Watson, 2002; Rüsch et al., 2005). Individuals have reported a perceived change in treatment from those around them once their diagnoses became well known, including a feeling of being treated like a child, being feared, and being given less responsibility in the workplace and at home (Corrigan & Watson, 2002; Wahl, 1999). Personal stigma refers to how affected individuals feel about themselves, that they are defined by their diagnosis, and that the publics beliefs about them are correct (Corrigan & Watson, 2002; Rüsch et al., 2005). For example, an individual may believe that they are weak, or lesser than, because they suffer from a mental illness; that they are not 'normal'.

Stigma is manifested through language and is commonly experienced via the behaviours and actions of others once a mental illness becomes known. Stigmatizing comments and depictions of mental illness are the most common experiences of stigma (Wahl, 1999). Direct stigma occurs through harmful and/or offensive comments regarding mental illness, while indirect stigma occurs when negative remarks are made without the intent to be harmful or hurt mental health consumers (Wahl, 1999).

Impact of Stigma on Mental Health

Stigma has been found to be a barrier in help-seeking behaviour (Canadian Mental Health Association, 2018b; Marcus & Westra, 2012; Sartorius et al., 2010; Stuart, Sartorius, Liinamaa, & Images Study Group, 2015). It is suggested that two-thirds of individuals in the United States and Canada who require mental health services will not seek help because of perceived stigma

(Association for Psychological Science, 2014; Canadian Mental Health Association, n.d; Scheffer, 2003). In a 2016 Canadian survey, 40% of respondents reported that they have experienced symptoms of mental illness but never sought help due to stigma (Canadian Mental Health Association, 2017; Mental Health Commission of Canada, 2012). Additionally, on average, there is a one to two-year delay in seeking treatment for psychoses, six to eight-year delay for seeking treatment for mood disorders, and a nine to twenty-three year delay for seeking treatment for anxiety, due to perceived stigma (Jones, 2013; Kessler et al., 2007; Kessler et al., 2003; Merikangas et al., 2011; Statistics Canada, 2013; Wang et al., 2005).

Delays in treatment often result in poorer outcomes when individuals eventually do seek and receive treatment (Malla et al., 2018). When treatment is delayed, earlier stages of mental illness progress to more severe stages and can create complex problems, for example, increasing functional deficits or comorbidity of substance abuse, or increased risk for suicide (Malla et al., 2018; McGorry et al., 2011). Further implications of stigma include rejection by peers and fear-based social distancing, placing those with a diagnosis at a higher risk to be victims of a violent crime (Eisenberg et al., 2009; Link et al., 1999; Rüsch et al., 2005; Scheffer, 2003). As well, it has been linked to low self-esteem and low self-worth (Corrigan & Watson, 2002; Rüsch et al., 2005).

A mental illness diagnosis becomes more difficult to navigate as individuals are dealing with symptoms of their illness as well as the difficulties resulting from associated stigma (Corrigan & Watson, 2002; Rüsch et al., 2005). A greater understanding of mental illness can influence positive attitudes towards mental illness, thus reducing the effects of stigma and the misconceptions the public holds about mental health (Jorm, 2012; Kutcher et al., 2015a; 2015b; Pinefold et al., 2005; Santor et al., 2009).

Mental Health Misconceptions

A misconception is the result of beliefs that are inconsistent with core concepts and empirical evidence in a field (Hamza & Wickman, 2008; Taylor & Kowalski, 2004). A belief is a state of mind, a mental representation of an attitude where individuals think that something is true regardless of empirical evidence (Schwitzgbel, 2006). Mental health misconceptions are often grouped into the term psychological misconceptions in previous studies, which are beliefs that are inconsistent with the core concepts and empirical evidence in the field of psychology

(Hamza & Wickman, 2008; Taylor & Kowalski, 2004). Misconceptions are divided into two groups; factual misconceptions and ontological misconceptions (Hughes et al., 2013). Factual misconceptions are characterized as beliefs that are influenced by inaccurate or incomplete information, mostly perpetuated via popular media, the classroom, and the everyday environment (Hughes et al., 2013). For example, the belief that psychiatry does not offer suitable treatment options for mental illness is a common factual misconception (Marcus & Westra, 2012; Sartorious et al., 2010; Stuart et al., 2014). Ontological misconceptions are characterized by beliefs formed through naïve or common-sense theories pertaining to thought, feeling, and behaviour (Hughes et al., 2013). For example, the belief that individuals with a mental illness are weak and cannot handle stress is an ontological misconception (Canadian Mental Health Association, 2018c).

According to the Canadian Mental Health Association (2018c), common mental health misconceptions include:

- Mental illnesses are not real illnesses.
- Mental illnesses will never affect me.
- Mental illnesses are just an excuse for poor behaviour.
- Bad parenting causes mental illness.
- People with mental illnesses are violent and dangerous.
- People do not recover from mental illness.
- People who experience mental illness can't work.
- Kids can't have mental illness like depression, as those are adult problems.
- Everyone gets depressed sometimes as they grow older. It's just part of the aging process.

These misconceptions can reinforce stigmatizing attitudes associated with mental illness, such as fear-based social distancing, decreased employment, prejudicial attitudes and behaviours, low help-seeking behaviour, low self-esteem, and unwanted decreases in responsibility within the home or other social roles (Corrigan & Watson, 2002; Link et al., 1999; Rüsch et al., 2005; Scheffer, 2003; Wahl, 1999).

Previous Studies of Canadian Mental Health Literacy

Mental health literacy for major depressive disorder, generalized anxiety disorder, and schizophrenia was examined in young adults aged 18-24, and older adults aged 25-64 through a national Canadian survey (Marcus & Westra, 2012). Participants were presented with three vignettes characterizing major depressive disorder, generalized anxiety disorder, and schizophrenia and were then asked to choose what they thought was wrong with the individual from a list of responses: depression, anxiety, don't know, not sure, and no response. Help seeking beliefs were examined by asking participants the best way for the vignette characters to seek help and to deal with their symptoms. Lastly, participants were asked about their beliefs regarding medication and psychotherapy treatment for mental illness. Both age groups labeled the major depressive disorder vignette correctly more often than the generalized anxiety disorder or schizophrenia, and both age groups consistently agreed that seeking help from a psychiatrist was the best option for schizophrenia but not for depression or anxiety (Marcus & Westra, 2012). Young people reported negative beliefs towards medication and psychotherapy, significantly more than older adults, however, young people believed that medications could be helpful in managing mental disorders, but did not view psychotherapy as helpful (Marcus & Westra, 2012).

Manser (2016) examined the mental health literacy of young people aged 18-24 in Ontario with particular interest in participants' ability to correctly label, identify symptoms, and recommend appropriate resources for major depressive disorder, generalized anxiety disorder, and bipolar disorder. Participants were asked to complete an online questionnaire that consisted of three vignettes in which individuals presented characteristics of either major depressive disorder, generalized anxiety disorder, or bipolar disorder. For each vignette, participants were asked if they believed the individual was experiencing a mental illness; which mental illness did the participants believe the vignette was portraying, if they believed a mental illness was present; which section(s) of the vignette the participant believed to be the strongest indicator(s) of mental illness; which section(s) of the vignette participants believed to be the strongest indicator(s) that he/she was not experiencing a mental illness; and how participants thought the vignette character should cope with the symptoms.

Manser (2016) found that young adults in Ontario have a mixed level of knowledge regarding their ability to label mental illnesses, as participants were able to accurately label major depressive disorder more than generalized anxiety disorder and bipolar disorder. The

results also found a mixed level of knowledge regarding identification of key symptoms, as participants were better able to identify the symptoms of major depressive disorder compared to generalized anxiety disorder and bipolar disorder. The overall results found that young people had the highest mental health literacy for major depressive disorder, however, their identification of symptoms was still inconsistent. Participants' identification ability for generalized anxiety disorder fell drastically short compared to major depressive disorder, and identification for bipolar disorder fell drastically short in comparison to both major depressive disorder and generalized anxiety disorder. Most worrisome, was that the behaviour identified as the most obvious symptom of generalized anxiety disorder and bipolar disorder were not actual symptoms of the disorders themselves. Participants suggested seeking help from a doctor or mental health specialist for both major depressive disorder and generalized anxiety disorder, however, better parenting skills and 'growing up' were the most noted sources of help for bipolar disorder (Manser, 2016). These results suggest that while young people's mental health literacy of coping strategies and treatment had improved when compared to the findings from Marcus and Westra (2012), there may still be many mental health concerns where young people may not view professional help as the appropriate avenue.

Gagnon, Gelinas, and Friesen (2015) conducted a study on the mental health literacy of emerging adults ages 17-25 at a Canadian university. Participants were administered a questionnaire to determine their knowledge of campus mental health services, what they believed to be their knowledge of mental health and counseling-related services, knowledge of how to contact services if needed, and their knowledge of other courses of support counseling on their campus. Participants were then asked to complete a 10-item self-report measure (Attitudes Toward Seeking Professional Psychological Help – Short Form) to determine (a) what behaviours, problems, or feelings they would consider as warning signs that they should seek help; (b) what behaviours, problems, or feelings would need to be occurring for them to actually seek help; (c) perceived barriers to seeking mental health services; and (d) perceived facilitators to seeking mental health services (Gagnon et al., 2015). Lastly, participants were shown a list of 18 common signs and symptoms of mental health decline and were asked to identify which of these they determined to be a warning sign that an individual might need help and were also asked to identify which sign(s) and/or symptom(s) would need to occur before they would personally seek help from a mental health professional (Gagnon et al., 2015).

Findings of the aforementioned study indicate that emerging adults can identify signs and symptoms of mental health decline, however, they do not see these symptoms as serious enough to seek professional help. Participants were able to identify subtle signs of mental health concerns, such as impairment of daily activities, social withdrawal, and changes in behaviour patterns, but professional help was only viewed appropriate for severe signs of mental health decline, such as suicidal thoughts or hallucinations. Participants indicated that stigma was a major barrier in their intentions to seek professional help and that the stigma surrounding mental illness is still prevalent within the Canadian university culture (Gagnon et al., 2015).

Previous Mental Health Literacy Studies on Canadian Youth

McLuckie, Kutcher, and Wei (2014) and Kutcher, Wei, and Morgan (2015) examined the impact of a high school mental health curriculum on youth mental health literacy in Ontario, Canada. First, youth were asked to complete a survey assessing their general knowledge of mental illness stigma, mental health and wellness, mental disorders and their treatments, help resources and support available, and positive mental health. Second, youth were asked to complete a survey to assess their attitudes towards mental disorders and illnesses (Kutcher et al., 2015a; McLuckie et al., 2014). Results revealed that 64% (McLuckie et al., 2014) and 55.18% (Kutcher et al., 2015a) of youth, respectively, have a mediocre knowledge of mental health prior to educational intervention. As well, students held poor attitudes towards mental illness across both studies', scoring 34.09 (McLuckie et al., 2014) and 42.5 (Kutcher et al., 2015a) out of a possible 56. The results of these two studies show that youth in Ontario have mediocre mental health literacy.

Knighton and Currie (2010) in partnership with Kids Help Phone Canada, examined youth's ability to differentiate between normal, intense emotions, and behaviour associated with symptoms of mental illness; beliefs and attitudes regarding mental illness and how they are linked to social acceptance, support, and help-seeking behaviour; and sadness and depression, stress and anxiety, and eating disorders and body image. The results of this study show that young people, ages 11-16, demonstrated a relatively high level of general knowledge regarding mental illness, with 75% of participants correctly answering questions related to knowledge about mental health problems (Knighton & Currie, 2010). However, 58% of respondents reported having personal experience with mental illness (diagnosis, counselling, treatment) and

this could explain why the results from this study do not parallel other mental health literacy reports on young people both internationally (Burns & Rapee, 2006; Pinfold, Stuart, Thornicroft, & Arboleda-Flórez, 2005) and nationally (Kutcher et al., 2015a; McLuckie et al., 2014). The participants from the Kids Help Phone study do not accurately represent the Canadian population of youth as they had a more informed knowledge base than youth with no previous experience, education, or exposure. Although this study reported relatively higher levels of mental health knowledge, only 50% of participants considered seeking help for mental health problems due to stigma associated with mental illness (Knighton & Currie, 2010). This is in line with the low to moderate attitude scores found in studies by McLuckie, Kutcher, and Wei (2014) and Kutcher, Wei, and Morgan (2015). These results suggest that despite participants' higher levels of mental health knowledge, stigma associated with mental illness and help-seeking behaviour is still a major barrier for youth.

Coulter (2014) explored early adolescents' (age 11-14) experience with mental health, which included their perceptions of mental health, the language they use to refer to mental health, and their individual coping strategies when dealing with mental distress. Results from this study found that young adolescents tend to view the term mental health as interchangeable with mental illness, not understanding the difference between the terminologies. Participants viewed both mental health and mental illness negatively to mean someone was 'not healthy' or 'bad', and mental health was often described as dealing with a disability. The study also found that stigmatizing attitudes about mental health and mental illness predominated this cohort, as participants believed a mental illness makes people different, restricts an individual's abilities, causes individuals to hear voices and be dangerous, and that having a mental illness meant living in a mental home or unable to ever live independently. The results from this study found some increases in mental health literacy when compared to other studies (Burns & Rapee, 2006; Kutcher et al., 2015a; McLuckie et al., 2014; Pinfold et al., 2005), which may be contributed to, in part, the advancements of youth mental health initiatives. Nevertheless, stigmatizing attitudes and inconsistent knowledge are still very much present and are still serious barriers in youth help-seeking behaviour.

Sources of Mental Health Misconceptions

Qiant and Guzzettii (2000) and Dole (2000) identified three primary sources of misconceptions among students:

1. Prior Knowledge – when learners attempt to explain everyday events and/or phenomena they are often incorrect and may have faulty conclusions based on limited personal experience.
2. Social Settings – Movies, TV, or conversations with friends or family.
3. Classroom Learning – Inaccurate prior instruction and textbooks with incorrect or outdated information.

Other sources of mental health misconceptions have been linked to medical faculty and the medical community (Garryfello et al., 1988; Higbee & Clay, 1998; Sartorius et al., 2010; Stuart et al., 2014).

Textbooks and other course materials specifically, have been identified as sources of mental health misconceptions (Chew, 2006; Higbee & Clay, 1998; Stanovich, 2009; Taylor & Kowalski, 2004). Misconceptions that stem from textbooks and classroom learning materials are called didaktikogenic misconceptions (Chattopadhyay, 2016; Simanek, 2008). According to Chattopadhyay (2016), these misconceptions emerge from, "inappropriate analogies in textbooks as well as the course of instruction" (p. 381). Textbooks and course material are also a commonly cited source due to their oversimplification of concepts (Chew, 2006; Dake, 2007; Stanovich, 2009). Oversimplification of concepts occurs when an explanation is simplified to a point that is no longer accurate or it does not involve all the facts and details necessary to develop a proper understanding of the concept (Feltovich, Spiro, & Coulson, 1980, 1991; "Oversimplification", 2020; "Oversimplify", 2020; Pereira et al., 2020; Spiro, Feltovich, Coulson, & Anderson, 1989). Textbooks and classroom instruction are a vital component of knowledge construction (Goodlad, 1984; Stern & Roseman, 2004), therefore, it is important to consider whether or not these teaching tools are sufficient in addressing and reducing mental health misconceptions and not reinforcing them.

The Internet and Adolescence

While revolutionizing the availability of information, the Internet has also increased the spread of misconceptions by creating active users, hoax websites, increasing popularity of

inaccurate online videos, and voluntarily limiting exposure to opinions challenging the original beliefs posted (Lewandowsky et al., 2012; Morrison, 2016; Radwanick, 2011). The influence of the Internet and social media on misconceptions may be particularly important for adolescents, as 95% of youth between the ages of 12-18 are using the Internet as a key source for information (Fox, 2011; Wartella et al., 2015). Offering students a comprehensive approach to mental health can equip youth with the ability to critically assess information from various sources (Balon et al., 1999; Garyfellos et al., 1998; Higbee & Clay, 1998; Lewandowsky et al., 2012). Beliefs are suggested to solidify before young adulthood (Boysen & Vogel, 2008; Hinshaw, 2006), therefore, exposure to mental health content that is congruent with core concepts and empirical findings before post-secondary education can potentially address harmful misconceptions before they become engrained and difficult to dispel (Boysen & Vogel, 2008; Gregg et al., 2001; Hinshaw, 2006; Lamal, 1995; Landau & Bavaria, 2003).

Gaps in the Literature

An initial literature review for this study was conducted between 2015-2017. A recent review update was done during the summer 2020 term, as I continued to seek out studies on mental health literacy in young people and youth in a Canadian context, and mental health literacy education interventions directed at Canadian youth in school settings. I also explored media outlets, government agencies, and voices of young people and youth in Canada for information regarding mental health education. Suicide prevention, help-seeking behaviour, and stigma were apparent themes throughout my search; thus, I added new information as well as updated the previous information in the literature review.

Presently, there is little research that discusses mental health literacy interventions within a curriculum context. Throughout my literature review I found that many publications on mental health and/or mental health literacy, based on both empirical research and journalistic fields, focus heavily on rates of mental health literacy or attitudes towards mental health and mental illness. I decided to choose only publications highlighting studies that were conducted in Canada, specifically Ontario, within the last decade, directed at youth and young people (Coulter, 2014; Gagnon et al., 2015; Knighton & Currie, 2010; Kutcher et al., 2015a; Manser, 2016; McLuckie et al., 2014).

A majority of mental health literacy research has been conducted in Australia (Jorm et al., 1997; Jorm et al., 2012), along with several Canadian studies (Coulter, 2014; Gallagher & Watt, 2019; Gagnon et al., 2015; Knighton & Currie, 2010; Kutcher et al., 2015a; Oliffee et al., 2016; Manser, 2016; Marcus & Westra, 2012; McLuckie et al., 2014). The Canadian literature predominantly focuses on mental health literacy rates and explores attitudes towards mental illness. As well, many of the studies focused on post-secondary education populations and neglected to include examples at the high school level of education. In total, three studies were dedicated to a curriculum approach to mental health literacy at the high school level (Kutcher & Wei, 2014; Kutcher et al., 2015a; McLuckie et al., 2014).

A case study at the high school level on mental health education that specifically looks at official curriculum and accompanying resources, is warranted. Thus, my study addresses this gap as it will provide insights and knowledge to the education sector about how their approaches are succeeding, or failing, to enhance mental health literacy within the classroom. Furthermore, my study will add to the literature on early mental health literacy initiatives.

Summary

Mental health literacy initiatives have grown substantially throughout the past decade in Canada, and mental health has been implemented at the elementary and high school level in education. Mental health has been addressed through non-profit charity campaigns, social campaigns, after and in-school programs, and implemented into existing school curriculum. The nature and content of these interventions and the environment in which they are implemented are integral factors impacting their effectiveness (Benzie, 2019; Gagnon et al., 2015; Gregg et al., 2001; Kutcher & Wei, 2014; Kutcher et al., 2015a, 2015b; McLuckie et al., 2014; Robinson et al., 2012; Wei et al., 2013). In this study, I explored mental health education by examining the official high school curriculum in Ontario, including curriculum documents and textbooks, to present a better understanding of how Ontario education is addressing mental health literacy within a curriculum context.

Chapter 3: Theoretical and Curriculum Frameworks

In this chapter, I discuss social constructivist learning theory; Piaget's theory of cognitive development, and Vygotsky's social constructivist theory. I then outline school-based mental health literacy (SBMHL). The theoretical framework was used to analyze curriculum in relation to how we learn. The curriculum framework was used to analyze the curriculum documents and corresponding textbook approaches to mental health literacy. As noted in Chapter two, the literature review, the approach to enhancing mental health literacy education in Ontario high school curriculum is currently unknown. I decided to use SBMHL as a framework as it has demonstrated significant mental health literacy enhancement through the use of The Mental Health and High School Curriculum Guide (Teen Mental Health, 2018; Kutcher & Wei, 2014; Kutcher et al., 2015a; McLuckie et al., 2014). These frameworks influence the questions posed and the data analysis.

My theoretical framework is informed by Piaget's Theory of Cognitive Development, established by developmental psychologist Jean Piaget in 1936, and Vygotsky's Social Constructivist theory, developed by psychologist Lev Vygotsky in 1934. I chose social constructivist learning theory as it posits that knowledge construction reflects the interrelationship of personal and social factors; learning is objective and subjective simultaneously (Dole, 2000; Garryfello et al., 1998; McLeod, 2015; Plourde & Alawiye, 2003; Qiant & Guzzetti, 2000; Stanovich, 2009; Taylor & Kowalski, 2004; Vygotsky, 1978; Wood, 1998; Woolfolk, 2010).

I use SBMHL as a framework, which has been established through the works of Dr. Anthony Jorm (1997, 2000, 2012), an honorary professor with the Melbourne School of Population and Global Growth, and Dr. Stan Kutcher, Canadian Senator and Professor Emeritus of Psychiatry at Dalhousie University. I use Dr. Stan Kutcher's work on The Mental Health and High School Curriculum Guide (2014, 2015), which is also affiliated with his Teen Mental Health organization (2018). This framework is used to analyze which characteristics of mental health literacy are being incorporated into the Ontario high school curriculum. This framework is globally accepted and was influential in the development of The Mental Health and High School Curriculum Guide, recognized as Canada's only non-official mental health curriculum (Kutcher et al., 2015a, 2015b; Kutcher & Wei, 2014; Teen Mental Health, 2018). In this chapter, I will

discuss the theories first, and then explain the SBMHL framework that I used as a critical lens to analyze the content of curriculum documents and textbooks.

Jean Piaget's Theory of Cognitive Development

Piaget's theory focuses on how individuals come to acquire, construct, and use knowledge (Torres & Ash, 2007). His theory states that cognitive development involves reorganization of mental processes due to both biological and environmental experiences (McLeod, 2015). Piaget's theory asserts that schemas are the building blocks of knowledge and learning occurs through the process of adaption (Piaget & Cook, 1952; Wadsworth, 2004; Woolfolk, 2010). Schemas are mental representations about the world and are a way to organize knowledge (McLeod, 2015; Piaget & Cook, 1952). For learning to occur, an individual must go through the three phases of adaption (McLeod, 2015):

1. Assimilation: attempting to use a pre-existing schema (prior knowledge) to address new information;
2. Accommodation: when the existing schema does not work, or prior knowledge is not consistent with new information; and
3. Equilibration: adjustments have been made to a schema so that assimilation works, or when prior beliefs are adjusted based on the new information so that the belief is now consistent with core concepts.

Piaget posits that knowledge is constructed by experiencing cognitive dissonance between one's beliefs and new information, then adjusting one's beliefs to adequately represent the new information (McLeod, 2015).

Lev Vygotsky's Social Constructivist Theory

Vygotsky argues that knowledge must first exist in a social context and within social settings before an individual can learn that knowledge (Plourde & Alawiye, 2003; Woolfolk, 2010). Social constructivist theory suggests two levels of development: (a) "actual" level of development, where learners can use knowledge without help from others, and (b) Zone of Proximal Development (ZDP), where learners seek the help of others to aid them in solving a problem (Plourde & Alawiye, 2003; Tuncel, 2009; Woolfolk, 2010). A principle of Vygotsky's theory is scaffolding, a process where the learner is provided hints or clues to build problem

solving skills (Woolfolk, 2004). Piaget and Vygotsky's theories combined underpin contemporary constructivist learning theory; knowledge is constructed using prior knowledge and the individual's envrionment(s) (Woolfolk, 2010).

Social Constructivist Learning Theory

Constructivism, broadly, is a philosophical viewpoint that posits that knowledge is constructed through interaction with the environment and is a reflection of those experiences (WNET Education, 2004; Woolfolk, 2010). This view holds the belief that prior knowledge is essential to the learning process, as when new information is introduced learners must merge it with previous understandings and experiences and adjust their beliefs accordingly (McLeod, 2015). Social constructivism, while adhering to the traditional definition, extends the focus of individual learning to collaborative and social learning aspects as well (Plourde & Alawiye, 2003; Wood, 1998; Woolfolk, 2010).

Prior Knowledge and Learning

Prior knowledge is defined as the skills and/or abilities, correct understandings, or misconceptions that students bring into new learning environments and processes (Brynes, 1996; Dochy, Segers, & Buehl, 1999; Jonassen & Gabrowski, 1993). Prior knowledge is argued to be one of the most valuable and influential factors influencing student academic success, performance, and the persistence of misconceptions (Bransford, Brown, & cocking, 2000; Chi & Ceci, 1987; Dochy, 1992; Dochy et al., 1999; Griggs & Jackson, 1988; Hailkari & Lindblom-Ylänne, 2007; Ragland, 1987; Scheirer & Rogers, 1985). Accurate prior instruction is beneficial for students' future disciplinary learning and is demonstrated by significant connections between prior knowledge and student achievement among various disciplines (Adamuti-Trache & Andres, 2008; Adamuti-Trache, Bluman, & Tiedje, 2013; Dochy, 1992; Frederici & Schuerger, 1979; Griggs & Jackson, 1988; Nashon & Neilson, 2007; Smith, 2004; Thompson & Zamboanga, 2003a, 2003b; Winterson & Russ, 2009). Domain-specific knowledge is beneficial only when the pre-existing information is accurate and complete (Alexander & Judy, 1988; Dochy et al., 1999; National Research Council, 2000). This was demonstrated in previous studies where empirically correct psychology content and mental health education programs implemented during adolescence produced substantial misconception extinction and enhanced

mental health literacy, which continued after follow up test's months later (Gregg et al., 2001; Kutcher & Wei, 2014; Kutcher et al., 2015a, 2015b, McLuckie et al., 2014).

Social constructivist learning theory maintains that learning is a process of building upon prior understanding and knowledge (Woolfolk, 2010). Research using a social constructivist lens advocates the importance of knowledge transfer; all learning that occurs requires transfer from previous experiences (Bransford et al., 2000). Knowledge transfer occurs when one demonstrates an ability to bring prior knowledge into another context, or to use that prior knowledge to further learning in the same subject (Brynes, 1996). Knowledge transfer can only occur if the student has achieved an adequate understanding in the subject before moving forward (Bransford et al., 2000). If this level of understanding does not happen then students will be ill-prepared for further learning in the subject and may struggle to succeed. This argument can be made for mental health literacy as well, in that, if adolescence fail to obtain correct understandings about mental health, they may struggle to understand what peers are dealing with, may hold and act on stigmatizing attitudes towards those with a mental illness, and/or may struggle to understand how to deal with symptoms themselves.

School-Based Mental Health Literacy

Mental health literacy is characterized by three major areas: recognition, attitude, and knowledge (Jorm, 2000; Jorm et al., 1997; O'Connor et al., 2014). Recognition is when an individual has the ability to recognize beliefs, behaviours, and other manifestations of mental health issues without specifically knowing which mental disorder they are connected to, and specific illness recognition, where an individual has the ability to identify a mental disorder from specific presenting symptoms (Corrigan, Morris, Michaels, Rafacs, & Rüsch, 2012; Jorm et al., 1997; Jorm, 2000). Attitude is characterized by the public and individual attitudes held about mental health and mental illness, often described as stigma. According to Jorm et al. (1997), Jorm (2000), Guy et al. (2014), and McDowell, Hughto, and Reisner (2019), knowledge encompasses the following components:

- Where and how to get information: any means of networks or systems used to obtain information about mental disorders.
- Risk-factors: factors that put individuals at greater risk for mental health issues.

- Causes: Any biological, psychological, or environmental factors that can contribute to the onset or progression of mental health issues.

- Self-treatment: Techniques individuals may use in replacement of professional help.

- Professional help: Knowing where to get professional help and/or what professional help is available.

SBMHL was developed, "to help schools better address youth mental health in an effective, inexpensive, system strengthening, and pedagogically familiar way" (Teen Mental Health, 2020, para. 3). This framework encompasses all the characteristics of mental health literacy while adding mental health promotion/positive mental health, which is described as, "[u]nderstanding how to optimize and maintain good mental health" (Kutcher & Wei, 2017, p. 4). According to Dr. Stan Kutcher's Teen Mental Health Organization (2020), SBMHL has five goals,

- Promote mental health and reduce stigma by enhancing mental health literacy of students, educators, and parents';

- Promote appropriate and timely access to mental health care through early identification, support, triage, and referral from schools to health services, or through site-based mental health interventions;

- Enhance effective linkages between schools and health care providers;

- Provide a framework in which students receiving mental health care can be seamlessly supported in their educational needs within usual school settings;

- Include parents and the wider community in addressing the mental health needs of youth. (paras. 4).

This framework is composed of both The Mental Health and High School Curriculum Guide and the Go-To Educator Professional Training (Teen Mental Health, 2020). As this study focuses on the nature of mental health content within the curriculum, the content that should be addressed, as referenced throughout the framework, while teaching mental health will be utilized as a reference.

Summary

Social constructivist learning theory is a useful framework to examine mental health literacy education as it posits that learning is a process of building upon prior understanding and knowledge (Woolfolk, 2010). Prior understanding and knowledge have long been acknowledged as major influences on mental health literacy (Gagnon et al., 2015; Gregg et al., 2001; Jorm et al., 2012; Kutcher et al., 2015a, 2015b; McLuckie et al., 2014; Pinfold, Stuart, Thornicroft, & Arbdeda-Florèz, 2005; Robinson et al., 2012; Santor et al., 2009; Wei et al., 2013). Social constructivist learning theory and SBMHL complement each other, as the former emphasizes that knowledge construction and transfer rely on prior understandings, while the latter outlines the specific information needed to obtain accurate knowledge for successful knowledge transfer to occur. Additionally, social constructivist learning theory maintains that learning occurs both objectively and subjectively, whether positive or negative, and SBMHL acknowledges these barriers to knowledge construction and guides curriculum development towards a refutational/preventative curricular approach to mental health and stigma. In the next chapter, I discuss the research design, data collection, data organization, and data analysis that were conducted.

Chapter 4: Methodology

In this chapter I explain why a case study was the appropriate choice for this research. I will discuss the data sources, which include curriculum documents and textbooks, and textual analysis used in this case study of high school curriculum in Ontario. I also discuss the research questions, the processes involved during data collection and analysis, and the trustworthiness and reliability of the study.

This research study addresses the following questions:

1. How much exposure do Ontario high school students have to mental health information through the official curriculum?
2. What is the nature of mental health education in the official Ontario high school curriculum?

Exposure to mental health education encompasses the amount of the intended curriculum as a whole, and the curriculum of each specific course textbook, that is dedicated to the discussion of mental health. The nature of mental health education was determined by which major characteristic(s) of SBMHL specific courses focus on. These are knowledge, recognition, attitude, and positive mental health. These are understood through various definitions which were noted in further detail in the theoretical framework, in Chapter three. This research also highlights course levels and publication dates of textbooks.

Research Design

The goal of this research study is to understand Ontario's educational approach to mental health, utilizing a naturalistic inquiry approach. The goal of naturalistic research design is to study organisms in their natural settings, without being experimental (Salkind, 2010). This type of research does not use manipulation of the environment, instead, exploring the phenomena of interest and how it manifests in everyday situations (Salkind, 2010). According to Salkind (2010), types of naturalistic inquiry include, "participant observation, direct observation, ethnographic methods, case studies, grounded theory, unobtrusive methods, and field research methods" (paras. 1). For this study, I chose to use a case study.

Case Study

There are various definitions for case study research, however, all definitions agree that this design is used for an in-depth exploration of an event or phenomena, multi-facedly, and within its natural context (Crowe, Creswell, Robertson, Avery, & Sheikh, 2011; Yin, 2009, 2014). Case study research is defined by the object of the study (the bounded system; i.e., the case), it focuses on a particular thing and the data should be descriptive and heuristic in nature (Merriam, 2009). The case encompasses various forms, such as a specific school, an individual teacher, or classroom, for example (Gay, Gall, & Borg, 2007). The purpose of a case study is to focus on a specific phenomenon, further deepening our understanding of, and providing greater awareness (Gay et al., 2009; Yin, 2009). A case study is the appropriate research design of choice as I am exploring a single case, mental health education, by analyzing the components of the approach (official curriculum documents and textbooks) within a natural environment (the Ontario high school classroom). This approach will give a deeper understanding of the mental health education youth in Ontario are receiving within the classroom environment.

There are three main types of case studies: intrinsic, instrumental, and collective (Stake, 2005). An intrinsic case study is used when the researcher wants to learn about a unique phenomenon, researching the case as a whole and trying to understand everything encompassing that specific case (Hamilton & Corbett-Whittier, 2013; Stake, 2005). The goal of an instrumental case study is to focus on a particular aspect, concern, or issue of a case to gain a greater understanding of the issue or phenomena (Hamilton & Corbett-Whittier, 2013). Lastly, a collective case study is used when the researcher wants to study multiple cases simultaneously, allowing more generalizations and more in-depth exploration (Cousin, 2005; Crowe et al., 2011; Stake, 2005). I conducted an instrumental case study and focused on a specific phenomenon: mental health education. I focused on how the Ontario high school curriculum addresses mental health through the intended curriculum (official curriculum documents and textbooks).

Secondary Data use in Case Studies

This study uses secondary data to address the research questions. According to Allen (2017), secondary data is "data that have already been collected for some other purpose" (paras 1.), and can include government publications, books, journals, industry statistics and reports. This study utilizes government publications in the form of official curriculum documents and

resources in the form of textbooks. Allen (2017) and Donnellan and Lucas (2013) highlight the many advantages of using secondary data:

1. Secondary data is accessible. With the revolution of the Internet, large data sets have become much more accessible to researchers. This provides the opportunity to investigate research questions using more inclusive data. These large data sets are also well-suited for investigating under-represented populations, due to the amount of information available. Therefore, as discussed in the literature review in chapter two, Canadian youth mental health and mental health education are under-represented in the current literature, however, have the opportunity to be more recognized when the available research is aimed to address these specific concerns.

2. Secondary data is continually evolving. This allows for research to explore both the evolution of a phenomenon and/or its current state. For this study, the ability to understand the progress of mental health education and its current state are important factors when considering the provincial approach to addressing mental health in the education system. Not only can this research inform on what steps have already been taken, but also on what is currently being done within the curriculum, and what future steps can be taken to address gaps highlighted in the study.

3. Secondary data provides opportunities for new understandings. Using already existing data that was collected for other uses provides an opportunity to discover new knowledge or understandings. Pertaining to this research study, the secondary data used was compiled to determine what information is important for youth to learn and to help guide teachers as to what content should be taught. This research will use this data to explore how it aligns with mental health literacy and how this may reflect the status of mental health within Ontario.

The major criticism of secondary data is a lack of control over its quality (Allen, 2017). While this type of data provides a large pool of data, the information must be verified and of high-quality. This study addresses quality but only using data from government and official institutions, which are considered the be the most reliable (Allen, 2017).

I decided to use multiple data sources to best triangulate my data. In order to achieve this, I used 29 curriculum documents retrieved from the official Ontario high school curriculum and

four textbooks, retrieved from the Ministry of Education's Trillium List. Choosing multiple sources of data for my study allows me to enhance the credibility of this research. I chose to use data sources from both the Official Ontario high school curriculum and the Ministry of Education Trillium List, as both sources are intertwined within the education system, where, curriculum documents may influence textbook selection, while textbook publications influence the content included into the curriculum documents, teacher's lesson plans, and other course materials that may brought into the classroom (Goodlad, 1984; Stern & Roseman, 2004). To further triangulate my research, I chose to use social constructive learning theory and SBMHL to analyze the data that I have collected. By combining differing theories and frameworks, as well as curriculum documents and textbooks, I am able to align multiple perspectives on learning and mental health literacy to allow for a comprehensive understanding of mental health education in Ontario high schools (Salkind, 2010).

Data Sources

A case study can include both qualitative and quantitative data and both types of data can be highly complex during analysis (Yin, 2004). I decided to use only qualitative data to understand mental health education in Ontario high schools. A qualitative approach is the appropriate choice for this study as this will allow for an in depth understanding and ability to collect rich and descriptive data (Gay et al., 2009). I used multiple data sources, which included 29 curriculum documents that compose the official Ontario high school curriculum and four textbooks. Data collection occurred through May to August of 2019.

I obtained the curriculum documents through the Ministry of Education's public website. The data acquired included course descriptions and the overall and specific expectations for the courses currently listed in the official curriculum documents. The following documents were included in my data set:

- *The Ontario Curriculum Grades 9 and 10: The Arts* (Ontario, 2010a).
- *The Ontario Curriculum Grades 11 and 12: The Arts* (Ontario, 2010b).
- *The Ontario Curriculum Grades 9 and 10: Business Studies* (Ontario, 2006a).
- *The Ontario Curriculum Grades 11 and 12: Business Studies* (Ontario, 2006b).
- *The Ontario Curriculum Grades 9 and 10: Canadian World Studies* (Ontario, 2018b).

- *The Ontario Curriculum Grades 11 and 12: Canadian World Studies* (Ontario, 2015a).
- *The Ontario Curriculum Grades 9 to 12: Classical Studies and Languages* (Ontario, 2016a).
- *The Ontario Curriculum Grades 10 to 12: Computer Studies* (Ontario, 2008a).
- *The Ontario Curriculum Grades 11 to 12: Cooperative Education* (Ontario, 2018c).
- *The Ontario Curriculum Grades 9 and 10: English* (Ontario, 2007a).
- *The Ontario Curriculum Grades 11 and 12: English* (Ontario, 2007b).
- *The Ontario Curriculum Grades 9 to 12: English as a Second Language and English Literacy Development* (Ontario, 2007c).
- *The Ontario Curriculum Grades 9 to 12: First Nations, Métis, and Inuit Studies* (Ontario, 2019a).
- *The Ontario Curriculum Grades 9 to 12: French as a Second Language – Core, Extended, and Immersion French* (Ontario, 2014).
- *The Ontario Curriculum Grades 9 and 10: Guidance and Career Education* (Ontario, 2006c).
- *The Ontario Curriculum Grade 10: Career Studies* (Ontario, 2019b).
- *The Ontario Curriculum Grades 11 and 12: Guidance and Career Education* (Ontario, 2006d).
- *The Ontario Curriculum Grades 9 to 12: Health and Physical Education* (Ontario, 2015b).
- *The Ontario Curriculum Grades 11 and 12: Interdisciplinary Studies* (Ontario, 2002).
- *The Ontario Curriculum Grades 9 and 10: Mathematics* (Ontario, 2005).
- *The Ontario Curriculum Grade 9: Mathematics – Mathematics Transfer Course, Applied to Academic* (Ontario, 2006e).
- *The Ontario Curriculum Grades 11 and 12: Mathematics* (Ontario, 2007d).
- *The Ontario Curriculum Grades 9 and 10: Native Languages* (Ontario, 1999).
- *The Ontario Curriculum Grades 11 and 12: Native Languages* (Ontario, 2000).
- *The Ontario Curriculum Grades 9 and 10: Science* (Ontario, 2008b).
- *The Ontario Curriculum Grades 11 and 12: Science* (Ontario, 2008c).

- *The Ontario Curriculum Grades 9 to 12: Social Sciences and Humanities* (Ontario, 2013).

- *The Ontario Curriculum Grades 9 and 10: Technological Education* (Ontario, 2009a).

- *The Ontario Curriculum Grades 11 and 12: Technological Education* (Ontario, 2009b).

After an initial content analysis of the curriculum documents, I used the Ministry of Education's Trillium List to determine which textbooks were required for the courses that discuss mental health. I consulted the Trillium List as it contains all textbooks approved by the Ministry of Education, for use in Ontario schools, that are selected to implement the curriculum (Ministry of Education, 2020b). The following textbooks were obtained:

- *Healthy Active Living 2.0: Keep fit, Stay Healthy, Have fun* (Temertzoglou, 2018).

- *McGraw-Hill Ryerson Child Care: Working with Infants, Children, and Adolescents* (Chapman, Hodowanski, & Shepski, 2014).

- *McGraw-Hill Ryerson Parenting: Rewards and Responsibilities* (Witte, Fitzpatrick, & Hildebrand, 2005).

- *McGraw-Hill Ryerson Social Science: An Introduction* (Hasking-Winner, Collishaw, Kritzer, & Warecki, 2011).

Data Analysis

This study used NVivo 12 software for the content analysis. NVivo is a software tool that allows researchers to track and manage their data sources and ideas associated with or derived from their data sources; search their data for terms or concepts; use indexing or coding for text and multimedia information; organize codes to provide a conceptual framework; see, and query, relationships occurring between concepts, themes, and/or categories in their research; and build visual models linked to their data (Salkind, 2010). According to Salkind, (2010), "[p]articular and unique strengths of NVivo lie in its ability to facilitate work involving complex data sources in a variety of formats, in the range of query tools it offers, and in its ability to link quantitative and qualitative data" (paras. 3). I chose to use this software as it is often used for qualitative research, specifically for the analysis of text, audio, video, and image data (Kent State University, 2020).

To address research question one, how much exposure do Ontario high school students have to mental health information through the official curriculum, I first conducted two content analyses of the curriculum documents. This was done to determine (a) which subject fields include mental health instruction and (b) to determine which specific courses address mental health. To conduct these analyses, I created an NVivo 12 project and imported all of the curriculum documents. I then made a node for 'mental health', which encompassed the terms mental health, mental illness, and mental disorder(s). These characteristics were derived from the Ministry of Education's (2016) *Ontario's Well-Being Strategy for Education,* and the school-based mental health literacy framework (Teen Mental Health, 2020), as discussed in the theoretical and curriculum frameworks, in chapter three. The node 'mental health' also encompassed the terms depression, anxiety, bi-polar disorder, and substance use disorder(s), as these present the highest prevalence rates among all mental disorders in Canada (Statistics Canada, 2012).

For each curriculum document, I manually read through the document and coded mental health. I only coded a document once as this initial analysis was strictly meant to determine which subject fields include mental health discussion. Once specific subject fields were identified I then created a new NVivo project and imported only the identified subject fields curriculum documents. I once again created a node for the term 'mental health', encompassing the same characteristics as the previous analysis. Once again, I manually read through each document, but this time I coded the course name under the node 'mental health' if the characteristics of mental health were present throughout the overall and specific course expectations. I only coded the course name as this analysis was strictly meant to identify which specific courses address mental health.

During these two analyses I only focused on the course's sections of the curriculum documents, as this section discussed the overall and specific expectations of the curriculum. Secondly, I did not code mental health characteristics when mentioned in teacher prompts, sample questions, or examples, as these discussions are not mandatory learning objectives for the specific course and the choice to include them are subjective to the teacher and/or students. These two analyses provided me with the information needed to seek out appropriate textbooks.

While coding the curriculum documents, I manually wrote down the total number of courses offered through the Ontario high school curriculum. This was recorded to determine how much of the offered curriculum addresses mental health. I then saved sections of each course document, highlighting the courses examined in this study, to record the course levels for each identified course. The course levels were recorded as they have been suggested to influence students' course selections, potentially eliminating courses discussing mental health from their class schedules, therefore, potentially influencing students' exposure to mental health (Chen, 2017).

Once I obtained the corresponding textbooks for the identified courses, I manually conducted a content analysis without the use of NVivo 12 software. NVivo 12 was not used for this analysis as it would have taken too much time to transcribe the entirety of each textbook into a digital copy. Instead, I read each textbook and identified sections where mental health is discussed with a sticky note tab. Mental health was once again characterized through the terms mental health, mental illness, mental disorder(s), depression, anxiety, bi-polar disorder, and substance use disorder(s). This allowed me to determine where, in each textbook, mental health content was discussed. I was then able to transcribe the identified sections into a digital copy, for each textbook. I also manually wrote down the number of pages for each textbook, so that I could compare the total number of pages with the number of pages identified. This allowed me to determine the amount of mental health discussion occurring within the textbooks.

Prior to the analysis process, I had already determined the codes that would be used for the content analysis addressing research question two, what is the nature of mental health within the official Ontario high school curriculum? I developed a codebook using the SBMHL framework, as discussed in the theoretical and curriculum frameworks in chapter three, presented in Table 1.

Table 1

Codebook Used to Define Codes

Code Name	Code Definition	Code Components
Knowledge	Discussion pertaining to networks or systems used to	Where and how to get information

	obtain mental health information; Factors that put individuals at greater risk for mental health issues; biological, psychological, or environmental factors that contribute to the onset or progression of mental health issues; techniques used in replacement, or in combination with, professional help; and professional help that is currently available.	Professional help Causes Risk-Factors Self-Treatment
Recognition	Discussion pertaining to non-specific and specific symptoms of mental disorders.	Symptom recognition Specific illness recognition
Attitude	Discussion pertaining to public and individual beliefs and attitudes about mental health and the issues that arise due to these beliefs and attitudes.	Stigma
Positive Mental Health	Discussion about how to optimize and maintain good mental health.	Enhance mental health Contribute to mental health/well-being

The code book was derived from the SBMHL framework and the previous literature's (Arango et al., 2018; Cooper et al., 1997; Guy et al., 2014; Jorm 2000; Jorm et al.,1997; O'Connor et al., 2014; Teen Mental Health's (2018, 2020) major characteristics of mental health literacy:

knowledge, recognition, attitude, and positive mental health. These codes were used to determine (a) which characteristics are being discussed within the curriculum, (b) which components of the characteristics are being discussed in the curriculum, and (c) which characteristics, and their components, are not being addressed in the curriculum. An example of the coding process is shown in Figure 1.

Figure 1

Coding of the Knowledge Characteristic: Course Documents

Knowledge, recognition, attitude, and positive mental health were created as parent nodes while where and how to get information, professional help, causes, risk-factors, self-treatment,

specific illness recognition, symptom recognition, stigma, enhance mental health, and contribute to mental health/well-being were created as child nodes, representing the components of each parent node. When coding the course documents and the textbook data I used the child nodes as my primary coding structure. By using the child nodes as my primary codes, I was able to determine the extent to which each characteristic of mental health is being discussed and how it is being discussed.

Lastly, to additionally address research question two, I manually recorded the age of each textbook. Including the age of textbooks was important as our understanding and knowledge about mental health is constantly evolving, therefore, older textbooks may inadvertently endorse misconceptions, or represent an outdated view about mental health through inappropriate analogies or oversimplification of concepts (Chattopadhyay, 2016; Chew, 2006; Dake, 2007; Kutcher, Wei, & Coniglio, 2016; Stanovich, 2009).

A hierarchy of nodes was conducted for each course document and for each textbook. An example of this process is shown in Figure 2. By doing this analysis, I was able to determine which child nodes were more heavily coded than others, in turn, allowing me to understand which characteristics of mental health are discussed in greater detail, and which characteristics are being addressed. I also conducted a hierarchy chart of nodes encompassing all of the course documents, and all of the textbooks, allowing me to see which mental health literacy characteristics are most discussed and which components are most addressed throughout the entire curriculum.

Figure 2

Example of Hierarchy of Nodes Analysis for Healthy Active Living 2.0: Keep fit, Stay Healthy, Have fun (Temertzoglou, 2018)

Files		
Name	Codes ▽	Referen
Social Science an	11	72
Child Care Worki	10	20
Physical and Hea	9	56
Parenting Rewar	5	18

Compared by number of coding r ✕

Codes	Number of coding references
Nodes\\Knowledge\Causes	5
Nodes\\Knowledge\Professio	7
Nodes\\Knowledge\Risk Facto	6
Nodes\\Knowledge\Self Treat	1
Nodes\\Knowledge\Where an	3
Nodes\\Recognition\Specific I	3
Nodes\\Recognition\Sympto	3

Trustworthiness and Reliability of the Study

According to Creswell (2014), "[v]alidity is one of the strengths of qualitative research and is based on whether the findings are accurate from the standpoint of the researcher, the participants, or the readers account" (p. 201). This study used multiple validity approaches, as recommended by Creswell (2014) to "enhance the researcher's ability to assess the accuracy of findings as well as convince readers of that accuracy" (p. 201). I triangulated my data from different sources of information, curriculum documents and textbooks, to provide a detailed and balanced representation of the situation (Altrichter, Feldman, Posch, & Somekh, 2008; Salkind, 2010). Throughout the literature review, I discussed research that demonstrates contradictory results and/or perspectives on the efficacy of mental health literacy in the high school classroom. This discussion allows the research to become more realistic, therefore, adding credibility and validity of the study (Creswell, 2014). This study will also be reviewed by an external reviewer, someone who is not familiar with the researcher nor the present study and can provide objective assessment, enhancing the overall validity of the project (Creswell, 2014).

This study also employed multiple reliability procedures, as recommended by Gibbs (2007):

- I checked data transcripts for mistakes prior to conducting the data analysis to ensure the result would be an accurate reflection of the offical Ontario high school curriculum.

- I made sure the code definitions remained consistent throughout the writing of the paper and the process of data analysis through the development of a code book.

Summary

In this chapter, I outlined the methods, research questions, and the data collection and analysis. I outlined the different types of data collected; curriculum documents and textbooks. This chapter provided a context to the results section by describing in detail the curriculum, courses, and textbooks explored. I also discussed the process of transcription used. These details are important for the studies trustworthiness and reliability.

Chapter 5: Results

This chapter presents the results for the content analysis of the official Ontario high school curriculum and its accompanying textbooks. I have organized the results by research question and demonstrated the overlap and interconnectedness of different data sources. For each research question, I present the findings pertaining to curriculum documents first, followed by the results for the textbooks.

Student Exposure to Mental Health Information in the Curriculum

In this section I discuss all results pertaining to the research question: *How much exposure do Ontario high school students have to mental health information through the official curriculum?*

Curriculum Documents

Once data collection was completed, I uploaded all official curriculum documents to an NVivo 12 project. I created a node labelled 'mental health' which embodied any reference to mental health, mental illness, mental disorders, depression, anxiety, bi-polar disorder, and substance use. A curriculum document was coded once into the node if a reference to any one of the characteristics was found during the coding process. The results of this analysis found that mental health is referenced in four curriculum documents, shown in Figure 3, within the official Ontario secondary school curriculum:

- *The Ontario Curriculum Grades 9 to 12: Health and Physical Education* (Ontario, 2015b).
- *The Ontario Curriculum Grades 9 to 12: Social Sciences and Humanities* (Ontario, 2013).
- *The Ontario Curriculum Grades 9 and 10: Technological Education* (Ontario, 2009a)
- *The Ontario Curriculum Grades 11 and 12: Technological Education* (Ontario, 2009b).

Figure 3

The Four Curriculum Documents That Reference Mental Health
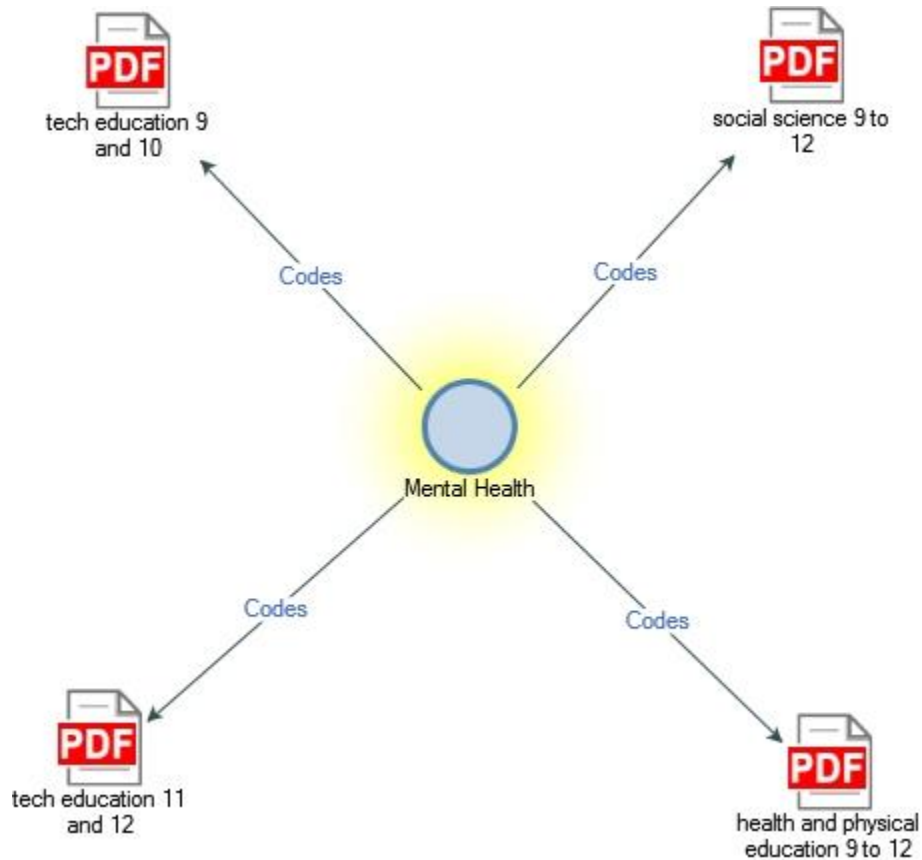
Once I was able to determine which subjects included mental health education, I uploaded each document into a new NVivo 12 project. Once again, I created a node labelled 'mental health' encompassing the same characteristics as the previous analysis. I coded the specific course documents to determine which courses included references to mental health. An excerpt of the results is illustrated in Figure 4.

Figure 4

Excerpt of the results identifying specific courses

○Mental Health   ✕
<Files\health and physical education 9 to 12> - § 5 references coded [0.02% Coverage]
Reference 1 - 0.01% Coverage
Healthy Active Living Education, Grade 9 Open
Reference 2 - 0.01% Coverage
Healthy Active Living Education, Grade 10 Open
Reference 3 - 0.01% Coverage
Healthy Active Living Education, Grade 11 Open
Reference 4 - 0.01% Coverage
Healthy Active Living Education, Grade 12 Open
Reference 5 - 0.01% Coverage
Health for Life, Grade 11 College Preparation
<Files\social science 9 to 12> - § 5 references coded [0.02% Coverage]
Reference 1 - 0.01% Coverage
Dynamics of Human Relationships, Grade 11 Open
Reference 2 - 0.01% Coverage
Raising Healthy Children, Grade 11 Open
Reference 3 - 0.01% Coverage
Working With School-Age Children and Adolescents, Grade 12 College Preparation
Reference 4 - 0.01% Coverage
Introduction to Anthropology, Psychology, and Sociology, Grade 11 University Preparation
Reference 5 - 0.01% Coverage
Introduction to Anthropology, Psychology, and Sociology, Grade 11 College Preparation
<Files\tech education 11 and 12> - § 1 reference coded [0.01% Coverage]

These results found that mental health is included in the following 12 courses:

1. Grade 9 Healthy Active Living Education
2. Grade 10 Healthy Active Living Education
3. Grade 11 Healthy Active Living Education
4. Grade 11 Health for Life
5. Grade 12 Healthy Active Living Education (Ontario, 2015b)
6. Grade 11 Raising Healthy Children
7. Grade 11 Introduction to Anthropology, Psychology, and Sociology (University Preparation)
8. Grade 11 Introduction to Anthropology, Psychology, and Sociology (College Preparation)
9. Grade 11 Dynamics of Human Relationships
10. Grade 12 Working with School-Age Children and Adolescents (Ontario, 2013)
11. Grade 10 Health Care (Ontario, 2009a)
12. Grade 12 Child Development and Gerontology (Ontario, 2009b)

It is important to note that, as Grade 11 Introduction to Anthropology, Psychology, and Sociology is offered separately for university and college preparation, each course was counted separately.

While coding the course documents I manually kept track of the number of courses within the Ontario secondary school curriculum (see Figure 5). This would allow me to determine the percentage of the curriculum that addresses mental health.

Figure 5

The Manual Recording for Number of Total Courses Offered
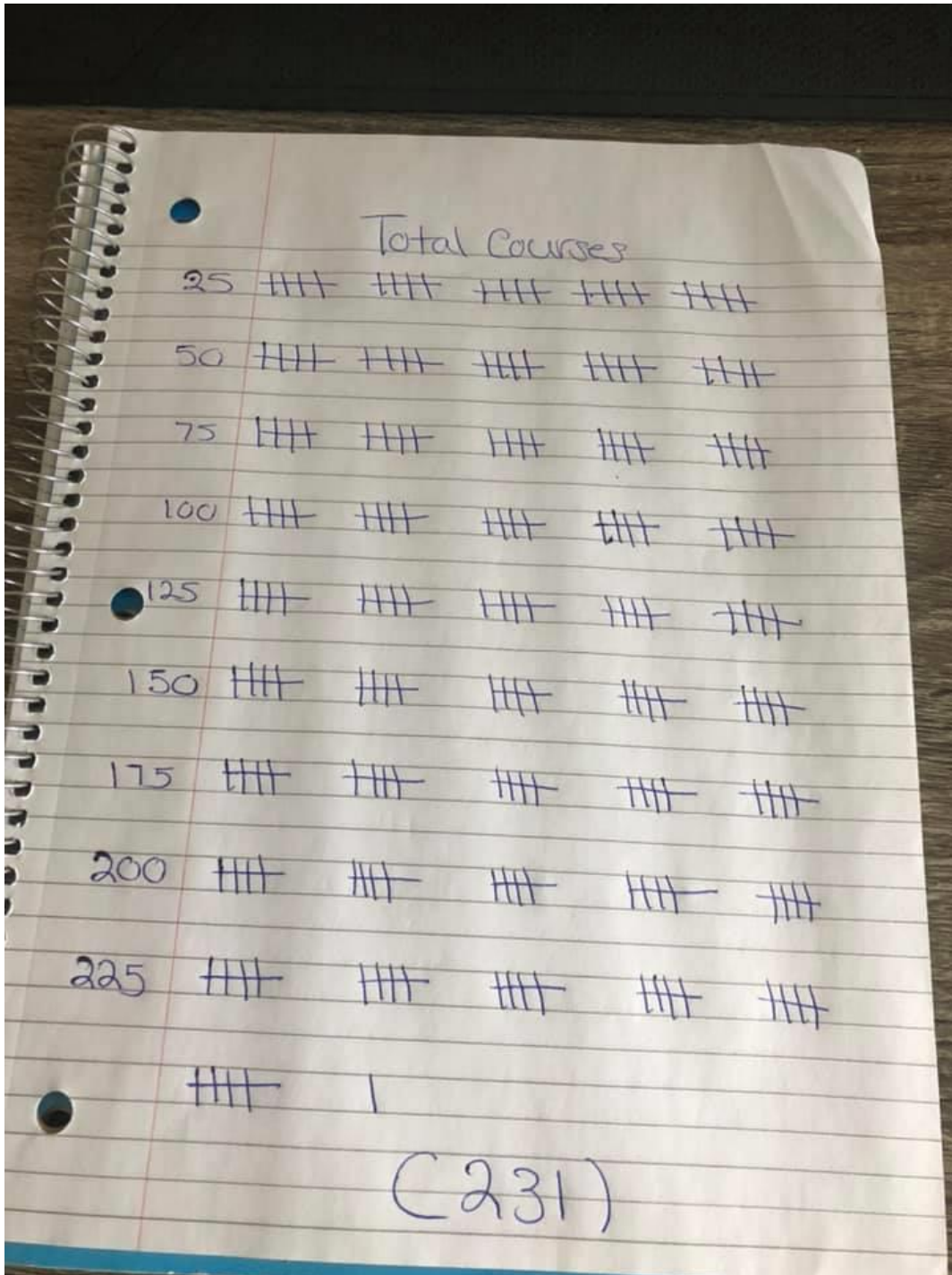
The results found that there are currently 231 courses offered within the Ontario
secondary school curriculum. I manually divided the number of identified courses (12), by the

number of total courses offered, 231. This result found that 5.1% of the Ontario high school curriculum references mental health in some capacity.

Lastly, while coding through the curriculum documents, I also highlighted the course levels for each identified course (see Figures, 6,7,8, 9, & 10). This allowed me to understand the average level for courses addressing mental health.

Figure 6

Course Levels for Identified Courses in The Ontario Curriculum Grades 9 to 12: Health and Physical Education (Ontario, 2015b)

Courses and Prerequisites for Health and Physical Education, Grades 9–12				
Grade	**Course Name**	**Course Type**	**Course Code**	**Prerequisite**
Healthy Active Living Education				
9	HALE	Open	PPL1O	None
10	HALE	Open	PPL2O	None
11	HALE	Open	PPL3O	None
12	HALE	Open	PPL4O	None
Destination Courses				
11	Health for Life	College	PPZ3C	None
12	Introductory Kinesiology	University	PSK4U	Any Grade 11 university or university/ college preparation course in science, or any Grade 11 or 12 course in health and physical education
12	Recreation and Healthy Active Living Leadership	University / College	PLF4M	Any health and physical education course

9. Notice that the codes start with the first three letters identified in the list above; followed by the number 1, 2, 3, or 4, representing Grade 9, 10, 11, or 12, respectively; followed by the letter O for "Open".

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Figure 7

Course Levels for the Identified Courses in The Ontario Curriculum Grades 9 to 12: Social Sciences and Humanities (Ontario, 2013)

General Family Studies				
11	Dynamics of Human Relationships	Open	HHD3O	None
12	Families in Canada	University	HHS4U	Any university or university/college preparation course in social sciences and humanities, English, or Canadian and world studies
12	Families in Canada	College	HHS4C	Any university, college, or university/college preparation course in social sciences and humanities, English, or Canadian and world studies
12	Human Development throughout the Lifespan	University/College	HHG4M	Any university, college, or university/college preparation course in social sciences and humanities, English, or Canadian and world studies
12	Personal Life Management	Open	HIP4O	None
Raising and Caring for Children				
11	Working with Infants and Young Children	College	HPW3C	None
11	Raising Healthy Children	Open	HPC3O	None
12	Working with School-Age Children and Adolescents	College	HPD4C	Any university, college, or university/college preparation course in social sciences and humanities, English, or Canadian and world studies

Figure 8

Course Levels for the Identified Course in The Ontario Curriculum Grades 9 to 12: Social Sciences and Humanities Continued (Ontario, 2013)

Grade	Course Name	Course Type	Course Code**	Prerequisite
General Social Sciences				
11	Introduction to Anthropology, Psychology, and Sociology	University	HSP3U	The Grade 10 **academic** course in English, or the Grade 10 **academic** history course (Canadian and world studies)
11	Introduction to Anthropology, Psychology, and Sociology	College	HSP3C	None
12	Challenge and Change in Society	University	HSB4U	Any university or university/college preparation course in social sciences and humanities, English, or Canadian and world studies
Philosophy				
11	Philosophy: The Big Questions	University/College	HZB3M	None
12	Philosophy: Questions and Theories	University	HZT4U	Any university or university/college preparation course in social sciences and humanities, English, or Canadian and world studies
World Religions				
11	World Religions and Belief Traditions: Perspectives, Issues, and Challenges	University/College	HRT3M	None
11	World Religions and Belief Traditions in Daily Life	Open	HRF3O	None

Figure 9

Course Levels for the Identified Course in The Ontario Curriculum Grades 9 and 10:

Technological Education (Ontario, 2009a)

Technological Education Courses, Grades 9 and 10*				
Grade	Course Name	Course Type	Course Code**	Prerequisite
9	Exploring Technologies†	Open	TIJ1O	None
10	Communications Technology	Open	TGJ2O	None
10	Computer Technology	Open	TEJ2O	None
10	Construction Technology	Open	TCJ2O	None
10	Green Industries	Open	THJ2O	None
10	Hairstyling and Aesthetics	Open	TXJ2O	None
10	Health Care	Open	TPJ2O	None
10	Hospitality and Tourism	Open	TFJ2O	None
10	Manufacturing Technology	Open	TMJ2O	None
10	Technological Design	Open	TDJ2O	None
10	Transportation Technology	Open	TTJ2O	None

* Each Grade 9 and 10 course has a credit value of 1. (Half-credit and multiple-credit courses may be developed according to conditions described in this document.)

** Course codes consist of five characters. The first three characters identify the subject; the fourth character identifies the grade (i.e., 1 and 2 refer to Grade 9 and Grade 10, respectively); and the fifth character identifies the type of course (i.e., O refers to "open").

† The Grade 9 course may be adapted to create an additional course or courses that focus on any one of the technological education subject areas listed on page 9. For more information, see page 13.

Figure 10

Course Levels for the Identified Course in The Ontario Curriculum Grades 11 and 12:

Technological Education (2009b)

Health Care				
11	Health Care	University/College	TPJ3M	None
11	Health Care	College	TPJ3C	None
12	Health Care	University/College	TPJ4M	Grade 11 Health Care, University/College
12	Health Care	College	TPJ4C	Grade 11 Health Care, College
12	Child Development and Gerontology	College	TOJ4C	None
12	Health Care: Support Services	Workplace	TPJ4E	None
Hospitality and Tourism				
11	Hospitality and Tourism	College	TFJ3C	None
11	Hospitality and Tourism	Workplace	TFJ3E	None
12	Hospitality and Tourism	College	TFJ4C	Grade 11 Hospitality and Tourism, College
12	Hospitality and Tourism	Workplace	TFJ4E	Grade 11 Hospitality and Tourism, Workplace

The results found that of the identified courses, seven are open level, four are college preparation level, and one is university preparation level. The average course level for courses addressing mental health is open.

Textbooks

Once I completed the initial analysis on the course documents and identified specific courses, I was able to obtain their accompanying textbooks via the Ministry of Education's Trillium List. It is important to note that grades 9 to 12 Healthy Active Living Education use the same textbook. The following courses did not have a recommended textbook on the Trillium List, nor was I able to obtain a recommendation through the Ministry of Education nor public-schools throughout Ontario:

- Grade 11 Health for Life
- Grade 11 Dynamics of Human Relationships
- Grade 10 Healthcare
- Grade 12 Child Development and Gerontology

To explore research question one, I manually read through each textbook, searching for the terms mental health, mental illness, mental disorder(s), depression, anxiety, bi-polar disorder, and substance use. Once a term was identified, I marked the page with a sticky note (see Figure 11). This allowed me to identify the specific sections of each textbook that discuss mental health in some capacity. I also noted the total number of pages of each textbook, excluding the table of content sections, glossary sections, and credit sections. This allowed me to determine the percentage of each textbook that addresses mental health. The distribution of mental health throughout all textbooks can be found in Table 2.

Figure 11

The Coding Method Used to Identify Mental Health Sections Within Each Textbook
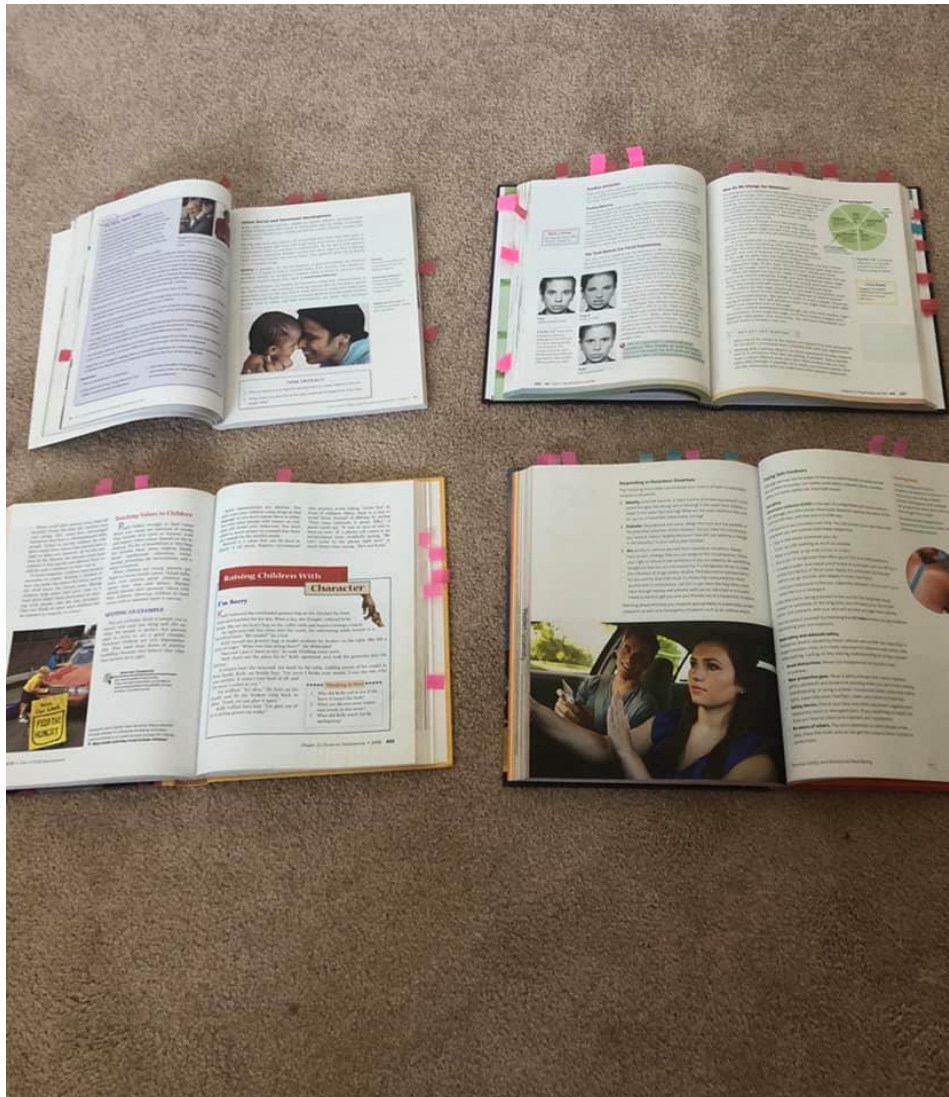
Table 2

Distribution of Mental Health Education by Textbook

Textbook	Pages	%
Healthy Active Living: Keep fit, Stay Healthy, Have fun (Temertzoglou, 2018).	11	3
McGraw-Hill Ryerson Child Care: Working with Infants, Children, and Adolescents (Chapman et al., 2014).	7	2
McGraw-Hill Ryerson Parenting: Rewards and Responsibilities (Witte et al., 2005).	10	1
McGraw-Hill Ryerson Social Science: An Introduction (Haskings-Winner et al., 2011).	24	5
Total	52	3

The findings from the distribution of mental health education by textbook highlighted in Table 2 illustrates that *McGraw-Hill Ryerson Social Science: An Introduction* (Haskings-Winner et al., 2011), includes the greatest amount of mental health content, with 5% coverage throughout the textbook. *McGraw-Hill Ryerson Parenting: Rewards and Responsibilities* (Witte et al., 2005), includes the least amount of mental health content, with 1% coverage throughout the textbook. Overall, these findings indicate mental health education accounts for 3% of textbook learning.

The Nature of Mental Health Education in the Ontario Curriculum

In this section I discuss all results pertaining to research question two: *What is the nature of mental health education in the official Ontario high school curriculum?* I present the results starting with curriculum documents, followed by textbooks. I also organize the results by mental health literacy characteristics: knowledge, recognition, attitude, positive mental health, followed by general mental health discussion.

Curriculum Documents

To explore research question two, I first reviewed and then transcribed the specific course descriptions into individual electronic documents. I uploaded each document into a new NVivo 12 project and created parent nodes for the mental health literacy characteristics knowledge, recognition, attitude, positive mental health, as well as a node for general mental health discussion (see a detailed discussion in Chapter four, Methodology – code book). I executed a hierarchy chart of files for each node to determine the amount of references per course. I also ran a matrix coding query to determine which components of each characteristic are discussed the most. Introduction to Anthropology, Psychology, and Sociology contain the same, word-for-word, course description between the college and university preparation documents, therefore, I only analyzed the university preparation document.

Knowledge. The number of references to the mental health literacy characteristic *knowledge* can be found in Table 3.

Table 3

Distribution of the Knowledge Characteristic Throughout all Identified Courses

Course Name	Number of References
Grade 9 Health and Physical Education	3
Grade 10 Health and Physical Education	2
Grade 11 Health and Physical Education	4
Grade 11 Health for Life	1
Grade 12 Health and Physical Education	2

Grade 11 Introduction to Anthropology, Psychology, and Sociology	0
Grade 11 Dynamics of Human Relationships	0
Grade 11 Raising Healthy Children	0
Grade 12 Working with School-Age Children and Adolescents	3
Grade 10 Health Care	3
Grade 12 Child Development and Gerontology	1
Total	19

The findings from the hierarchy of charts run on the node knowledge, as given in Table 3, show that the Grade 11 Health and Physical Education course references the greatest amount of discussion regarding knowledge. Whereas, Grade 11 Introduction to Anthropology, Psychology, and Sociology; Grade 11 Dynamics of Human Relationships; and Grade 11 Raising Healthy Children do not include discussion of the knowledge characteristic. These results also find that the Health and Physical Education subject field discusses knowledge the most, with 12 references, followed by Technological Education with four references, and Social Sciences and the Humanities with three references.

A matrix coding query was performed to understand which components of the knowledge characteristic are referenced throughout the curriculum document (see Figure 12). Acronyms were made for courses with longer titles so the information could better fit the scale of the figure; this occurs for all matrix coding query figures throughout this paper. The acronyms and their assigned courses are as follows:

- WWSACA12: Grade 12 Working with School-Age Children and Adolescents
- Gym 9, 10, 11, 12: Health and Physical Education
- DHRGR11: Grade 11 Dynamics of Human Relationships
- CDAGGR12: Grade 12 Child Development and Gerontology
- ASPSGR: Grade 11 Introduction to Anthropology, Psychology, and Sociology

Figure 12

Results of a Matrix Coding Query Performed on the Components of Knowledge
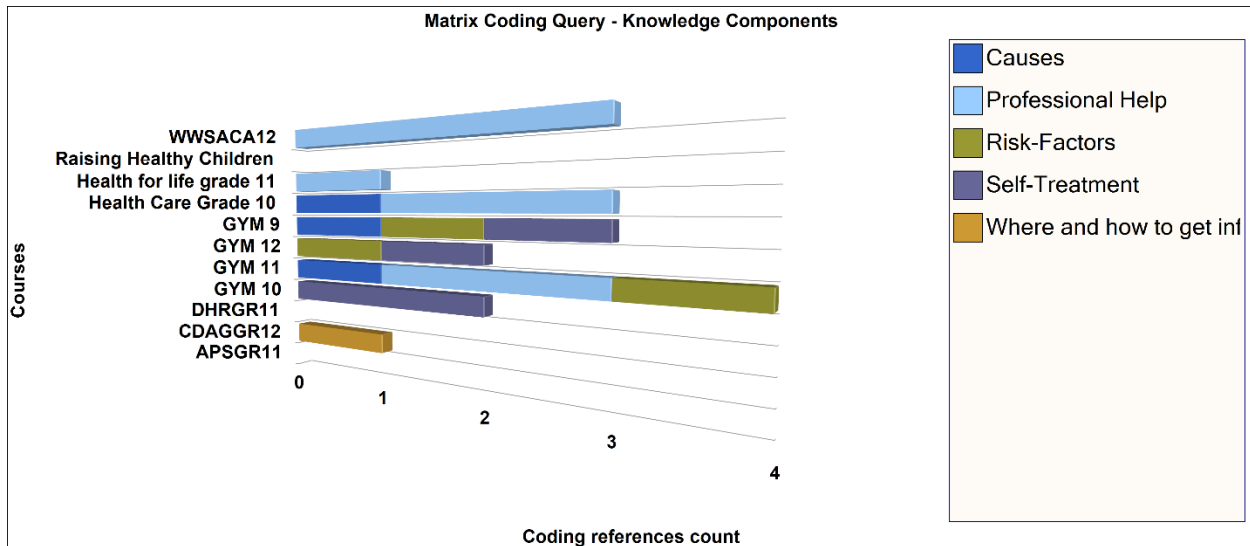
The results from the matrix coding query displayed in Figure 12 found that professional help is the most discussed knowledge component throughout the identified courses. These results also found that the where and how to get information component is the least discussed. Furthermore, these results show that the Health and Physical Education subject field focuses on, in hierarchal order, professional help, self-treatment, risk-factors, and causes, but does not discuss where and how to get mental health information; the Social Sciences and Humanities field only discusses professional help; and the Technological Education field focuses on, in hierarchal order, professional help, where and how to get information, and causes, but does not discuss risk-factors or self-treatment.

Recognition. The number of references to the mental health literacy characteristic *recognition* can be found in Table 4.

Table 4

Distribution of the Recognition Characteristic throughout all Identified Courses

Course Name	Number of References
Grade 9 Health and Physical Education	1
Grade 10 Health and Physical Education	0

|	
Grade 11 Health and Physical Education	2
Grade 11 Health for Life	0
Grade 12 Health and Physical Education	2
Grade 11 Introduction to Anthropology, Psychology, and Sociology	0
Grade 11 Dynamics of Human Relationships	0
Grade 11 Raising Healthy Children	1
Grade 12 Working with School-Age Children and Adolescents	0
Grade 10 Health Care	1
Grade 12 Child Development and Gerontology	0
Total	7

The findings from the hierarchy of charts run on the node recognition, as given in Table 4, show that the Grade 11 and 12 Health and Physical Education courses reference the recognition characteristic the most. Whereas, Grade 10 Health and Physical Education; Grade 11 Health for Life; Grade 11 Introduction to Anthropology, Psychology, and Sociology; Grade 11 Dynamics of Human Relationships; Grade 12 Working with School-Age Children and Adolescents; and Grade 12 Child Development and Gerontology do not include discussion of the recognition characteristic. These results also find that the Health and Physical Education subject field discusses the recognition characteristic the most, with five references, followed by Technological Education and the Social Sciences and Humanities with one reference each.

A matrix coding query was performed to understand which components of the recognition characteristic are referenced throughout the curriculum documents (see Figure 13).

Figure 13

Results of a Matrix Coding Query Performed on the Components of Recognition
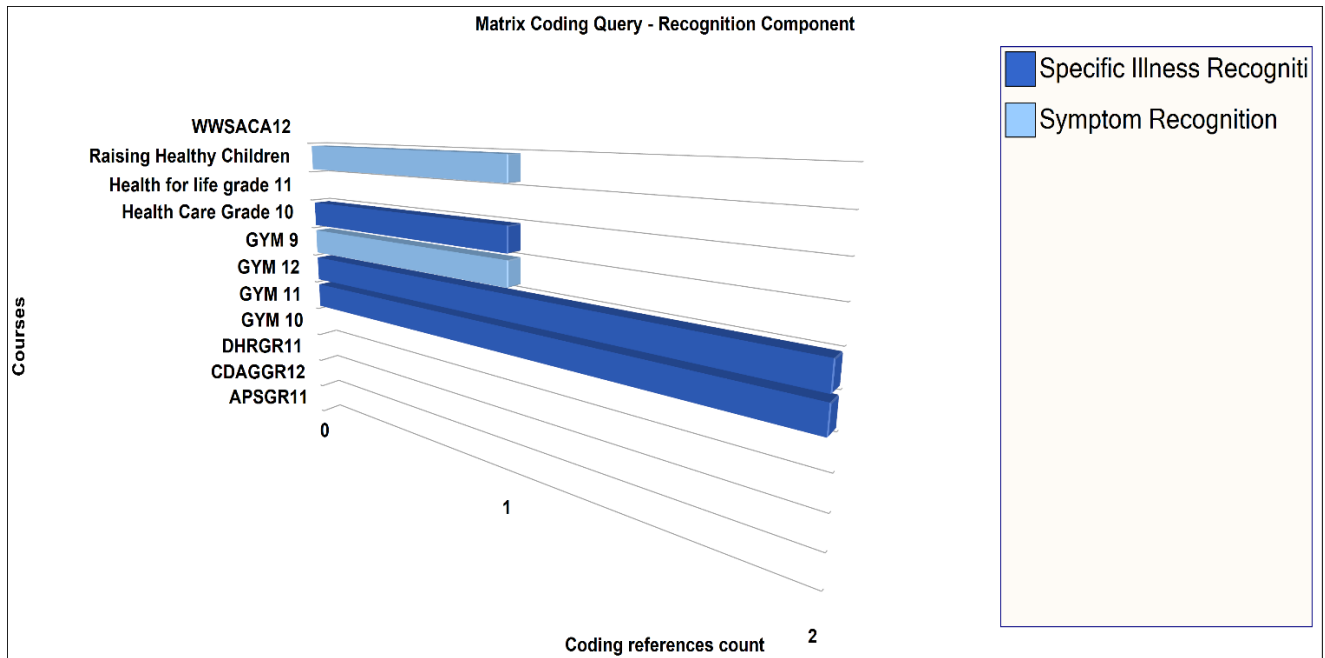
The results from the matrix coding query displayed in Figure 13 found that specific illness recognition is the most discussed recognition component throughout the identified courses. These results show that the Health and Physical Education field focuses on the specific illness recognition component; the Social Sciences and Humanities subject field focuses on symptom recognition but does not discuss specific illness recognition; and the Technological Education subject field focuses on the specific illness component, but does not discuss symptom recognition.

Attitude. The number of references to the mental health literacy characteristic *attitude* can be found in Table 5.

Table 5

Distribution of the Attitude Characteristic Throughout all Identified Courses

| Course Name	Number of References
Grade 9 Health and Physical Education	0
Grade 10 Health and Physical Education	0

Grade 11 Health and Physical Education	2
Grade 11 Health for Life	0
Grade 12 Health and Physical Education	0
Grade 11 Introduction to Anthropology, Psychology, and Sociology	1
Grade 11 Dynamics of Human Relationships	0
Grade 11 Raising Healthy Children	0
Grade 12 Working with School-Age Children and Adolescents	0
Grade 10 Health Care	0
Grade 12 Child Development and Gerontology	0
Total	3

The findings from the hierarchy of charts executed on the node attitude in Table 5 illustrate that the Grade 11 Health and Physical Education course references the attitude characteristic the most, with two references, followed by the Grade 11 Introduction to Anthropology, Psychology, and Sociology, with one reference. The remaining courses do not discuss the characteristic at all. The results also show that the Health and Physical Education subject field discusses the attitude characteristic the most, with two references, followed by the Social Sciences and Humanities field with one reference.

Positive Mental Health. The number of references to the mental health literacy characteristic *positive mental health* can be found in Table 6.

Table 6

Distribution of the Positive Mental Health Characteristic Throughout all Identified Courses

Course Name	Number of References
Grade 9 Health and Physical Education	1
Grade 10 Health and Physical Education	1

Grade 11 Health and Physical Education	0
Grade 11 Health for Life	0
Grade 12 Health and Physical Education	0
Grade 11 Introduction to Anthropology, Psychology, and Sociology	0
Grade 11 Dynamics of human Relationships	0
Grade 11 Raising Healthy Children	0
Grade 12 Working with School-Age Children and Adolescents	1
Grade 10 Health Care	0
Grade 12 Child Development and Gerontology	0
Total	3

The findings from the hierarchy of charts run on the node positive mental health, as given in Table 6, shows that the Grades 9 and 10 Health and Physical Education courses, and the Grade 12 Working with School-Age Children and Adolescents course are the only identified courses that discuss positive mental health. These results find that the Health and Physical Education subject field discusses positive mental health the most with two references, followed by the Social Sciences and Humanities field with one reference.

A matrix coding query was performed to understand which components of the positive mental health characteristic are referenced throughout the curriculum documents (Figure 14).

Figure 14

Results of a Matrix Coding Query Performed on the Components of Positive Mental Health
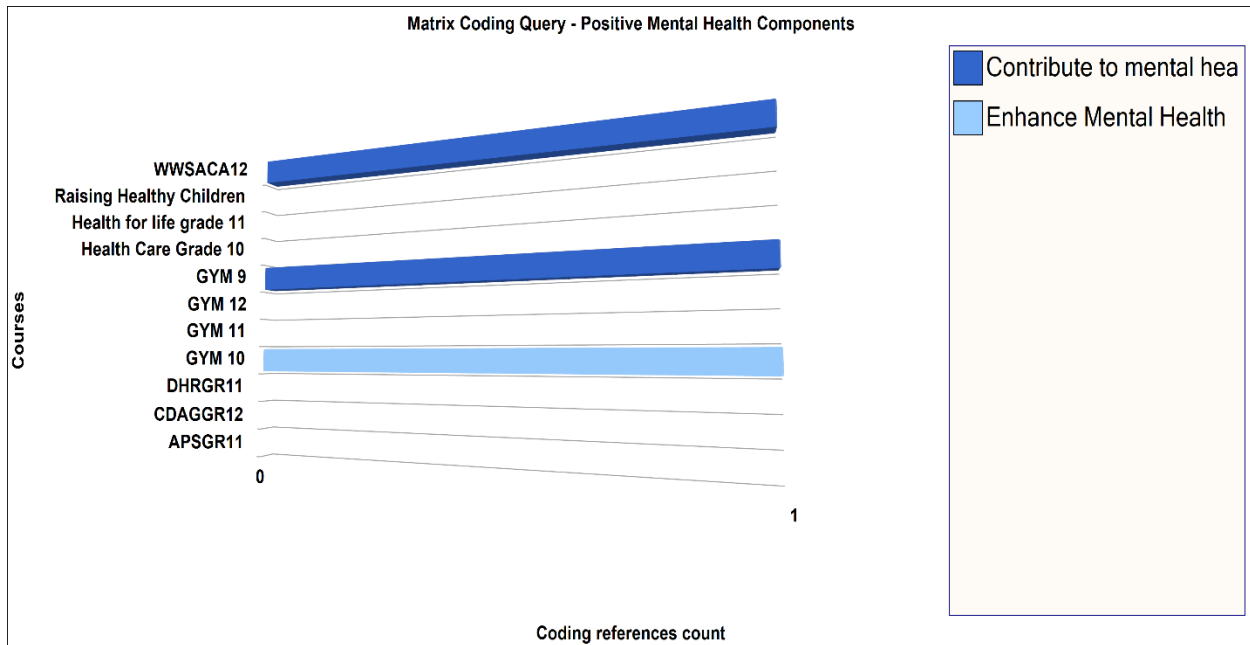
The results from the matrix coding query displayed in Figure 14 found that contributions to mental health was the most discussed component throughout the identified courses. These results show that the Health and Physical Education field discusses both components equally; the Social Sciences and Humanities field focuses on contribution to mental health but does not discuss the enhancement of mental health; and the Technological Education field does not discuss either component.

General Mental Health Discussion. The number of references *general mental health discussion* can be found in Table 7.

Table 7

Distribution of General Mental Health Discussion throughout the Identified Courses

Course Name	Number of References
Grade 9 Health and Physical Education	0
Grade 10 Health and Physical Education	0
Grade 11 Health and Physical Education	0

Grade 11 Health for Life	0
Grade 12 Health and Physical Education	1
Grade 11 Introduction to Anthropology, Psychology, and Sociology	0
Grade 11 Dynamics of Human Relationships	2
Grade 11 Raising Healthy Children	0
Grade 12 Working with School-Age Children and Adolescents	0
Grade 10 Health Care	0
Grade 12 Child Development and Gerontology	0
Total	3

The findings from the hierarchy of charts executed on the node general mental health discussion in Table 7 shows that Grade 12 Health and Physical Education and Grade 11 Dynamics of Human Relationships are the only two courses to discuss mental health in a context that does not refer to the major characteristics of mental health literacy. These results also find that the Social Sciences and Humanities subject field discusses mental health in a broad context most often, with two references, followed by the Health and Physical Education field, with one reference.

A hierarchy chart of nodes was performed across all files to determine the total number of references of each characteristic, and their components, throughout the identified courses, as shown in Figure 15.

Figure 15.

Results of a Hierarchy of Nodes Performed on all Identified Courses
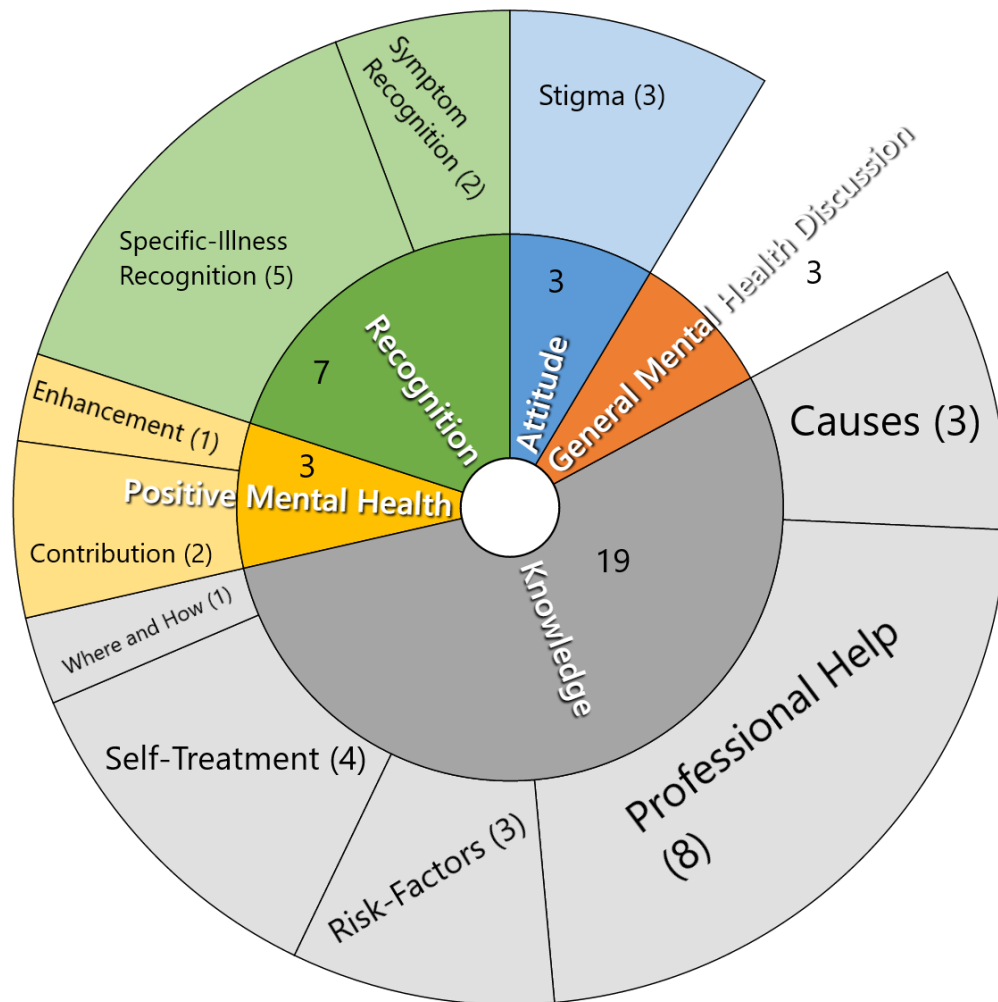
Results from this hierarchy of nodes found that knowledge is the most discussed mental health literacy characteristic within the Ontario secondary school curriculum, followed by recognition, positive mental health, and attitude. Professional help is the most discussed mental health literacy component while enhancement of mental health and where and how to get information are the least discussed components throughout the curriculum.

Textbooks

   To address the second research question, once I determined which sections of each textbook included mental health content, I was able to transcribe these sections into an electronic document for each textbook. I then uploaded each document to a new NVivo 12 project and created parent nodes for the mental health literacy characteristics knowledge, recognition, attitude, and positive mental health (elaborated upon in Chapter four, Methodology – code book). A parent node was also created for general mental health discussion. I then executed a hierarchy chart of nodes for each textbook to determine which characteristics and their components are referenced and at what frequency these references occur.

   ***Healthy Active Living 2.0: Keep fit, Stay Healthy, Have fun* (Temertzoglou, 2018).** The distribution of the mental health literacy characteristics and their components can be found in Figure 16.

Figure 16

Results of a Hierarchy of Nodes performed on Health Active Living 2.0: Keep fit, Stay Healthy, Have fun (Temertzoglou, 2018)
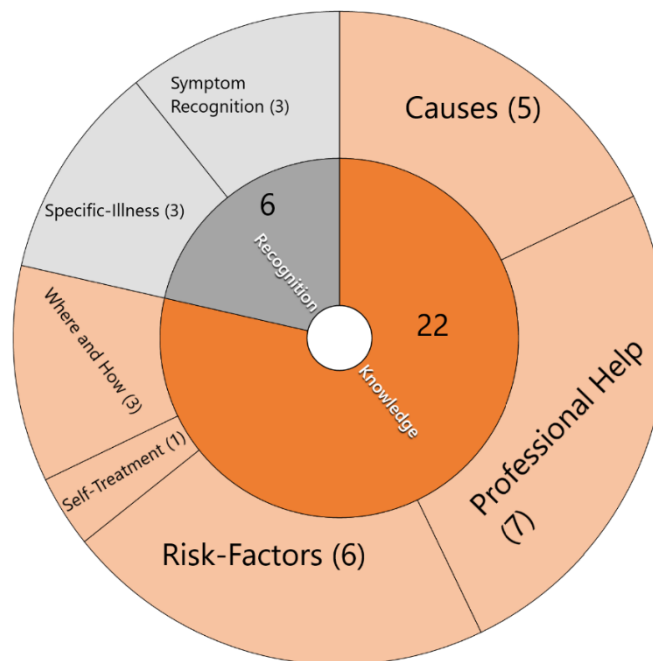
The results from the hierarchy of nodes performed on *Healthy Active Living 2.0: Keep fit, Stay Healthy, have fun* (Temertzoglou, 2018) found that knowledge is the most discussed mental health literacy characteristic with 23 references, followed by the recognition characteristic with six references. This textbook does not discuss the attitude or positive mental health characteristics, nor is there general mental health discussion. These results also highlight that this textbook primarily focuses on professional help, risk-factors, and causes.

McGraw-Hill Ryerson Social Science: An Introduction (Haskings-Winner et al., 2011). The distribution of the mental health literacy characteristic and their components can be found in Figure 17.

Figure 17

Results from the Hierarchy of Nodes Performed on McGraw-Hill Ryerson Social Sciences: An Introduction (Haskings-Winner et al., 2011)
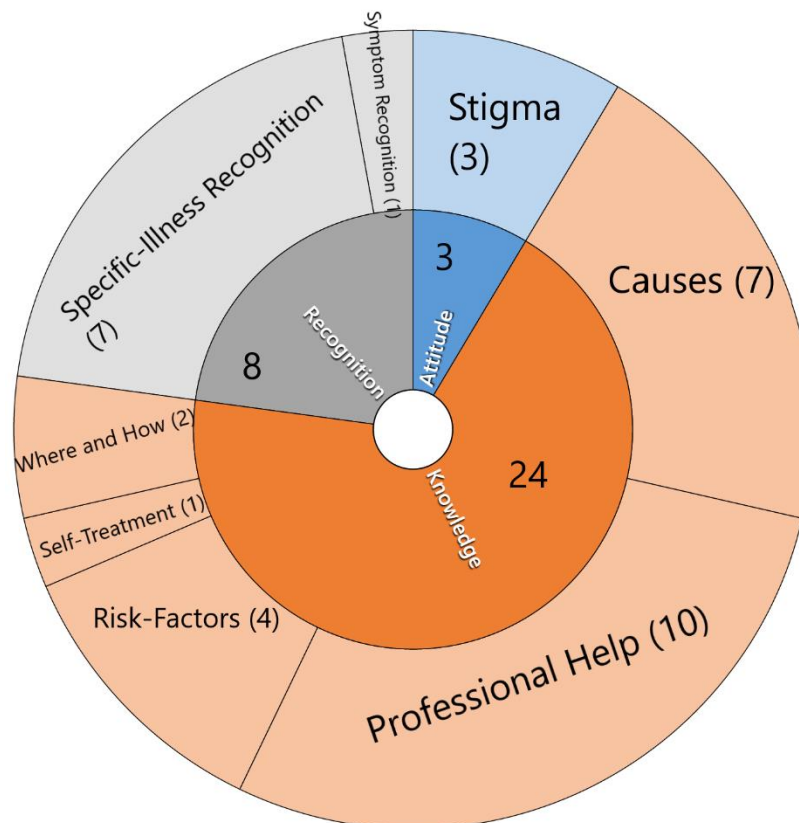
The results from the hierarchy of nodes performed on *McGraw-Hill Ryerson Social Sciences: An Introduction* (Haskings-Winner et al., 2011) found that knowledge is the most discussed mental health literacy characteristic with 24 references, followed by the recognition characteristic with eight references, and the attitude characteristic with three references. This textbook does not discuss the positive mental health characteristic, nor does it include general mental health discussion. These results highlight that this textbook primarily focuses on professional help, specific-illness recognition, and causes.

McGraw-Hill Ryerson Child Care: Working with Infants, Children, and Adolescents **(Chapman et al., 2014).** The distribution of mental health literacy characteristics and their components can be found in Figure 18.

Figure 18

Results from the Hierarchy of Nodes run on McGraw-Hill Ryerson Child Care: Working with Infants, Children, and Adolescents (Chapman et al., 2014)
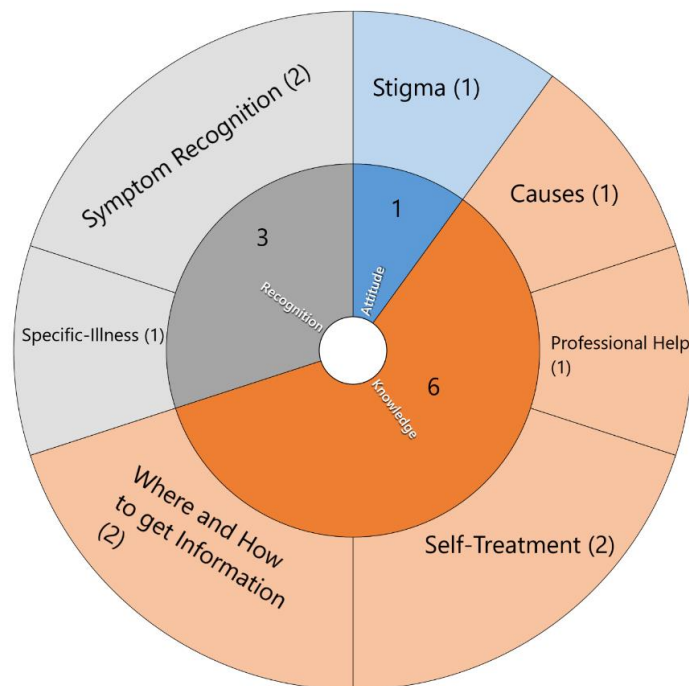
The results from the hierarchy of nodes performed on *McGraw-Hill Ryerson Child Care:*
Working with Infants, Children, and Adolescents (Chapman et al., 2014), found that knowledge
is the most discussed mental health literacy characteristic with six references, followed by the
recognition characteristic with three references, and the attitude characteristic with one reference.
The textbook does not discuss the positive mental health characteristic, nor is there general
discussion of mental health. These results also highlight that this textbook primarily focuses on
symptom recognition, self-treatment, and where and how to get mental health information.

      ***McGraw-Hill Ryerson: Rewards and Responsibilities* (Witte et al., 2005).** The
distribution of mental health literacy characteristics and their components are illustrated in
Figure 19.

Figure 19

Results of a Hierarchy of Nodes Performed on McGraw-Hill Ryerson Parenting: Rewards and
Responsibilities (Witte et al., 2005)
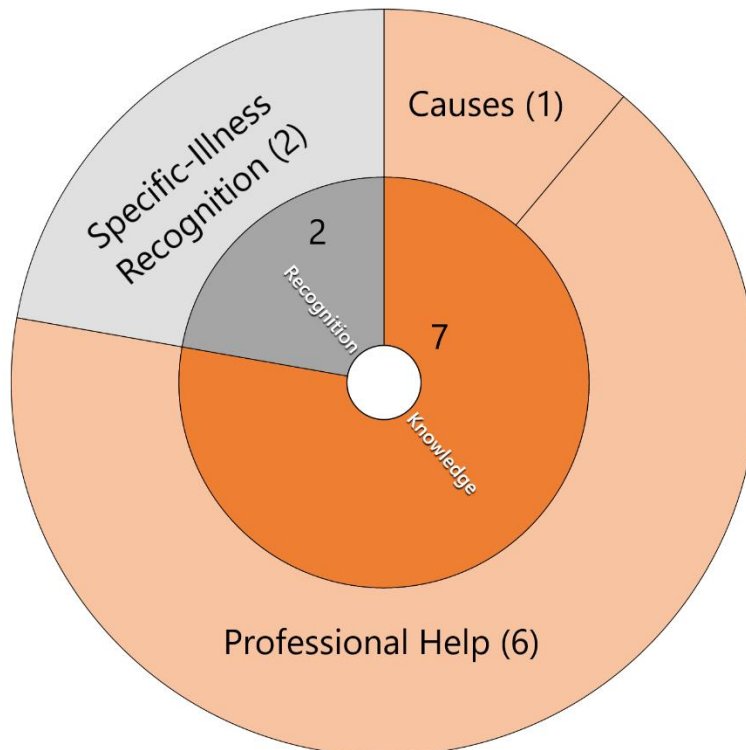
The results from the hierarchy of nodes performed on *McGraw-Hill Ryerson Parenting: Rewards and Responsibilities* (Witte et al., 2005), found that knowledge is the most discussed mental health literacy characteristic with seven references, followed by the recognition characteristic with two references. This textbook does not discuss the attitude or positive mental health literacy characteristics nor is there general mental health discussion. These results also highlight that this textbook primarily focuses on professional help.

A hierarchy of nodes was also performed across all textbooks to determine the total reference number of each characteristic, and the components, throughout all textbooks, as shown in Figure 20.

Figure 20

Results of a Hierarchy of Nodes Performed on all Textbooks
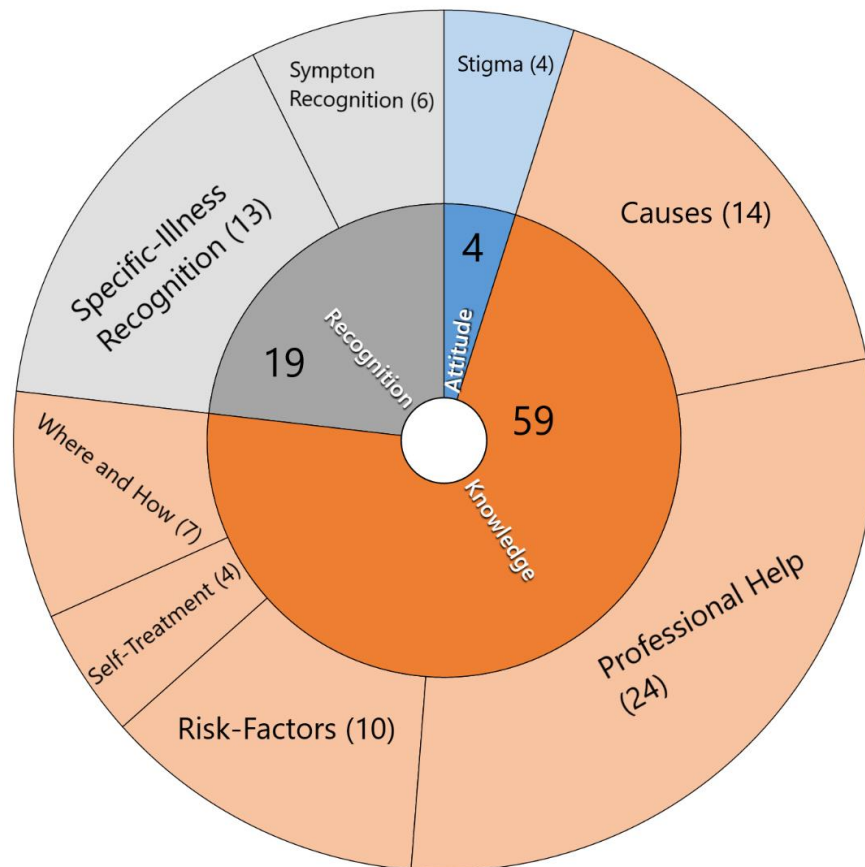
The results from the hierarchy of nodes performed on all textbooks found that knowledge is the most discussed mental health literacy characteristic with 59 references, followed by the recognition characteristic with 19 references, and the attitude characteristic with four references. The textbooks do not discuss the positive mental health literacy characteristic, nor do they include general mental health discussion. These results also highlight that the textbooks primarily focus on professional help.

Textbook Age. The age for each textbook can be found in Table 8.

Table 8

Textbook Age

Textbook	Age
Healthy Active Living 2.0: Keep fit, Stay Healthy, Have fun (Temertzoglou, 2018)	2018
McGraw-Hill Ryerson Child Care: Working with Infants, Children, and Adolescents (Chapman et al., 2014)	2014
McGraw-Hill Ryerson Social Science: An Introduction (Haskings-Winner et al., 2011)	2011
McGraw-Hill Ryerson Parenting: Rewards and Responsibilities (Witte et al., 2005)	2005

These results demonstrate that *Healthy Active Living 2.0: Keep fit, Stay Healthy, have fun* (Termertzoglou, 2018) is the most recently published textbook, while *McGraw-Hill Ryerson Parenting: Rewards and Responsibilities* (Witte et al., 2005) is the oldest textbook in use, published 15 years ago. *McGraw-Hill Ryerson Child Care: Working with Infants, Children, and Adolescents* (Chapman et al., 2014) was published six years ago and *McGraw-Hill Ryerson Social Sciences: An Introduction* (Haskings-Winner et al., 2011) was published nine years ago.

Summary

Findings from this study indicate that Ontario secondary school students have a 5.1% chance of being exposed to mental health information within the Ontario secondary school curriculum and a 3% chance, on average, to be exposed to mental health content within textbooks used in courses that discuss mental health. Furthermore, courses that include mental health content are predominantly open level courses that require no prerequisites, nor are they considered prerequisites for later courses. These results also found that within the course documents and the textbooks, knowledge is the most discussed mental health literacy characteristic and professional help is the most discussed component. For both the curriculum documents and the textbooks, the attitude and positive mental health characteristics are the least discussed. Lastly, the results found that the most recently published textbook in use for mental health education in Ontario secondary schools in two years old while the oldest publication in use is 15 years old.

Conclusion

In this chapter I presented the results of the analyses conducted on the Ontario secondary school curriculum documents and corresponding textbooks. In the next chapter I discuss these results further by detailing the nature of the characteristics and components referenced, and the potential impacts these characteristics and exposures may have on mental health literacy in youth in Ontario.

Chapter 6: Discussion

The aim of the current study was to explore how the Ontario high school curriculum incorporates mental health content. Specific interest in this study was the frequency of exposure to mental health content through the intended curriculum and the nature and of that content. The discussion in the following section is organized according to the two research questions posed in Chapter one: 1) how much exposure do Ontario high school students have to mental health information through the official curriculum? 2) what is the nature of mental health education in the official Ontario high school curriculum? Each subsection below summarizes and discusses the main findings.

How Much Exposure do Ontario High School Students Have to Mental Health Information through the official curriculum?

Mental health content is implemented into Ontario high schools through existing courses and their respective textbooks. Previous studies have demonstrated that when children and adolescents are exposed to mental health information, they significantly increase their understanding of mental health while decreasing the stigma surrounding it (Gregg et al., 2011; Kutcher et al., 2015a; McLuckie et al., 2014; Wei et al., 2013). In this section, I discuss the findings on the exposure to mental health information within Ontario high schools. Data were collected and analyzed from curriculum documents and textbooks to better understand students' chances of learning about mental health in the classroom. The findings from this study suggest that exposure can be influenced by the number of courses offered, graduation guidelines, their course level, post-secondary aspirations, and the amount of mental health content discussed in the course materials.

The results from this study revealed that mental health content is addressed in 12 courses within the Health and Physical Education field, Technological Education field, and the Social Sciences and Humanities field. This result is in line with the literature, which states that a school-setting is the ideal location to address mental health, as the information can accompany other curricula that already addresses aspects of health (Wei et al., 2011). However, the results found that across the fields of study, students have a maximum 5.1% chance of choosing courses that contain mental health content. Additionally, this is only achievable if students choose to take all

12 courses offered. This number can change when taking into account what is mandatory for graduation and what courses students need to apply for post-secondary education.

Graduation Guidelines

A mandatory course is a compulsory credit that students must obtain in order to graduate (Ontario, 2020b). Of the 12 courses that include mental health content, only one course is mandatory for students to graduate; a student may choose grade 9, 10, 11, or 12 Healthy Active Living Education. This finding means that mental health education accounts for only 0.004% of mandatory learning within Ontario high schools.

Course Levels and Post-Secondary Aspirations

The results from this study found that seven of the 12 courses are open level, four are college preparation level, and one is university preparation level. As mentioned in the Methodology chapter, course levels are important as they are suggested to influence which courses students choose during selection (Chen 2017). In 1999, the Ministry of Education and Training introduced a new four-year program into secondary schools which now allows for students to select courses on a more personal level, suiting their needs towards personal goals (Ontario Ministry of Education and Training, 1999). This new format gives students the options of choosing courses at an academic or applied level during course selection in grades 9 and 10 and then the option of choosing courses at the workplace, college, or university levels in grades 11 and 12 (Ontario Ministry of Education and Training, 1999). Students are also given the option to choose courses at the open level through grades 9 to 12 (Ontario Ministry of Education and Training, 1999).

According to the province of Ontario (2016b) a college, university/college, and university preparation course is designed to equip students with the knowledge and skills they need to meet entrance requirements to most college programs, university programs, specific programs offered at universities and colleges, and for admission to specific apprenticeship or other training programs. An open level course is, "designed to broaden students' knowledge and skills in subjects that reflect their interests and prepare them for active and rewarding participation in society. They are not designed with the specific requirements of universities, colleges, or the workplace in mind" (Ontario, 2016b, p. 72).

The results from this study revealed that over half of the mental health courses offered to high school students are not designed with the specific requirements for post-secondary education or the workplace. This may impact that rate at which these courses are taken as demand for highly skilled and educated employees has been fueling surges in post-secondary enrollment and the number of post-secondary students within Canada has more than doubled over the past 40 years (Chen, 2017). This literature suggests that students are more likely to gear their high school educational path towards their post-secondary goals, therefore, courses that are not geared toward post-secondary programs may not be chosen as often.

Currently, the eleven most in demand post-secondary degrees across Canada are in the fields of engineering, nursing, business, geosciences, pharmacology, finance, computer information, medical assistance and technology, construction, physical therapy, and aeronautics and aviation technology (Best College Reviews, 2020; Betteridge-Moes, 2020). Nine of these degree fields do not require any of the currently offered high school courses, with the exception of one of the Healthy Active Living Education courses, as this is mandatory. As students are planning their secondary school pathways, the literature suggests that their goal will be towards one of the top eleven fields, thus, possibly eliminating all courses that may discuss mental health with the exception of one mandatory course. If a student is on a specific pathway through secondary school to meet the requirements for a post-secondary aspiration, they will gear their course selection to best fit their path. Given almost all of the above-mentioned degrees require only one course identified in this study, students will most likely limit their opportunities to take advantage of learning about mental health in the classroom. Therefore, the results from this study would suggest that students have closer to a 0.004% chance of being exposed to mental health content within the classroom as they are only guaranteed to be exposed to mental health content in one course – Healthy Active Living Education.

Textbooks

The study found that of the 12 courses, seven have a recommended textbook. The following are the textbooks and corresponding course(s):

- *Healthy Active Living 2.0: Keep fit, Stay Healthy, Have fun* (Temertzoglou, 2018) (Grades 9 to 12 Healthy Active Living Education).

- *McGraw-Hill Ryerson Social Science: An Introduction* (Haskings-Winner et al., 2011) (Grade 11 Introduction to Anthropology, Psychology, and Sociology, college and university preparation).

- *McGraw-Hill Ryerson Child Care: Working with Infants, Children, and Adolescents* (Chapman et al., 2014) (Grade 12 Working with School-Age Children and Adolescents).

- *McGraw-Hill Ryerson Parenting: Rewards and Responsibilities* (Witte et al., 2005) (Grade 11 Raising Healthy Children).

The results found that *McGraw-Hill Ryerson Social Science: An Introduction* (Haskings-Winner et al., 2011) contains the most mental health discussion, allotting 24 pages to mental health, or 5% of the textbook. *Healthy Active Living 2.0: Keep fit, Stay Healthy, have fun* (Temertzoglou, 2018) consists of 11 pages of mental health discussion, or 3% of the total textbook. *McGraw-Hill Ryerson Child Care: Working with Infants, Children, and Adolescents* (Chapman et al., 2014) contains seven pages of mental health discussion, equating to 2% of the textbook, while *McGraw-Hill Ryerson Parenting: Rewards and Responsibilities* (Witte et al., 2005) contains 10 pages of mental health discussion, equating to 1% of the textbook. It is important to note however, that while mental health discussion may be found on a page in a textbook, that did not mean that the entirety of that page was dedicated to the mental health topic. For example, in *McGraw-Hill Ryerson Social Science: An Introduction* (Haskings-Winner et al., 2011), the psychological impact of cyberbullying is discussed in four sentences within the entire textbook. Overall, the results found that mental health information accounts for an average of 5% of textbook learning.

I was surprised to find that *Healthy Active Living 2.0: Keep fit, Stay Healthy, Have fun* (Temertzoglou, 2018) only contains 11 pages of mental health discussion, since this textbook is used to teach the only mandatory mental health course and because the 11 pages are used to discuss mental health over the course of four years. By dispersing the 11 pages equally over the four courses, this could mean that students may only be reading about mental health over 2-3 pages per course. This would suggest that the Grades 9 to 12 Healthy Active Living Education courses may provide students with the least amount of mental health education, which is concerning when this field contains the only mandatory mental health course for graduation. This result is also surprising as the curriculum, and textbook, has undergone the

most recent revisions to include more mental health information (Ontario 2015b, Ontario, 2015c; Temertzoglou, 2018).

Secondly, I was surprised by the low amount of mental health information overall across all textbooks, especially when the literature states that teachers continually rely on them for some or all of their lesson planning (Goodlad, 1984; Stern & Roseman, 2004). This suggests that the amount of mental health instruction being implemented into lesson planning most likely reflects the amount of mental health content found in the courses' required textbook. The lack of mental health content within the textbook poses a risk for oversimplification of concepts to occur within the classroom, a common source of misconceptions in a school-setting (Chew, 2006; Dake, 2007; Stanovich, 2009). The possibility of oversimplifying mental health concepts can result in providing inaccurate information which may produce mental health misconceptions and strengthen already existing ones, as students may not be exposed to all of the facts and details necessary to develop a proper understanding of the concept (Feltovich et al., 1988, 1991; "Oversimplification", 2020; "Oversimplify", 2020; Pereira et al., 2020; Spiro et al., 1988). This possibility is worrisome as textbooks have been suggested to be one of the most valuable parts of students' knowledge (Goodlad, 1984; Stern & Roseman, 2004).

What is the Nature of Mental Health Education in the Official Ontario High School Curriculum?

Schools have continually played a pivotal role in health promotion globally. The literature has stressed that the school setting is the most ideal place to address mental health literacy in youth, as students spend more than 30 hours a week in the classroom (Keiling et al., 2011; Koller, 2006; Teen Mental Health, 2008; UCLA School Mental Health Project, 2009; Wei et al., 2001; World Health Organization, 2009). The official Ontario high school curriculum is the only constant teaching tool for mental health literacy that students interact with in a school setting and it influences the knowledge, understanding, skills, values, and attitudes about mental health that students learn through lesson plans, textbooks, and other classroom resources (International Bureau of Education, 2018a, 2020; Kelly, 2009). In this section, I discuss the study findings related to the nature of mental health content within the Ontario high school curriculum.

Data were collected and analyzed from curriculum documents and textbooks to better understand the provincial approach to mental health in the classroom.

Mental Health Literacy Characteristics

The goal of mental health literacy is creating an understanding of how to obtain and maintain positive mental health (Jorm, 2012; Kutcher et al., 2015a; Kutcher et al., 2016; 2014). To achieve this understanding, mental health education directed at youth encompasses learning objectives focused on the major mental health literacy characteristics: knowledge, recognition, attitude, and mental health promotion/positive mental health (Jorm, 2000; Jorm et al., 1997; Kutcher & Wei, 2017; O'Connor et al., 2014). The goal of these learning objectives is to teach youth to understand mental health disorders and their treatment; to eliminate the stigma surrounding mental illnesses; and to aid help-seeking behaviour in youth (Jorm, 2012; Kutcher & Wei, 2017; Kutcher et al., 2015a; Kutcher et al., 2016; Teen Mental Health, 2020). The literature has demonstrated than when educational approaches to mental health literacy are comprehensive, youth obtain and maintain positive mental health literacy (Gregg et al., 2001; Kutcher & Wei, 2014; Kutcher et al., 2015a; McLuckie et al., 2014; Wei et al., 2013). Therefore, this study explored the comprehensiveness of the Ontario high school curriculum approach to mental health to better understand why Canadian youth continue to present poor mental health literacy rates (Gagnon et al., 2015; Kutcher et al., 2015a; Manser, 2016; McLuckie et al., 2014; Wei et al., 2013).

Overall, across all curriculum documents and required textbooks, this study's findings indicate that mental health literacy characteristics are discussed the most within the Social Sciences and Humanities field, with 51 points of discussion. The Health and Physical Education field references characteristics 49 times, and the Technological Education field referenced characteristics 15 times. This result was surprising as the Health and Physical Education Field offers the most courses that contain mental health content, and of the five courses, only one course did not have a required textbook. Whereas, of the four courses within the Social Sciences and Humanities field, only three had a required textbook. An explanation for this could possibly be that all the courses in the Health and Physical Education field that have a required textbook share the same textbook, whereas, the courses with required textbooks in the Social Sciences and Humanities field each have an individual text, providing a greater amount of time dedicated to

mental health within the text. Additionally, the field of Technological Education may have presented the least amount of characteristic discussion as neither of the courses have a required textbook.

Knowledge was found to be the most referenced component overall with 75 points of discussion found across the curriculum documents and textbooks. The recognition component is referenced 26 times; attitude is referenced seven times; and positive mental health is referenced three times. These results were partially anticipated as the knowledge characteristic contains the greatest number of components; however, I am surprised at the large gap between references for the characteristics. These results suggest that the Ontario high school curriculum is not addressing mental health education comprehensively.

Characteristic Components

Each mental health literacy characteristic encompasses mental health components. These components are the specific information that individuals need to understand about mental health to gain good mental health literacy. No one component is more important than the other, in fact, each characteristic and the components within work together to cohesively form mental health literacy.

Knowledge. The knowledge characteristic consists of the following components: an understanding of where and how to get information about mental health issues; understanding risk-factors that put individuals at a greater risk for developing mental health issues; understanding the biological, psychological, or environmental factors that can contribute to the onset or progression of mental health issues; understanding the self-treatment techniques that may be used in replacement of, or alongside, professional help; and knowing what professional help is available and where to go for this help (Guy et al., 2014; Jorm, 2000; Jorm et al., 1997; McDowell et al., 2019).

Overall, the results found that professional help is the most referenced knowledge component across the curriculum documents and the textbooks, with 32 references in total. These results are in line with the recent student-centred mental health initiatives enacted by the province of Ontario, which overall focuses primarily on support for those dealing with mental health issues (Ontario, 2019; Ontario 2020; Ministry of Health, Ministry of Long-Term Care,

2011). While the ongoing revisions to the curriculum and textbooks continue to recognize mental health as an important aspect of health education, these results suggest that Ontario high schools are less focused on mental health literacy as a whole and more focused on providing support systems for students. This can be problematic as the literature has demonstrated that poor mental health literacy and stigma are the biggest barriers for help-seeking behaviour. Furthermore, researchers have strongly argued that regardless of the amount of support systems put into place, or the amount of education about support systems, if youth do not have a comprehensive mental health literacy education, they are less likely to use these supports or be open to them (Furnham et al., 2011; Gagnon et al., 2015; Gulliver et al., 2010; Larson & Corrigan, 2016; Story et al., 2016).

The results found that titles and organizations, such as 'counsellor' or 'Kids Help Phone' where mentioned the most in terms of professional help, with 41 references. Specific treatments, such as 'cognitive behavioural therapy' were also mentioned, with 15 references. Professional help was discussed the most for depression and substance-use and addictions, and was discussed the least for anxiety disorders, eating disorders, suicide, panic disorders, post-traumatic stress disorder (PTSD), attention deficit hyperactivity disorder (ADHD), and hoarding. I was surprised to find that professional help related to suicide was among the least discussed as Canada continues to have the third highest rate of youth suicide in the industrialized world and suicide continues to be a leading cause of death for Canadian youth, across all racial and ethnic groups (Canadian Mental Health Association, 2020a, 2020b; Public Health Agency of Canada, 2016).

Causes were the second most referenced knowledge component across all the curriculum documents and textbooks, with 17 references. The results found that the causes for the onset and/or progression of, in order of most references to least, eating disorders, substance-use and addictions, and depression are discussed the most, with nine or more references. Causes for anxiety disorders, schizophrenia, psychosis, and ADHD are discussed less, with three to five references. Lastly, the causes for obsessive-compulsive disorder (OCD), bi-polar disorder, suicide, autism, phobias, and PTSD are discussed the least, being referenced only one or two times.

Risk-factors were the third most referenced knowledge component across all the curriculum documents and textbooks, with 13 references. Family environment was the most

referenced risk-factor for the development and progression of mental health issues with ten references. Genetics, trauma, educational environments/situations, and social and cultural pressures were the second most referenced risk factors with four or five references. Lastly, poverty, abuse, lack of support, physical illness, discrimination, low self-esteem, friend group and comorbidity were the least discussed risk factors with one or two references. Risk factors were discussed the most for substance-use and addictions with eight references and were discussed the least for schizophrenia, autism, ADHD, depression, psychosis, PTSD, and eating disorders with one reference each.

Overall, discussion regarding the causes and risk-factors focused mostly on substance-use and addictions, eating disorders, and depression. However, I found that the topic of comorbidity was greatly underrepresented. Comorbidity is when two or more mental disorders may be present in one individual (Valderas, Starfield, Sibbald, Salisbury, & Roland, 2009). Recent meta-analysis research has shown a strong comorbidity between substance-use disorder and other mental illness among youth, specifically for depression and anxiety disorders (Esmaeelzadeh, Moraros, Thrope, & Bird, 2018). Additionally, 55-97% of individuals dealing with an eating disorder have also been diagnosed with another mental illness, most commonly depression, OCD, social anxiety disorder, PTSD, or substance-use disorder (National Eating Disorders Collaboration, n.d.). Recent research has found that an individual's risk of developing a mental disorder substantially increases if they have a previous disorder, or are already suffering symptoms for an undiagnosed disorder (Plana-Ripoll et al., 2019). Discussion of comorbidity between disorders may be important as the literature states this information may allow individuals to better educate themselves about how to best manage their symptoms (Plana-Ripoll et al., 2019).

Secondly, the relationship between mental illness and suicide is only discussed once across all of the data. This is alarming as suicide remains a leading cause of death for youth in Canada, and in a recent survey, 80% of Ontario high school student respondents admitted to not understanding suicide and mental health problems (Benzie, 2019; Canadian Mental Health Association, 2020a, 2020b; Public Health Agency of Canada, 2016). Recent meta-analysis research as found that suffering from a mental disorder tremendously increases an individual's risk for suicide (Chensey, Goodwin, & Fazel, 2014; Too et al., 2019), therefore, coupled with suicide statistics and mental health research within a Canadian context, an increase in education

would be beneficial, and especially discussing the relationship between mental illness and suicide.

Where and how to get information and self-treatment techniques were the least referenced knowledge components throughout the curriculum documents and the textbooks, with eight references each. The results found that mental health agencies, surveys, and other institutions were referenced 17 times throughout the data. These sources of information were primarily geared toward substance-use and addictions, with five references. Sources of information for suicide, PTSD, and general mental health information were referenced the least with one to three references. Surprisingly, discussion about where and how to get mental health information was among the least mentioned.

The core of enhancing mental health literacy is learning mental health information (Jorm, 2012; Kutcher et al., 2015a; Kutcher et al., 2016). While the Ontario high school curriculum does offer mental health content within already existing courses, this study has demonstrated the inconsistencies and weaknesses within the current approach to mental health literacy. Furthermore, while students do spend more than 30 hours in the classroom, there is still debate, and research occurring, to determine the ideal pedagogical techniques, choice of textbooks, and other classroom materials (Bransford et al., 2000; Gregg et al., 2001; Guzzetti, 2000; Hughes et al., 2013; Kowalski & Taylor, 2009, 2004; Kutcher & Wei, 2014; Kutcher et al., 2015a; Landau & Bavaria, 2003; Marshall, 1989; McLuckie et al., 2014; Miller et al., 1996; Taylor & Kowalski, 2002; Winer et al., 2002). It would be naïve to believe that classroom learning alone is enough to enhance the mental health literacy of youth in Ontario, especially when recent revisions to the curriculum, to include more mental health content, have been introduced in 2009, 2013, and 2015 yet, Canadian youth, and young adults who have been exposed to the revised curriculums still demonstrate poor mental health literacy rates (Coulter, 2014; Gagnon et al., 2015; Knight & Currie, 2010; Kutcher et al., 2015a; Manser, 2016; Marcus & Westra, 2012; McLuckie et al., 2014).

Furthermore, the lack of guidance towards appropriate mental health information sources within the curriculum highlights the possibility of the current curriculum being out of touch with the behaviours of present-day youth. As discussed in the literature review, 95% of teens between the ages of 12-18 use the Internet as a key source for information, however, some of the

information found on the Internet is not reliable and may endorse negative beliefs and attitudes about mental illness (Fox, 2011; Lewandowsky et al., 2012; Morrison, 2016; Radwanick, 2011; Wartella et al., 2015). As a curricular approach to mental health education is still being studied, it would be beneficial to include additional mental health information to supplement the already existing curriculum to ensure that students are exposed to more mental health information and also being guided towards appropriate resources. As the Internet has become a widely used tool for youth to seek information, it would also be beneficial to provide students with more sources they can find online, appropriate websites with accredited information, and support that is now offered online, like chat rooms or organization websites.

The results for self-treatment techniques found that physical activity was the most referenced technique with two references. Other techniques mentioned were phone apps, talking with friends, getting enough sleep, eating well, meditation, acquiring the right information, keeping good company, and yoga. These techniques were offered as an alternative, or to be used in partner with, professional help for substance-use and addictions, anxiety disorders, and depression. There was one self-treatment technique reference for suicide. While this component is not discussed as much throughout the curriculum, a lesser focus on self-treatment is a positive result, as these have been acknowledged to be regularly ineffective and to be potentially harmful (Guy et al., 2014).

Recognition. The recognition characteristic consists of the ability to recognize beliefs, behaviours, and other manifestations of mental health issues without specifically knowing which mental disorder they are connected to (Corrigan et al., 2012; Jorm, 2000; Jorm et al., 1997). For example, understanding that inflated self-esteem or grandiosity, grandiose delusions, decreased need for sleep, being more talkative than usual or pressure to talk, flight of ideas or racing thoughts, distractibility, increase in goal-directed activity, and excessive involvement in risky behaviour are symptoms of a mental health issue, without knowing they are symptoms of a manic episode of bi-polar disorder (American Psychiatric Association, 2013; Miklowits, 2008). Additionally, the recognition characteristic involves the ability to identify a mental disorder from specific presenting symptoms (Corrigan et al., 2012; Jorm 2000; Jorm et al., 1997). For example, understanding that a difficulty to perform in front of others or be around others, coupled with blushing, sweating, trembling, rapid heart rate, or the feeling of the mind going blank; feelings of

being nauseous; rigid body posture, little eye contact and/or speaking overly softly; scared to be around other people or difficulty being around others; being very self conscious in front of others and feeling embarrassed; being afraid of judgement from others; and avoiding environments with other people are symptoms of social anxiety disorder (National Institute of Mental Health, 2016).

Overall, the results of this study indicate that specific illnesses are discussed the most throughout the curriculum documents and textbooks, with 19 references in total. Symptoms related to depression and substance-use and addictions are discussed the most throughout the data, with five references each. Symptoms related to suicide, anorexia nervosa, bulimia nervosa, and schizophrenia are discussed the second most with two to three references each. Lastly, symptoms related to post-partum depression, binge eating disorder, phobia, ADHD, compulsive hoarding, and PTSD are discussed the least with one reference each. General mental health symptoms are discussed eight times across the data. The results show that non-specific symptoms of mental health issues, such as, "identify warning signs and symptoms that could be related to mental health concerns (e.g., inability to cope with stress; feelings of sadness, anxiety, hopelessness, or worthlessness; negative thoughts about oneself, others, and the future; thoughts of suicide" (Ontario, 2015b, p. 107), were mentioned the most, with four references. General symptoms of specific groups of disorders, for example, "[a]nxiety disorders: [p]eople may be frequently nervous or worried, be frequently absent, or refuse to take part in social activities or new situations" (Chapman et al., 2014, p. 207), are referenced once for anxiety disorders, behaviour disorders, mood disorders, eating disorders, and neurotic disorders.

Firstly, what I found interesting from these results was that, within the curriculum documents suggested points of discussion in the context of mental illnesses, bi-polar disorder and OCD are mentioned yet there is no discussion of these disorders in the textbooks. Furthermore, major depressive disorder is referenced five times while generalized anxiety disorder and bi-polar disorder are never mentioned throughout the data, even though these three disorders have similarly high prevalence among youth in Canada and have closely related origins and symptoms (American Psychiatric Association, 2013; Barlow, 1991, 2000, 2002, 2008; Statistics Canada, 2012). As these three disorders have the highest prevalence rate among youth, it would be beneficial to discuss each one equally, especially to ensure that youth understand their commonalities and their differences.

Attitude. The attitude characteristic of mental health literacy is the public and individual attitudes held about mental health (Jorm, 2000; Jorm et al., 1997; O'Connor et al., 2014). This component would involve discussion about the stigma surrounding mental health, the impact of stigma, and ways to combat stigma (Jorm, 2000; Jorm et al., 1997; O'Connor et al., 2014). While the attitude characteristic contained some of the least amount of discussion across the data, I was pleasantly surprised by the nature of the content. While discussion of mental health can be argued to combat stigma, I was specifically looking for discussion about the origins of stigma, it's effect on an individual, and refutational information. The results indicate that the data focuses heavily on what breeds stigma and how stigma negatively affects the lives of those diagnosed with a mental disorder. I was specifically impressed with the textbook *McGraw-Hill Ryerson Social Science: An Introduction* (Haskings-Winner et al., 2011) as it contained almost all of the stigma discussion, which was in line with the curriculum analysis findings as the Grade 11 Introduction to Anthropology, Psychology, and Sociology course was one of two courses that included discussion around stigma. I was also impressed with the textbook *McGraw-Hill Ryerson Social Science: An Introduction* (Haskings-Winner et al., 2011) as it contains the only refutational learning strategies, which as mentioned in the literature review, are currently the most ideal form of combating stigma and misconceptions around mental illness (Gregg et al., 2001; Guzettii, 2000; Kowalski & Taylor, 2009; Kutcher & Wei, 2014; Kutcher et al., 2015a; McLuckie et al., 2014; Miller et al., 1996; Winer et al., 2002).

However, I was surprised to find that the only other course suggesting discussion about stigma within the curriculum is Grade 11 Healthy Active Living education. On the other hand, *Healthy Active Living 2.0: Keep fit, Stay Healthy, have fun* (Temertzoglou, 2018) did not discuss stigma at all throughout the textbook. Secondly, the Grade 11 Healthy Active Living course actually contained more stigma discussion throughout the course documents than the Grade 11 Introduction to Anthropology, Psychology, and Sociology, yet, contained no stigma related content in the textbook. Lastly, *McGraw-Hill Ryerson Child Care: Working with Infants, Children, and Adolescents* (Chapman et al., 2014) discusses how people with a mental illness are still stigmatized today and are often excluded by others because of their diagnosis and discusses how this makes socialization harder for these individuals. However, the corresponding course document for Grade 12 Working with School-Age Children and Adolescents does not mention

any discussion of stigma. These results suggest that there is a disconnect between what some courses promise to offer versus what students are actually learning.

   Positive Mental Health. The positive mental health characteristic involves, "[u]nderstanding how to optimize and maintain good mental health" (Kutcher & Wei, 2017, p.4) by providing information on how to enhance one's mental health and discussion of what positive mental health is (Teen Mental Health, 2020; Kutcher & Wei, 2017). The only discussion of positive mental health is in the *Healthy Active Living 2.0: Keep fit, Stay Healthy, have fun* (Temertzoglou, 2018) textbook, where the text discusses external and internal factors that play a role in an individual's state of mind (p. 300). Coping strategies, active living, and healthy eating are referenced in three curriculum documents but are not discussed throughout the textbooks in the context of enhancing or contributing to mental health. These results seem to suggest a disconnect once again between what the curriculum documents state students will learn versus what content is actually implemented. Active living, healthy eating, and coping strategies are discussed throughout the textbooks but in the context of self-treatment options to help an individual manage their mental illness symptoms, as discussed earlier. It would be beneficial to add to this content that these are both forms of self-treatment but can also be used to promote positive mental health and to enhance one's mental state.

Age of Textbooks

   The results found that textbooks used in the courses that involve mental health instruction range from two to fifteen years old. Textbooks are a vital component of knowledge construction for students (Goodlad, 1984; Stern & Roseman, 2004). However, our knowledge and understanding of mental health is constantly evolving, therefore, the ability of classroom resources to enhance mental health literacy by presenting up-to-date, accurate, and appropriate information to students is important. The importance of up-to-date content in textbooks is two-fold as the Internet has now also become a vital source of information for youth (Fox, 2011; Wartella et al., 2015). While the Internet has revolutionized our ability to obtain information, it has also increased the spread of misconceptions (Lewandowsky et al., 2012; Morrison, 2016; Radwanick, 2011). It would be beneficial to continually update required textbooks for courses including mental health content to provide students with the facts and ability to critically think about the information they are reading online.

Furthermore, older textbooks may inadvertently endorse misconceptions, or represent out-of-date views about mental health through inappropriate analogies, incorrect information, and oversimplification of conceptions (Chattopadyhay, 2016; Chew, 2006; Dake, 2007; Kutcher et al., 2016; Stanovich, 2009). For example, throughout the text, anxiety disorders are always grouped together and explained as a whole entity, as opposed to providing students with the knowledge of their commonalities and their differing symptoms. This is an example of oversimplification, as, while anxiety disorders do share some common symptoms, each specific anxiety disorder has its own unique set of symptoms and how they manifest (Canadian Mental Health Association, 2020a). As anxiety disorders, specifically generalized anxiety disorder, are among the highest prevalence rate in youth, it would be beneficial to provide students with a more in-depth knowledge of their common and differing symptoms so that youth can better understand their own symptoms and how to manage them, and/or, to understand their peers around them. Secondly, not explaining the unique symptoms and their manifestations for the most common mental health issues among youth can increase the stigmatizing attitudes, beliefs, and behaviours of youth towards those experiencing these symptoms because of a lack of knowledge (Eisenberg et al., 2009; Hamza & Wickman, 2008; Hinshaw, 2006; McGorry et al., 2011; Mental Health Commission of Canada, 2012; Story et al., 2016; Taylor & Kowalski, 2004; Teen Mental Health, 2018). Lastly, as a poor understanding of mental disorders and their symptoms can increase the stigma surrounding those disorders, this further deters individuals from seeking help (Furnham et al., 2011; Gagnon et al., 2015; Gulliver et al., 2010; Larson & Corrigan, 2016; Story et al., 2016).

Summary

The main findings of this research study focused on students' exposure to mental health education and the nature of mental health content through curriculum documents and textbooks. In this study, the curriculum documents and textbooks were important data sources as both encompass the intended curriculum, and therefore, can provide a good understanding of what the Ministry of Education and society believe to be the most important facets of mental health to teach youth in Ontario. The curriculum documents and textbooks were important to study as they often represent the attitudes and beliefs of society and serve as a building block for knowledge construction (Brooks, 1986; Kelly, 2009). I discussed the exposure to mental health by

explaining how many courses addressing mental health are currently offered in the curriculum, the factors that influence the total amount of exposure a student can receive, and the percentage of each textbook dedicated to the discussion of mental health. I also discussed the nature of the mental health content by exploring the mental health characteristics and discussed their components, and the influence of the age of textbooks on the nature of content.

Overall, the main findings of this research highlight the fact that Ontario high school students have little exposure to mental health content in the classroom, from as low as a 0.004% chance to as high as a 5.1% chance, and this exposure can be influenced by various academic and personal factors. This research found that the curriculum offers students limited choices of courses that include mental health content, and these courses may not coincide with students' course selection due to their post-secondary aspirations. Second, the Ontario high school curriculum focuses primarily on substance-use and addictions, depression, and eating disorders; it oversimplifies mental illnesses; it does not address the most common mental health issues affecting youth; and it does not address mental health in a comprehensive manner. Lastly, Ontario high schools are using predominantly out-of-date textbooks that cannot encompass mental health as understood in 2020-2021, which may further impede the development of good mental health literacy. I used this discussion section to address the research questions and examine some of the important findings of this study. In the next section, I discuss the implications, limitations, and future research opportunities.

Chapter 7: Conclusion

The conclusion section is organized according to the implications of the study and future research recommendations; limitations of the study; and final remarks. In the first section of the conclusion, I discuss the significance and some of the implications of this research study and offer recommendations for teachers, school curriculum leaders, the Ontario Ministry of Education, and future researchers. In the second section, I discuss some possible limitations of the study and how I addressed these limitations through the methods, design, data collection, and analysis stages. In the final section, I include final thoughts on how the findings address the research problem.

Implications

While writing this dissertation, I couldn't help but remember my experience in high school. I recall we had one course that included a psychology section – Grade 11 Introduction to Anthropology, Psychology, and Sociology. Nevertheless, there was no discussion about mental health during this course. Instead, we learned about the acts of serial killers, we completed quizzes to find out if we were introverts or extroverts, and we had a brief introduction to the history of psychology, which primarily focused on Sigmund Freud. Across all of my courses, my entire experience through high school, one thing is clear now – mental health was just something we did not talk about. Mental health was something I hardly knew existed until I entered my first year Introduction to Psychology course in university.

If you were experiencing the symptoms of a mental health issue, these were conversations that occurred in private. We were often guided to speak to guidance counsellors about 'emotional' issues we 'thought' we were feeling. The only time mental health and mental illness was acknowledged in a public manner would be a brief mention of seeking help through the guidance counsellors if you felt 'emotionally' unwell, or someone showing up to an assembly to talk to us about teen suicide for five minutes. I know there were situations where my peers were dealing with symptoms, not that I, or any of us, knew these were symptoms at the time, and instead of compassion from their friends or teachers or school staff, they were often bullied or punished for their behaviour or feelings. Delving further into this dissertation I thought, 'how were we suppose to know we were dealing with mental health issues when we were never taught anything about them?' and 'why would we seek help for our feelings from a complete stranger

when those around us, those closest to us, our teachers and staff who were suppose to protect us, made us feel embarrassed and wrong and different for our experiences?' Mental health was a taboo topic of conversation during my high school years; it was something we felt too embarrassed to talk about and something others 'brushed under the rug' and didn't want to acknowledge.

However, while writing this dissertation I was hopeful; mental health awareness and mental health education has come a long way in just eleven years since my experiences. Sadly, youth continue to demonstrate poor mental health literacy (Gagnon et al., 2015; Kutcher et al., 2015a; Manser, 2016; McLuckie et al., 2014; Wei et al., 2013) and I wanted to understand why this was still occurring even though student centred mental health initiatives are of great interest in Ontario (Kutcher & Wei, 2017; Ontario, 2019; Ontario, 2020a; Ontario, 2013, 2015b). I wanted to explore the provincial approach to mental health education to understand why these initiatives may not be having the intended impact. This study provided rich, descriptive data regarding mental health education within the Ontario high school curriculum. The data was collected from official curriculum documents and required textbooks. Overall, the findings from this study found that Ontario youth receive very little mental health education via classroom learning. Furthermore, the information available may be out-of-date, and can be oversimplistic, does not address key mental health issues affecting youth, and does not address mental health comprehensively.

This study can influence the development and implementation of mental health education. The implications of this study are that curriculum developers in Ontario can be encouraged to revise the current curriculum of courses that include mental health so that the content addresses the characteristics and components of mental health literacy appropriately. The results from this study showcase that the current approach to mental health education is not well rounded, missing vital information regarding mental health issues affecting youth. This study, along with the School-Based Mental Health Literacy framework, can guide the future of curriculum development of mental health education to be comprehensive and multidimensional, two characteristics stressed in the literature for their positive impact on enhancing mental health literacy (Gregg et al., 2011; Kelly et al., 2007; Kutcher & Wei, 2014; Kutcher et al., 2015a, 2015b; McLuckie et al., 2014; Wei et al., 2013). Secondly, the results found that required

textbooks for courses that discuss mental health may be out of date. The implication of this result is that newer textbooks can be chosen to replace what is currently being used so that students are learning the most up-to-date and appropriate information regarding mental health.

Based on these results, my recommendations fall to the Ministry of Education and all other individuals involved in the development of curriculum and selection of textbooks within Ontario. I would recommend a revision of the curriculum for courses where mental health information is currently implemented. I would recommend that any new content, and the existing content, be comprehensive of all mental health literacy characteristics and be well-tailored to address the specific needs of youth today. That is, the content needs to be multidimensional; the content should not prioritize one mental health issue over others to the extent that the current curriculum does.

It is important that these changes also take into account different cultures, socio-economic status, and backgrounds of students. While statistics can show us the data of common mental health issues overall in youth, we must acknowledge and address the differing issues affecting at-risk populations. For example, First Nations youth in Canada are five to six times more likely to die from suicide, 11 times the national average (Health Canada, 2002, 2003). Research has argued that priority areas of focus for First Nations mental health differs from a standard mental health approach, specifically focusing on community and cultural wellness and healing services (Giroux et al., 2017). Additionally, while Statistics Canada presents major depressive disorder, generalized anxiety disorder, bi-polar disorder, and substance use disorder as the most common mental health issues affecting youth overall in Canada, post-traumatic stress disorder is equally as prevalent among refugee and immigrant children entering our school systems (Fazel, Wheeler, & Danesh, 2005; Statistics Canada, 2012). I would recommend using the School-Based Mental Health Literacy Framework – The Mental Health and High School Curriculum Guide to understand how to properly address mental health literacy, what information is appropriate to address in the classroom, and strategies for doing so. Additionally, I would recommend adjusting this tool to address the specific needs for at risk populations within a school, making the education more relatable to the students. Furthermore, I hope this research can influence future revisions of curriculum in understanding the need for more mental health education to be available for students and that mental health education cannot be addressed in a

one-size-fits-all approach and potentially adding mental health information into more mandatory courses.

The implication of these results on classroom instruction of mental health are that current teachers can better develop a lesson plan when understanding that resources they use for inspiration may be out-of-date, noncomprehensive, and one dimensional. However, in order for teachers to develop more mental health friendly lesson plans, we need to make sure that our teachers have good mental health literacy themselves. I would recommend providing all teachers, not just those responsible for teaching courses with mental health, with The Mental Health and High School Curriculum Guide as it includes educational tools aimed at also improving the mental health literacy of teachers. If we can improve the mental health literacy of teachers, especially those responsible for the instruction of mental health content, then we will be giving them the skills they need to appropriately supplement missing mental health content from the current curriculum and to choose appropriate classroom resources. When teachers are provided with a means to improve their mental health literacy, they will be able to better address mental health in their lesson plans. This may be especially important as curriculum revisions can take time, but if a teacher has good mental health literacy, they may be able to address the gaps identified in this study. Furthermore, providing mental health education to teachers can help to improve their own mental health literacy, potentially creating a more open and compassionate environment for students in the classroom and within the school.

My recommendation for teachers is to be open to improving their own mental health literacy so they can enhance the mental health literacy of their students. I would recommend teachers to incorporate other course materials that can supplement missing or out-of-date information provided to them through curriculum documents and textbooks. I would also recommend that when selecting a classroom resource and developing their lesson plans, teachers focus on using materials from accredited sources and to discuss all characteristics and components of mental health equally, to the best of their ability. I understand that not every teacher has a background in Psychology or may not feel the most qualified to discuss mental health in the classroom. This is why I strongly encourage teachers to download The Mental Health and High School Curriculum Guide so they can enhance their own mental health literacy

but also to use this guide to help them in designing their lesson plans surrounding mental health and to help them understand how to discuss these topics.

Lastly, this study can influence research on mental health education. The results from this study can offer the research community an understanding of current mental health education in Ontario and an understanding of areas where more research is warranted. This study will add to the growing discussion of mental health education interventions, a research area in Canada that is small, but aims to understand how to enhance mental health literacy (Kutcher et al., 2015a, 2015b; Kutcher & Wei, 2014; McLuckie et al., 2014). The implications of this study are that future researchers will now have a base understanding of the approach to mental health education in Ontario high schools; they will have the knowledge of where mental health education is currently located and situate a vision for future research of this field.

For future research I would recommend exploring other classroom resources teachers are using to aid in the discussion of mental health. This research would be important as classroom learning is one of three primary sources of misconceptions among students, specifically textbooks and other course materials (Chew, 2006; Dole, 2000; Higbee & Clay, 1998; Qiant & Guzzettii, 2000; Stanovich, 2009; Taylor & Kowalski, 2004). Furthermore, as this study was unable to obtain textbook recommendations for all the courses examined, a study that can examine other textbooks being used would be beneficial to gain a comprehensive understanding of mental health content offered to high school students. As mentioned in the Discussion chapter, course levels and post-secondary aspirations can be highly influential to students' choice of courses, therefore, a study exploring the popularity of courses identified and those discussing mental health would be beneficial. This study could provide information about the amount of mental health education students are really being exposed to based on course choices. Lastly, I believe that examining the mental health literacy of teachers responsible for these courses would be a benefit. If an individual does not have good mental health literacy, we cannot assume that they will be able to accurately teach the content to students. Furthermore, if an individual holds negative beliefs and attitudes about mental illness, they may potentially limit the amount of time spent on mental health, or teach mental health through their personal lens which may promote misconceptions, false information, and stigma.

Limitations of the Study

As a case study design is used for an in-depth exploration of a specific object of study, a limitation of this study is the limited generalizations (Crowe et al., 2011; Gay et al., 2007; Merriam, 2009; Stake, 1995; Yin, 2009, 2014). That is, the results of this study cannot be attributed to any other location other than Ontario, Canada. Therefore, in my research study, I ensured that I reiterated that this research is only representative of Ontario, Canada and I avoided suggestions that the results can be generalized to other approaches to mental health education in Canada. Another limitation to this study was that mandatory textbooks were only available for seven courses studied; therefore, I was only able to do a textbook analysis for seven of the eleven courses examined. Although the data I collected was rich and thick (Fusch & Ness, 2015), it would have been beneficial to have textbooks for every single course offered.

While students interact with the curriculum on a daily basis, there are other mental health initiatives that occur within a school-setting that are not a part of the official curriculum. These school-wide mental health initiatives can include mental health awareness and promotion and/or suicide prevention that may be provided in special assemblies by public speakers and community agencies. There are also programs such as the Western Centre for Mental Health (2020a) MindUP for Young Children, a "universal, school-based education program that incorporates neuroscience, mindful awareness, and positive psychology in 15 teacher-led lessons" (para. 1), aimed at providing children with attentional, self-regulatory, and social-emotional strategies and mindfulness-informed social-emotional learning; the Western Centre for School Mental Health (2020b) RISE-R: Resilience and Inclusion through Strengthening and Enhancing Relationships program, which addresses "identified gaps in the area of violence prevention and mental health promotion programming for under-served populations" (para. 1); and The Mental Health and High School Curriculum Guide (Teen Mental Health, 2008) as discussed throughout the paper, for example. As this study did not examine school-wide mental health initiatives available outside of the official curriculum, the results can not reflect all learning that may occur nor mental health promotion that is available within Ontario high schools.

Other possible limitations to the study was the inability to interview teachers to determine any other course materials that they use when discussing mental health. It would have been

beneficial to obtain other course documents to obtain an even deeper understanding of how mental health is being addressed within the classroom.

Conclusion

This study found that mental health education in Ontario high schools is limited, noncomprehensive, and one-dimensional. Student-centered mental health initiatives focused on support systems for mental health are garnering much attention and funding within the province of Ontario (Ministry of Health, 2011; Ontario, 2019; Ontario, 2020;), however, the enhancement of mental health literacy appears to be sidelined. While creating funding for supports is important, the literature has demonstrated that poor mental health literacy and stigma are the biggest barriers for help-seeking behaviour (Furnham, Cook, Martin, & Batey, 2011; Gagnon et al., 2015; Gulliver, Giffiths, & Christensen, 2010; Larson & Corrigan, 2016; Story et al., 2016). Therefore, regardless of the amount of support systems we put into place, if youth do not have adequate mental health literacy, they are less likely to use these supports. Mental health education is becoming more politically and socially supported, driven to address the high incident rates of mental health issues in adolescence and the high rates of suicide in youth (Benzie, 2019; Canadian Mental Health Association, 2020a, 2020b; Ontario, 2019; Ontario, 2020a; Public Health Agency of Canada, 2016). The literature has demonstrated, and argues, that a mental health curriculum is essential for combating stigma and increasing help-seeking behavior (Gregg et al., 2001; Kutcher et al., 2015a, 2015b; Kutcher & Wei, 2014; McLuckie et al., 2014). Moreover, the literature stresses that these curricula must be comprehensive, multidimensional, and up-to-date to effectively address mental health literacy of youth (Gagnon et al., 2015; Gregg et al., 2001; Jorm, 2000; Kutcher & Wei, 2014; Kutcher et al., 2015 McLuckie et al., 2014; Wei et al., 2013). If adolescences are given the opportunity to learn about mental health in an integrated, comprehensive, and accurate manner they will have the ability to understand symptoms they may be feeling, hold positive beliefs and attitudes about mental health as a whole, and will be open to seeking out support when they feel they are in distress.

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