
Electronic Thesis and Dissertation Repository

2-21-2020 2:00 PM

Mental Health Literacy and Initial Teacher Education: A Program Evaluation

Jasprit K. Pandori-Chuckal, *The University of Western Ontario*

Supervisor: Rodger, Susan, *The University of Western Ontario*

A thesis submitted in partial fulfillment of the requirements for the Doctor of Philosophy degree in Psychology

© Jasprit K. Pandori-Chuckal 2020

Follow this and additional works at: <https://ir.lib.uwo.ca/etd>



Part of the [Child Psychology Commons](#), [Educational Psychology Commons](#), [Industrial and Organizational Psychology Commons](#), [School Psychology Commons](#), and the [Teacher Education and Professional Development Commons](#)

Recommended Citation

Pandori-Chuckal, Jasprit K., "Mental Health Literacy and Initial Teacher Education: A Program Evaluation" (2020). *Electronic Thesis and Dissertation Repository*. 6834.
<https://ir.lib.uwo.ca/etd/6834>

This Dissertation/Thesis is brought to you for free and open access by Scholarship@Western. It has been accepted for inclusion in Electronic Thesis and Dissertation Repository by an authorized administrator of Scholarship@Western. For more information, please contact wlsadmin@uwo.ca.

Abstract

Utilizing a program evaluation framework, this study explored the effectiveness of a 10-week, mandatory, online mental health literacy course for 275 teacher candidates in a large central Canadian faculty of education. Shifts in teacher candidates' mental health literacy (using the Mental Health Literacy Questionnaire; Rodger Johnson, & Weston, 2017), attitudes toward mental health (Opening Minds Scale; Modgill, Patten, Knaak, & Szeto, 2014), and two types of coping skills, seeking social support and self-control (Ways of Coping Scale; Folkman & Lazarus, 1985), were examined. The findings indicated that the course demonstrated efficacy in positively shifting teaching candidates' mental health knowledge, stigma attitudes, and one type of coping skill, namely self control. Further, a multivariate analysis of variance (MANOVA) was used to explore the predictive nature of the four-factor model from the Mental Health Literacy Questionnaire (MHLQ; teaching and leading in a mentally healthy classroom, role clarity, professional relational skills, expectancies) as a predictor of the measures of interest. Results indicated that teaching and leading in a mentally healthy classroom was the only predictor of teacher candidates' coping skills for those experiencing professionally related stress. Overall, findings of the program evaluation of this mandatory, online mental health literacy course support the existing literature, and demonstrates that teacher candidates can benefit from enhanced early training experiences on mental health topics during their initial teacher education.

Keywords: mental health literacy, initial teacher education, teacher mental health

Lay Abstract

Utilizing a program evaluation framework, this study explored the effectiveness of a 10-week, mandatory, online mental health literacy course for 275 teacher candidates in a large central Canadian faculty of education. Shifts in teacher candidates' mental health literacy (using the Mental Health Literacy Questionnaire; Rodger Johnson, & Weston, 2017), attitudes toward mental health (Opening Minds Scale; Modgill, Patten, Knaak, & Szeto, 2014), and two types of coping skills, seeking social support and self-control (Ways of Coping Scale; Folkman & Lazarus, 1985), were examined. The findings indicated that the course demonstrated efficacy in positively shifting teaching candidates' mental health knowledge, stigma attitudes, and one type of coping skill, namely self control. Further, a multivariate analysis of variance (MANOVA) was used to explore the predictive nature of the four-factor model from the Mental Health Literacy Questionnaire (MHLQ; teaching and leading in a mentally healthy classroom, role clarity, professional relational skills, expectancies) as a predictor of the measures of interest. Results indicated that teaching and leading in a mentally healthy classroom was the only predictor of teacher candidates' coping skills for those experiencing professionally related stress. Overall, findings of the program evaluation of this mandatory, online mental health literacy course support the existing literature, and demonstrates that teacher candidates can benefit from enhanced early training experiences on mental health topics during their initial teacher education.

Keywords: mental health literacy, initial teacher education, teacher mental health

Acknowledgements

“A person is the product of their dreams. So, make sure to dream great dreams.” -Maya Angelou

I am the product of my parents’ dreams, and the completion of this work is a product of my own. However, this dream was not possible without the support of many wonderful individuals. I would first like to thank my advisor, mentor, and ‘provider of great wisdom’, Dr. Susan Rodger. Thank you for your support and guidance, you have made a profound impact on my life with your mentorship. And to Dr. Andrew Johnson for your statistical expertise and support. I would also like to thank the Faculty of Education at Western University for your openness and support in the cultivation of the first mental health literacy course for teacher candidates in Canada. Our research could not have been possible without it.

To my family and friends, my virji’s, and my in-laws, Mom, Dad, and Savi, thank you for your patience and support all these years. Your encouragement through insightful conversations made me feel like I could conquer anything. To my parents, your lifelong ability to model strength and determination in the face of adversity has forever shaped Manmit and I. You came to this country with dreams of your own, and I hope that in some capacity, I have made you proud. Manmit, it is difficult to express in words the honour I feel to be your sister. Thank you for reminding me that through perseverance, anything is achievable. To my husband, Hark, thank you for your kindness, support, and love. I know that this journey has not been the easiest, but your reminders that ‘no dream is too big’ was a constant inspiration. I look forward to our life with Louie and achieving our dreams as a family. Finally, to my beloved mamajis, Jaswant Singh and Rachhpal Singh, I dedicate this work in your honour. This work was a product of my dreams, and I am a product of my parents’ dreams, but you are our dreamweavers, and without you, none of this would have been possible. Thank you. Satnam Waheguru.

Table of Contents

Abstract.....	ii
Lay Abstract.....	iii
Acknowledgements.....	iv
List of Tables	ix
List of Figures	x
List of Appendices	xi
Chapter 1: Introduction.....	1
Research Context: Mental Health Literacy, Why Is It Important?	1
Mental health literacy	2
Low levels of mental health literacy at school	3
The Teacher Experience.....	5
Mental Health and the School System	7
Mental Health Literacy and Initial Teacher Education.....	8
The need to examine and support the mental health literacy of teacher candidates.....	9
Initial teacher education in Canada	10
Summary of the Problem.....	11
Present Study	12
Research Questions.....	13
Chapter 2: Literature Review.....	14
Initial Teacher Education in Canada	14
The Systems of Initial Teacher Education.....	16
Factors related to accreditation in education	18

The Importance of Initial Education for Teachers	19
Professional standards and regulations.....	22
The Role, Responsibilities, and Experience of Teachers	23
The role of teachers	23
Changes to the teacher role.....	24
Teachers and occupational health.....	26
Initial Teacher Education and Mental Health Outcomes	27
Teacher mental health.....	27
Economic impact of poor teacher mental health outcomes.....	28
The Need for Mental Health Literacy in Schools	29
The Ideals for Initial Teacher Education and Mental Health Literacy Promotion.....	30
Mental health literacy in the initial education framework.....	31
Mental Health Literacy and Wellness	32
The role of post-secondary education.....	33
Student wellness in schools	33
Teacher resilience	34
Stress and the Teacher Experience.....	35
Violence against teachers	35
Positive stress	37
Coping strategies	37
Theoretical Underpinnings.....	39
Self-determination theory (SDT).....	39
Social ecological theory.....	40

Chapter 3: Methodology	42
The Usefulness of a Program Evaluation	42
Demographic Information	46
Measures.....	47
Mental Health Literacy – Curriculum Resource Evaluation Tool (MHL-CR)	47
The Mental Health Literacy Questionnaire (MHLQ).....	47
The Negative Acts Questionnaire Revised-US (NAQR-US).....	48
The Ways of Coping Scale (WOCS).....	49
The Opening Minds Scale (OMS-HC).....	49
The Course	50
Data Collection.....	57
Participants	57
Analysis Plan.....	60
Qualitative Data.....	60
Quantitative Data.....	62
Chapter 4: Data Analysis	64
Research Question 1	64
Research Question 2.....	72
Chapter 5: Discussion	74
Why Teacher Candidates and Mental Health Literacy	74
Teacher Candidates and Teaching and Leading in a Mentally Healthy Classroom.....	78
Teacher Candidates and Mental Health Knowledge and Attitudes.....	84
Mental Health Knowledge.....	84

Stigma and Attitudes	85
Coping Skills: Help-Seeking Behaviours and Self-Control	88
Help-Seeking Behaviours	89
Self-Control	91
Teacher Candidates and Workplace Wellness	92
Self-Determination Theory	94
Limitations	95
Implications	98
Conclusion	99
Personal Reflection	101
References	103
Appendix A: Measures	146
Appendix B: Course Outline	152
Appendix C: Board of Ethics Letter of Exemption	158
Curriculum Vitae	159

List of Tables

Table 1: Demographic Information.....	58
Table 2: Participant Ratings on the Negative Acts in the Workplace (NAQR-US) measure (Pre-test).....	60
Table 3: Descriptive Statistics for Pre- and Post-test.....	62
Table 4: Teacher Candidates Reports of Coping Skills, Mental Health Literacy Questionnaire Factor Scores and the Opening Minds Scale: Correlations and Descriptive Statistics.....	69
Table 5: Multiple Regression Analysis for Ways of Coping – Seeking Social Support subscale.....	70
Table 6: Multiple Regression Analysis for Ways of Coping – Self Control subscale.....	71
Table 7: Multivariate and Univariate Results.....	73

List of Figures

Figure 1: Hypothesized trajectory of enhanced mental health literacy for teacher candidates in the current study based on research by Levine Brown et al., 2019; Gambhir et al., 2008).....	10
Figure 2. Postulated positive outcomes of enhanced mental health literacy for teacher candidates and the education system in the current study.....	12

List of Appendices

Appendix A: Measures.....	144
Appendix B: Course Outline.....	150
Appendix C: Board of Ethics Letter of Exemption.....	155

Chapter 1: Introduction

Research Context: Mental Health Literacy, Why Is It Important?

There is growing research on mental health in the context of schools. However, the focus is mainly on factors such as student mental health, school safety, school-based violence for students, and the need for improved teacher support (Tian, Zhang, & Huebner, 2018; Rose, Lindsey, Xiao, Finigan-Carr, & Joe, 2017; Ekornes, 2017; Paschall & Bersamin, 2018; Lester, Lawrence, & Ward, 2017; Coker, Bush, Brancato, Clear, & Recktenwald, 2018). However, evidence has recently converged to support the notion that for students to learn well, their teachers must be well (e.g. Arens & Morin, 2016; Oberle & Schonert-Reichl, 2017). Given the link between teacher wellness and student mental health (Brown, Phillippo, Rodger & Weston, 2017; Atkins & Rodger, 2016; Kutcher, Bagnell & Wei, 2015), it should serve as an essential component of school mental health research and be recognized in early intervention and prevention programs. By equipping teachers with the knowledge and skills to support themselves and their students, it is possible to reduce adverse mental health outcomes and strengthen important and impactful teacher-student relationships (Hamama, Ronen, Shahar, & Rosenbaum, 2012; Holen, Waaktaar, & Sagatun, 2017; O'Conner, Dyson, Cowdell, & Watson, 2017).

Currently, there are gaps in the examination of teachers' understanding of mental health as it relates to them and their students (McLean, Abry, Taylor, Jimenez, & Granger, 2017; Dods, 2016; Eustache et al., 2017; Moon, Williford, & Mendenhall, 2017). Educating and training teachers on positive mental health and coping skills can be more meaningful at the pre-service level through quality initial education (e.g. Bachelor of Education programs). By providing teacher candidates with mental health knowledge and training, they can be better equipped when they are in-service (Woloshyn & Savage, 2018; Gambhir, Broad, Evans & Gaskell, 2008). As

will be summarized in this review, initial teacher education and mental health knowledge are linked, wherein successful mental health promotion and intervention require comprehensive educator training and expertise (Moon et al., 2017).

Teachers are considered on the ‘front-line’ in the context of education and, as will be shown, the intersection of mental health and education (Imran, Rahman, Chaudhry, & Aftab, 2018). Teachers play important roles in their initial contact and relationship-building with children and adolescents, and this is posited to be especially crucial for students who may be experiencing the onset of a mental health concern. Teachers have reported apprehensions that they are unequipped and unprepared to perform this role effectively due to limited knowledge and confidence (Froese-Germain & Riel, 2012; Meldrum, Venn, & Kutcher, 2009).

By utilizing a program evaluation framework, this study explored the efficacy of a mandatory, online mental health literacy course for teacher candidates at a large faculty of education as potential support for the acquisition of mental health literacy and related role preparedness. Specifically, the relationship between mental health literacy and related factors, including stress, coping abilities, knowledge of mental health, and an awareness of negative acts in the workplace, were explored.

Mental health literacy. It is essential to understand mental health literacy and its context within the school system. Mental health literacy is multifaceted and represents the knowledge, beliefs, skills, and attitudes that are related to mental health. It is thought to be influenced by a teacher’s education, experience, and existing belief systems (Dods, 2016; Kutcher, Wei, McLuckie, & Bullock, 2013; Jorm, Korten, Jacomb, Christensen, Rodgers, & Pollitt, 1997). In this review, mental health literacy is defined as ‘the capacity to understand how to enhance and maintain good mental health, understand mental disorders and their treatments, decrease stigma

against those living with mental disorders, and enhance help-seeking efficacy” (McLuckie, Kutcher, Wei, & Weaver, 2014). As such, enhanced mental health literacy may support an individual’s understanding of critical information, including the differences between positive and negative mental health factors and the development of skills in recognition of potential mental health concerns (Kutcher et al., 2013).

Ongoing learning in mental health literacy has been shown to effectively reduce stigma-related attitudes toward mental health by promoting help-seeking behaviours and recognizing how and when to provide appropriate intervention (Kutcher et al., 2013; Dods, 2016). Research has further suggested that there is a health-promoting benefit to mental health literacy. The research states that by utilizing an early prevention framework, children, families, and communities who can enhance and develop their mental health literacy are less likely to experience negative mental health outcomes and more likely to participate in successful early intervention (Kelly, Jorm & Wright, 2007). Furthermore, interventions that cohesively implement mental health literacy into their programming are more likely to experience increases in emotional resilience and decreased stress and stigma (Lo, Gupta, & Keating, 2017; Nakamura-Taira, Izawa, & Yamada, 2018).

Low levels of mental health literacy at school. When mental health literacy is lacking or of poor quality, there is greater susceptibility for the development of mental health disorders and increased social stigma surrounding mental illness. Furthermore, it is associated with a lack of understanding regarding access to treatment (Jorm, 2012; Reavley & Jorm, 2011).

Specifically, research suggests that improvement is needed in terms of the recognition and identification of mental health disorders. Jorm (2012) reports that the average person with a mental health disorder is unaware of both the severity of their symptoms and their need to access

treatment, and typically waited an average of 8.2 years before accessing the needed support. According to the mental health literacy model proposed and developed by Jorm (2012), by increasing mental health literacy and mental health awareness, individuals will be equipped with the knowledge to engage in early intervention by recognizing the onset of their symptoms and the need for support earlier, and seek support more quickly. Early intervention is linked with greater success in treatment (Jorm, 2012; Thomson, Griffiths, Fisher, McCabe, Abbott-Smith, Schwannauer, 2019; Berlin, Martoccio, & Jones Harden, 2018; Dixon, Holoshitz, & Nossel, 2016).

A national report by Kirby and Keon (2006) suggested that the most effective way to engage in early mental health promotion and support for students with existing mental health concerns is within the school setting. Given that recent studies indicate one in five children and adolescents in Canada are likely to suffer from at least one mental health-related issue (Waddell et al., 2019; Kessler, Berglund, Demler, Merikangas, & Walters, 2005; Zayed et al., 2016), adequately addressing these problems within the school system is a significant challenge. Additionally, despite the cultivation of a mental health strategy for Canadian secondary schools in 2012 (Mental Health Commission of Canada, 2012), and the development of evidence-based programming and recommendations to meet this challenge, mental health support for children and adolescents at school continues to be underdeveloped (Leadbeater, 2010). A primary reason for this gap is related to the lack of training and role definition for the school personnel responsible for implementing and delivering such evidence-based programming (Kutcher et al., 2016; Eustache et al., 2017; Moon et al., 2017). Importantly, the manifestation of mental health-related concerns in the classroom are often presented in a complex and dynamic way and can be challenging to identify, with children exhibiting a range of somatic complaints, behavioural

functioning deficits, difficulties with learning, and poor academic performance (Schulte-Korne, 2016; De Witt, Karioja, Rye, & Shain, 2011; Schneider, Mond, Turner, & Hudson, 2017; Tannock et al., 2016). Without adequate training or knowledge, teachers are left to navigate their students' mental health independently with no clear blueprint or certainty about what actions or steps are needed for implementation.

The Teacher Experience

Despite the considerable research on student mental health and success in schools (e.g. Giamos, Soo Lee, Suleiman, Stuart, & Chen, 2017; Dunley & Papadopoulos, 2019; Sullivan, Blacker, & Murphy, 2019; Cawthorpe, 2018), the understanding of teacher mental health and associated outcomes, including job stress, coping, and experiences of victimization, is limited. However, the impact on the system is undeniable. Reichel (2013) indicated that 30-50% of Canadian teachers quit within the first five years and cite burnout as the principal factor. Researchers and practitioners have identified teaching as a stressful occupation (Ouellette et al., 2018; Cancio, Larsen, Mathur, Estes, Johns, & Chang, 2018; Ferguson, Mang, & Frost, 2017; Lambersky, 2016), with challenges that include changing and complex demands from students, administrators, parents, and the community overall; none or few positive coping strategies for teachers; and early susceptibility to teacher burnout (Koenig, Rodger, & Specht, 2018; Klassen, Usher, & Bong, 2010; Hoglund, Klinge, & Hosan, 2015; Kim, Jorg, & Klassen, 2019).

Burnout encompasses depersonalization, poor coping, emotional exhaustion, compassion fatigue, and a limited or lacking sense of personal accomplishment (Hoglund et al., 2015). Researchers have found an important link between teacher burnout, student success, and classroom quality wherein teachers feel overwhelmed at work, and thus, their stress unintentionally undermines students' academic and social success (Yoon, 2002; Hoglund et al.,

2015). High stress levels and poor coping can also impact classroom quality and teacher responsiveness (Buettner, Jeon, Hur, & Garcia, 2016). In short, teachers who feel confident and well equipped are less likely to report feeling overwhelmed and more likely to report positive management of their stress levels (Zinsser, Christensen, & Torres, 2016).

Teacher candidates are not exempt from stressors, including degree progression, requirements of assessments, assignments, examinations, and practice teaching expectations (Gustems-Carnicer, Calderon, & Calderon-Garrido, 2019; Woloshyn & Savage, 2018). The balance act remains in the transition from pre-service to in-service. It is considered a steep trajectory of learning throughout the first years of in-service teaching wherein new teachers grapple with role clarity, student, and community needs, as well as legislative changes (Beck & Kosnick, 2014; Henry, Bastian, & Fortner, 2011). In-service teachers are reporting increased levels of workplace bullying and victimization by their students, parents, administrators and colleagues, with a lack of awareness regarding the availability and accessibility of resources (Kauppi & Porhola, 2012; Bernotaite & Malinauskiene, 2017).

Therefore, it is crucial to explore how teachers can become well equipped with this important knowledge, and it becomes central to the question as to when such education should be undertaken. Initial teacher education provides a valuable opportunity to promote early recognition and training on positive coping strategies; an awareness of possible in-service stressors, such as how to support students with complex mental health needs and who to access for support; and preventative and health-promoting practices and strategies that can benefit teachers and their students (Woloshyn & Savage, 2018; Carr, Wei, Kutcher, & Heffernan, 2018; Brewer, Nichols, Leight, & Clark, 2017; Yazan, 2017).

Mental Health and the School System

Given children spend most of their time in the classroom, schools can be considered ‘key players’ in early intervention, prevention and mental health promotion for students (Gott, 2003; Weist et al., 2017). For example, in Canada, *Evergreen*, a national mental health framework for children and adolescents, emphasized the need to link education and health systems with mental health intervention (Kutcher & McLuckie, 2010). Schools can play a foundational and critical role in supporting and promoting student mental health and a positive school climate (Gray, Wilcox, & Nordstokke, 2017; Lei, Cui, & Chiu, 2016; McLean, Abry, Taylor, Jimenez, & Granger, 2017; Newton et al., 2018). Research suggests a link between positive school climate and decreased peer victimization, bullying and improvements in student mental health and academic achievement over time (Wang, Berry, & Swearer, 2013; Leadbeater, Sukhawathanakul, Thompson, & Holfeld, 2015; Wang et al., 2014). For example, Libbey (2004) conducted a literature review of standard measures utilized in exploring the school climate and student connectedness and found nine commonly associated constructs, including peer relations, academic engagement, discipline and fairness, school liking, safety, belonging, teacher support, extracurricular activities, and student voice.

Growing research in this area suggests similar findings and emphasizes the need for a ‘whole school approach’ in promoting positive mental health (O’Reilly, Svirydzenka, Adams, & Dogra, 2018; Rowling, 2009; Neilsen, Meilstrup, Nelausen, & Koushede, 2015). This specific approach calls for active participation in mental health promotion by staff members, students, parents, and community partners (Weist et al., 2017; McIsaac, Read, Veugelers, & Kirk, 2017). Short (2016) suggests that educators are in an ideal position to engage in mental health promotion by recognizing early signs of concern. There is a need for capacity-building to equip

educators to engage in early interventions. Short (2016) utilized the School Mental Health ASSIST, (a provincial team in Ontario that supports school boards with supporting student mental health) and identified the following three-stage continuum for mental health capacity building in schools: “(1) mental health awareness, which encompasses professional learning strategies for providing basic mental health information; (2) mental health literacy: professional learning strategies for ensuring a deeper working knowledge of mental well-being; and (3) mental health expertise: professional learning strategies for ensuring those who serve vulnerable students have the knowledge/skills to effectively provide evidence-based programming” (pg. 41). Although the above are useful strategies for in-service teachers, it poses the question of whether mental health capacity building during initial teacher education would enhance teacher preparedness and increase mental health knowledge when transitioning to an in-service role.

Mental Health Literacy and Initial Teacher Education

To prevent and address adverse mental health outcomes within the context of the school system, the recent research literature converges and indicates the importance of increasing the mental health literacy of teachers, students, and other school personnel. Furthermore, it advocates for the need to embed a mental health literacy framework into school curricula and initial teacher education (Dods, 2016; Kutcher et al., 2013; Jorm et al., 1997; Weston, Anderson-Butcher & Burke, 2008). Teachers without suitable education and training possess a limited skill set and a lack of awareness of resources, both of which are necessary to discern their students’ concerns, including how to appropriately address and provide necessary support (Martin, Dolmage, & Sharpe, 2012).

Scholars suggest the important link between teacher preparedness, including their academic competencies, with student success and positive educational outcomes (Miller,

Ramirez, & Murdok, 2017; Pantaleo, 2016). Inadequate teacher preparedness and limited intervention can result in students with unmet needs throughout their early years, which is linked to poorer mental health outcomes for those who pursue higher education (Dods, 2016).

Furthermore, Lawrence, Dawson, Houghton, Goodsell and Sawyer (2019) found that students with mental health difficulties were absent more often than their peers, with their attendance and school success progressively worsening when intervention and treatment opportunities were missed or lacking. Absenteeism is thought to be mitigated by positive student-teacher relationships, which are also associated with reduced psychological distress, a sense of belonging in their classroom, and positive relationships with teachers. Thus, students were more likely to report increased feelings of connectedness to their schools and overall positive well-being (Cornelius-White, 2007; Centeio, Cance, Barcelona, & Castelli, 2018; Rissanen, 2018; Aldridge & McChesney, 2018).

Teachers are not exempt from poor mental health outcomes. Harding et al. (2019) found that teacher mental health and well-being are correlated with student mental health and well-being. Teachers experiencing depressive symptoms, poor coping skills, negative workplace experiences and stress often report low levels of presenteeism, difficulties developing a positive and supportive classroom environment, and challenges in developing and modeling good relationships with their students. Harding et al. (2019) note that these experiences are associated with increased rates of teacher absenteeism and a reduced personal belief that they can help with their emotional problems.

The need to examine and support the mental health literacy of teacher candidates. Initial teacher education is positioned to be a unique and vital opportunity to develop mental health literacy in the context of schools and within the education system. Teachers who do not have

adequate levels of mental health knowledge may be unable and unequipped to support students and themselves (Kidger et al., 2016; Howard, Haskard-Zolnierrek, Johnson, Roming, Price, & Cobos, 2017), increasing the likelihood of negative outcomes for teachers and their students, including the absence of early intervention and prevention (McLean & Connor, 2015). It is important to note that the current curriculum for many teacher education programs in Canada does not adequately address mental health literacy, nor is it a requirement of teachers' educational training (Brown, Philippo, Weston & Rodger, 2019; Gambhir et al., 2008) (see Figure 1).

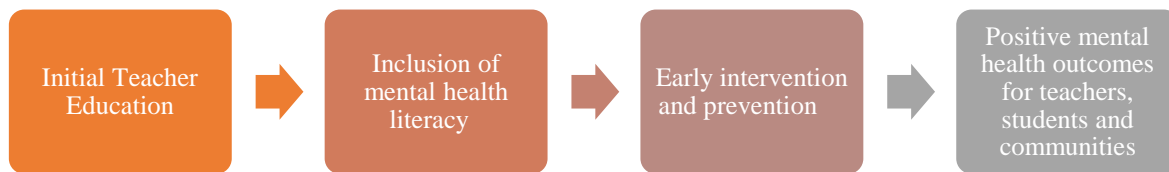


Figure 1. Hypothesized trajectory of enhanced mental health literacy for teacher candidates in the current study based on research by Levine Brown et al., 2019; Gambhir et al., 2008).

Initial teacher education in Canada. Initial teacher education in Canada is under the jurisdiction and responsibility of several bodies, including universities, secondary educational institutes, accreditation agencies, and provincial governments (Gambhir et al., 2008). In Ontario, teacher candidates must have an undergraduate degree to enter a Bachelor of Education program and take numerous courses and complete practice teaching as an unpaid placement, the timing of which varies across programs. Upon transitioning to in-service, teachers are required to engage in long-term professional development (Gambhir et al., 2008). This requires teachers to individually and independently select available professional development opportunities that would improve their lack of expertise in specific areas, while balancing the requirements of their professional roles, such as developing teaching content with out-of-work time to participate in professional development.

It is critical to identify and address the barriers that may limit access to future professional development regarding mental health, including the availability of learning opportunities and workplace factors. These factors include providing back-fill teachers to accommodate attendance, paid leave, lack of participation by colleagues, and time, among others (Campbell, 2017; Campbell, Osmond-Johnson, Sohn, & Leiberman, 2017; Justin, 2004; Kopcha, 2012; Zhang, Shi, & Lin, 2019). Such challenges for in-service teachers provide the impetus to examine and enhance teacher preparedness during initial teacher education so that teachers experience the opportunity to access foundational knowledge during their initial professional education. Given that the teaching role is suggestive of the balance between a generalist and a specialist (Gambhir et al., 2008), all educators must be equipped with the knowledge to be able to teach and support all students.

Summary of the Problem

Concerns related to student mental health needs and the increasing demands by the education system on teachers to meet curriculum changes and expectations have created significant increases in stress, and lower self-confidence and well-being for teachers (Parding, Berg-Jansson, Sehlstedt, McGrath-Champ & Fitzgerald, 2017; Darling-Hammond, Wei, Andree, Richardson, & Orphanos, 2009; Chang, 2009; Schaefer, Long, & Clandinin, 2012; Wang, Hall, & Rahimi, 2015). The lack of support and acknowledgement of these growing mental health issues is associated with increased attrition among teachers. This increase in attrition results in economic costs as the system must support teachers who have left their jobs due to stress-based leave and replace them within the education system (Ingersoll, Merrill, & May, 2014; With, 2017; Sutchter, Darling-Hammond, & Carver-Thomas, 2016; Carroll, 2007; Podolsky, Kini, Bishop, & Darling-Hammond, 2017).

The research converges on this point: many teachers are not well equipped when they commence their professional roles due to significant gaps in initial teacher education and training (Frauenholtz, Williford, & Mendenhall, 2015). Currently, teachers do not receive consistent or formalized education in mental health literacy, nor are they supported in obtaining the necessary skills to be competent in their roles as supporters of mental health for their students (Rodger et al., 2014). To date, there is a lack of research addressing teacher education experience in this domain, including limited knowledge as to how early promotion programs, such as mental health literacy for teachers can improve preparedness and mitigate adverse mental health outcomes for their students, and for themselves (Moon et al., 2017).

Present Study. The present study investigates the impact of a mandatory mental health literacy course for teacher candidates. Quantitative data collected at pre-and post-intervention is utilized. The objective of this research is to address the gap between initial teacher education and mental health literacy (see Figure 2).

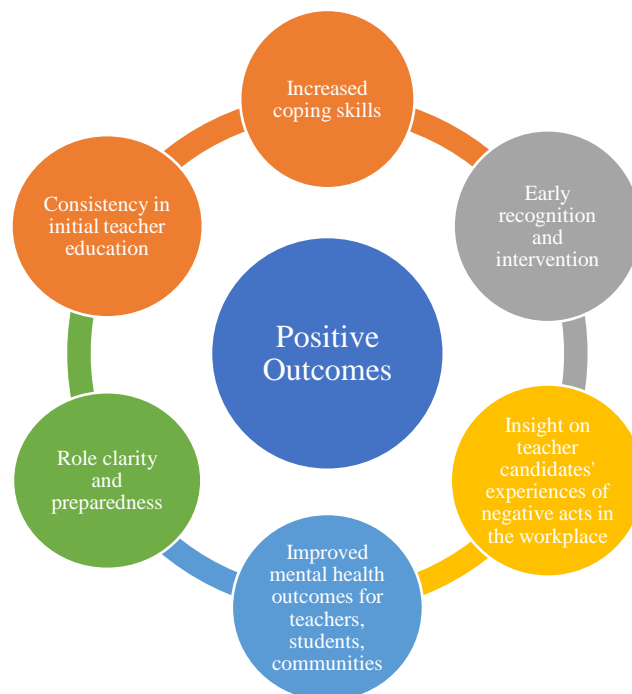


Figure 2. Postulated positive outcomes of enhanced mental health literacy for teacher candidates and the education system in the current study.

Research Questions. The following research questions will be explored to assess the efficacy of this mandatory mental health literacy course for teacher candidates:

1. Are the factors from the four-factor measure of mental health literacy (teaching and leading a mentally healthy classroom; expectancies; professional relational skills; and role clarity) and stigma toward mental illness predictive in practice teaching-related stress among teacher candidates?
2. Does the completion of the mandatory course influence mental health knowledge, positive attitudes, and coping skills?

Chapter 2: Literature Review

Initial Teacher Education in Canada

It is important to explore the current educational climate to help identify gaps and discuss the necessary change in Canadian-based initial teacher education and mental health literacy. A national Canadian education system does not exist. The curriculum is developed solely and independently by each province or territory and implemented through educational programming at the school district and school levels. Schools are divided by region and governed by district school boards that are responsible for the implementation of programming. In Ontario, where the current study is positioned, children and youth are required to attend school until the age of 18 years and enrol in elementary and secondary schooling. Upon completion of these two educational levels, students may enter post-secondary studies to obtain specialized education and training opportunities offered by universities, colleges and trade schools.

Teacher education programs in Canada, although widely offered, differ dramatically from one another with respect to delivery, course structuring and practical experiences provided. Most teacher candidates complete their undergraduate degrees and apply to specialized post-diploma university teacher education programs. Some five-year concurrent programs that combine undergraduate and teacher education exist. Upon application, teacher candidates are required to select a schooling level (elementary, middle, or secondary). If they choose secondary, they also need to choose two 'teachables' (e.g. geography, English, etc.). Teacher education programs are typically structured with academic learning opportunities provided concurrently with experiential learning in the school or community setting.

In Ontario, teacher education, experience and training have undergone modification with each new government and policy change. Good, Clark and Clark (1997) suggests that these

changes are, at times, associated with non-evidence ‘fads’ as opposed to the inner workings of the teaching role. These ‘fads’ can result in rapid changes to educational policy while failing to consider how this impacts teacher education and training. Walker and von Bergmann (2013) argue that teacher education is often seen as “irrelevant or a hopeless player in educational reform” (pg. 68). Teacher education in Canada has experienced radical changes over the past 60 years and is seen to have an unbalance between theory and practice (Walker & von Bergmann, 2013). This research outlines teacher education program ‘transformations’ as follows: in 1960-1980, teacher education was considered “training” and involved “benign government control” (Walker & von Bergmann, 2013, p.69). By 1980-2000, “teacher education penetrated government consciousness as concerns about education quality” and teacher education changed from “training” to “professional learning” giving more power to faculties of education (Walker & von Bergmann, 2013, p.69). However, in 1990-2010, the most considerable shift in teacher education occurred when it started to be considered policy, and subsequently, a “policy problem that could be fixed through government intervention” (Walker & von Bergmann, 2013, p.70). Of importance here is the duality of competing forces of professionalization and deregulation in Canadian teacher education (Grimmet, 2009; Grimmet, Young, & Lessard, 2012).

Professionalization is referred to as accountability, standards and competency-based professionalization. Grimmett (2009) argues that in the early 1990’s, the dramatic shift of teacher education as policy undermined faculties of education perceptions of their professional autonomy. The overarching pressures of government regulation on teacher education created an unbalance between professional control and institutional autonomy. This manifested differently across provinces and inherently threatened, and continues to threaten, teachers’ professional

identities and more broadly, teacher education programs as independent from government control and changing trends (Grimmett, 2009).

The Systems of Initial Teacher Education. Initial teacher education is best understood through an exploration of each part of its multiple and interconnected systems. The first of these systems is the professional regulation of teachers in Canada and includes professional teaching standards. For example, in Ontario, there are five professional standards including practices reflecting a commitment to students and student learning, remaining up to date on professional knowledge, applying professional practice, demonstrating leadership in learning communities, and participating in ongoing professional learning (Ontario College of Teachers, 2017; Ceulemans, Simons & Struyf, 2012).

The second system is the post-secondary education system, where teacher candidates are introduced to the profession. Higher education standards are included in this system and direct that the delivery of initial education must be clearly specified and consistent in each disciplinary field and within the context of that discipline. For example, in Ontario, teacher candidates are expected to have completed a post-secondary degree, and subsequently complete an additional four semesters in a specialized teacher education program that includes 80 days of practice teaching (Ontario College of Teachers, 2017). The completion of these educational and practice requirements is necessary to be eligible for formal, individual accreditation as a professional teacher. When the initial education program demonstrates adherence to professional standards and evidence of a consistent, equitable initial education program, a post-secondary teacher education program (typically located within a Faculty of Education at an accredited university) can become accredited (Ontario College of Teachers, 2014). This term reflects an ongoing requirement for quality assurance (Wergin, 2005; Michelli, Dada, Eldridge, Tamim, & Karp,

2017). The need for policies such as these is critical in fields where professionals provide direct services to the greater public, particularly those that involve complex provisions of care for diverse and vulnerable populations (Zionts, Shellady, & Zionts, 2006). Moreover, it further emphasizes the importance of quality training and education and the need for professional standards and accountability (Zionts et al., 2006).

The third system that is involved is the pre-kindergarten to grade 12 education system, which creates the schools, curriculum and policies within which all teachers –whether expert or novice– must comply with as they teach and work. In terms of hierarchies, the education system in each province is divided into districts overseen by directors, superintendents, administrative staff, principals, and the teachers at each school. Curriculum varies across grades and subjects, and policies can be general (for example, regarding attendance), or specific (for example, regarding students with special needs, including students with mental health concerns). The Ministry of Education determines such policies in each province – the bodies which are also responsible for mandating the curriculum. These policies can be changed at any time.

Teachers and school teams are required to adapt and adhere to such changes. In recent years numerous changes have been made to the curriculum across grades and subjects in Ontario. Examples of such changes include kindergarten becoming a full-day program primarily focused on play-based learning in 2016 primarily, and changes to the health curriculum in 2018 that returned to a version from 1998, and finally –with a few small changes– returned to the 2016 version. The health curriculum also identified specific populations of students, including those with mental health needs, learning disabilities, and Autism Spectrum Disorder. Teachers are required to be aware of specific student needs and implement the comprehensive teaching plans accordingly in their classrooms and school wide.

Furthermore, teachers are also expected to actively implement various policy-related initiatives for distinct populations of students including those with special needs (for example, mental health concerns, physical and developmental disabilities). One example of this came about in 2013, when the Ontario Ministry of Education implemented the K-12 curriculum, ‘Learning for All’, which included a push for data collection and assessment strategies. Across Canada, assessment strategies are currently an integral component of monitoring school successes and student achievement, along with creating accountability between various stakeholders including teachers, the public and the provincial government. Standardized assessment methods, overseen by the Education Quality and Accountability Office (EQAO) were developed by the Ontario government to increase accountability within the education system in 1995. Students are required to complete the Ontario Secondary School Literacy Test testing each year in Grades 3, 6, 9, and 10. Results are compared to the learning expectations as outlined in the Ontario curriculum. Although there is no currently known direct impact of student scores on school administrators or teachers, teachers report feeling an internal pressure to raise test scores to support student success (Volante, 2005; Volante & Jaafar, 2010).

Factors related to accreditation in education. Although accreditation, in general, can be useful in its efforts to maintain quality assurance of professional standards and conduct, accreditation standards in the field of education are often met with controversy (Ducharme & Ducharme, 2017). This is due primarily to the inconsistencies with which professional standards and practices are described, revised, and updated by the province or territory. In Canada, there is no national teacher education accreditation standard. Canada’s *Act of Confederation* (1867) granted provincial jurisdiction over the delivery of all education, and (implicitly) the quality of initial teacher education and training. However, in 2006, the Association of Canadian Deans of

Education developed the Accord on Initial Teacher Education (Association of Canadian Deans of Education, 2006). The purpose of the accord was to collaborate with provincial governments on improving and preserving teacher education programs, although it is not required of Canadian teacher education programs to implement the principles outlined in the Accord.

Although there are policies at the provincial level, they are inconsistent. For example, Ontario currently mandates mental health and well-being curricula. However, not all provinces and faculty of education programs have followed suit (Brown et al., 2019). This change in Ontario curricula is an example of the need to examine the quality of initial teacher education programs. By incorporating mental health and well-being coursework and practical experiences, the quality of the initial training experiences teacher candidates receive can improve and can better prepare them for their transition to their in-service roles.

The Importance of Initial Education for Teachers

Given the variability amongst initial teacher education, curriculum reform, and policy changes, teachers may be left with role ambiguity impacting their efficacy and confidence in their job performance (Papastylianou, Kalia & Polychronopoulos, 2008; Merida-Lopez, & Extremera, 2017). Research suggests that self-efficacy, role clarity, and preparedness can be enhanced through initial education and training experiences (Casey & Childs, 2011; Daniels, Mandzuk, Perry, & Moore, 2011). Teacher candidates who transition to in-service roles with higher perceived self-efficacy from their early education and training experiences were found to demonstrate greater autonomy practices, knowledge of content, reduced negative behaviours toward students, and risk of burnout (Fives, Hamman, & Olivarez, 2007; Daniels et al., 2011).

Teacher candidates should receive education and training experiences that can support them in their future careers. In examining initial teacher education, it is important to account for not

only educational experience but quality-based internship experience, and address ideologies related to personal qualities, the helping profession, mental health, social justice, and equitable education, among many others (Kaur, 2012; Pereira, Lopes, & Marta, 2015; Tang, Wong, & Cheng, 2016; Macbeath, 2011). Failure to account for these elements may lead to reduced success within the field and contribute to detrimental long-term effects throughout career progression and across several other systems (National Research Council, 2000; Tang et al., 2016; Macbeath, 2011). For example, if initial teacher education programs do not address important topics, such as the mental health of students and teachers, teacher candidates may not have the professional training to cope with fast-moving curriculum reform or policy change (Ryan, von der Embse, Pendergast, Saeki, Segool & Schwing, 2017). This can result in increased stress, job dissatisfaction and risk for burnout (Ryan et al., 2017).

Although there is limited research on the experience of teacher candidates, it is further suggested that there is a link between early training and education experiences and the foundation of coping and stress management skills once teachers transition to in-service (Woloshyn & Savage, 2018). New teachers may be challenged with diminished mental wellness, burnout and emotional exhaustion, poor stress management, difficulties in supporting students' complex needs, and skills in promoting social justice, equality, and diversity, resulting in a ripple effect within school systems and significantly impact school success (Kaur, 2012; Ballou, 2012; Davari & Bagheri, 2012; Van Droogenbroeck & Spruyt, 2015). Aside from personal stressors, novice teachers must concurrently navigate new school cultures and environments and develop a personal space in their new roles as they embark on the next stage of their teaching pathway, from pre-service to in-service (Byrne, Rietdijk, & Pickett, 2018).

The development of teaching efficacy is an important consideration to mitigate these adverse outcomes, particularly throughout pre-service experiences (Specht & Metsala, 2018; Ciampa & Gallagher, 2017). Daniels et al. (2011, p.91) suggest the need for maximizing the commitment to teaching, which they define as a “teacher candidates’ psychological attachment to the profession”. Commitment can be maximized through early education experiences that heighten feelings of belongingness, self-confidence and promote professional and emotional growth, and professional adequacy and acceptance (Hagger & Malmberg, 2011; Monsen, Ewing, & Kwoka, 2014; Zeichner, 2003; Gordon & Debus, 2002). Novice teachers who feel confident in their content knowledge and are strongly committed to their roles are more likely to engage as ‘health promoters’ (individuals who demonstrates a willingness to engage in health and well-being education), and are more willing to participate in early intervention and prevention in their school environment (Byrne et a al., 2018).

Craig (2018) describes Fenstermacher’s treatise on the knower and the known in which there is a need for a balance between “propositional knowledge: what teachers should know and do according to experts in the field” with “non-propositional knowledge: what teachers know and do, expressed in their own terms, using their own voices and own word choices” (pg. 301). Teachers who feel they ‘know’ can, therefore, ‘do’ and can readily apply what they have learned (pre-service) and what they are learning (in-service). The ability to balance can be learned through quality-based and practical early education experiences. In the current research, this is illustrated by the proposition that by equipping teacher candidates with mental health knowledge and skills throughout their early education experiences with specific coursework and practical training, they can develop the know-how and self-confidence to access their broader mental

health knowledge in their efforts to promote not only their mental health and well being but that of their students as well.

It is important to note that initial and professional education can yield influences over the personal ideology that a professional may possess about their skill level, competency and confidence to apply their skills (Hosein & Rao, 2017; Van Droogenbroeck & Spruyt, 2015). Professions and professional programs typically engage in the ongoing examination and improvement of their initial curriculum and regulation standards to improve the initial training that their students receive (Tang et al., 2016; Macbeath, 2011; Bethune et al., 2013). These initiatives acknowledge that the profession is populated by individuals who bring forth diversity as reflected in their previous knowledge, practice needs, and strengths. It is hypothesized in this study that strong, quality-based initial education can significantly impact the emerging teachers' ability to perform their role to the best of their ability, based on the understanding that if initial teacher education is poor or lacking, there is a higher risk for negative outcomes for teachers and their students (Darling-Hammond et al., 2009; Darling-Hammond, 2012).

Professional standards and regulations. The Canadian Teachers Federation (CTF) was developed in 1920 to promote professional development, research and advocacy through a quality assurance model. Since the establishment of the CTF, teachers' federations have been developed provincially to help guide professional standards, guidelines, and collective bargaining. In Ontario, there are associations representing teachers at the elementary and secondary school levels, including the *Elementary Teachers' Federation of Ontario* (ETFO), *Ontario English Catholic Teachers' Association* (OECTA), and the *Ontario Secondary School Teachers' Federation* (OSSTF). These *Federations* are responsible for evaluating teacher performance, addressing formal complaints and ethical dilemmas, and supporting collective

bargaining concerning professional needs. Evaluations at the school level are completed solely by principals and senior administration every five years. Although professional development outside that which is sponsored by the Ministry of Education through Ontario School Board, it is not mandated by a regulatory body or by the above-mentioned federations. There is no allocation or funding provided for professional development for teachers, external to the school board. Therefore, teachers may not receive any, or adequate, professional development on topics not prioritized by the Ministry of Education.

The Role, Responsibilities, and Experience of Teachers

The school context provides opportunities to positively impact mental health outcomes, specifically through leveraging mental health literacy in initial teacher education training (Kutcher et al., 2015). However, it is crucial to determine the context in which this can be executed successfully. Before understanding how mental health literacy can be delivered, the role and responsibilities of the educator need to be explored.

The role of teachers. The teaching role has continued to evolve over decades, and teachers continue to face increased pressures to deliver information, support complex needs and behaviours, and maintain currency concerning changes in curriculum and education (Lanier, 1997; McCann & Johannessen, 2005). Simply stated, being a teacher has never been more demanding (Kilderry, 2015). Research indicates that although most teachers are motivated by a positive desire to support their students (Whitley & Gooderham, 2016; Korthagen & Evelein, 2016), they often experience ongoing barriers that prevent them from executing their role in the way they initially hoped and envisioned (McCann & Johannessen, 2005). Research suggests that some new teachers who are often labelled as the ‘best and the brightest’, are likely to leave the profession due to the misconceptions they initially had about their ability to be competent in their

role (Ingersoll & Smith, 2004; Clandinin et al., 2015). Flores and Day (2006) identified three main forces that impact negativity in the context of the teaching role, including initial teacher training, and education, prior influences and school context. Without adequate education, training and support, new and existing teachers are often left without the necessary skills to address complexities in their roles, including the ability to manage their own mental well-being (Goddard & Goddard, 2006).

Changes to the teacher role. As the literature suggests, teachers have many additional responsibilities that, at times, are outside the scope of their initial teacher education and professional development. Within the past decade, the teaching role has intensified to include upkeep with educational and curriculum-based change (Valli & Buese, 2007), time commitment to workload, new data-driven assessment strategies, and a push for technology-based curricula, for example (The Joint Committee on Student and Teacher Time, 2015; Yoon, 2016; McKnight, O'Malley, Ruzic, Horsley, Franey, & Bassett, 2016). *The Education Act* of Ontario requires that all teachers act *in loco parentis*, where teachers may be naturally or legally mandated to act as a temporary parental guardian for a student (Podis & Podis, 2007). Essentially, this role requires the teacher to provide a higher standard of care and accountability for any wrongdoings on the part of the student in which the teacher would be held criminally responsible (The Alberta Teachers' Association, 2013). Additionally, standardized testing and changes to the curriculum have resulted in a heightened cynicism amongst teaching professionals who experience their role as constantly controlled and changing (Kilderry, 2015). The increased accountability of teachers can create an overload of stress and poor coping mechanisms if the teacher does not possess the necessary skills and training to manage these responsibilities and changes accordingly.

There are additional system-level complexities that layer onto increased pressures that teachers face to be successful in their roles. Teachers are increasingly becoming pressured to implement curriculum change and data-driven assessment strategies to continuously monitor student performance (Burris & Keller, 2008; Alstete & Beutell, 2004; Datnow & Hubbard, 2016). The push for a large-scale assessment in education centers on the need for ‘educational accountability’, where test results can serve as markers for how children are being taught and the quality of teaching they are receiving (Copp, 2019; Firestone & Donaldson, 2019). In conjunction with needing to learn new forms of assessment to monitor student progress, teachers are also required to stay up to date with curriculum changes. In 2017 in Ontario, in response to declining math performance on Education Quality and Accountability Office (EQAO) achievement testing, changes were made to the math education policy. However, the role of teachers within the reform process was not clear or mentioned (Ashraf, 2019). Curriculum change is often fraught with limited teacher input (Ashraf, 2019). It is typically a ‘top-down’ approach with mandated changes initiated by the government and expectations for teacher implementation despite the nonexistence of preparation, input, or support (Ashraf, 2019; Cohen & Mehta, 2017).

Recently, mental health has become an essential and prominent aspect of school and community-based initiatives. In Canada, schools are reporting higher prevalence rates of mental health and behaviour-related concerns and referrals to their professional staff for student-related support (Mental Health Commission of Canada, 2012). However, the influx of referrals to professional staff are not always appropriate (Fagan & Wise, 2007), suggesting that teachers are frequently ill-equipped with the knowledge, confidence, or expertise to identify which concerns require referral and how to intervene in the context of their classrooms. Without previous

training or knowledge, it is difficult for teachers to know what constitutes ‘best practice’, including how to identify red flags in a child’s behaviours, recommending resources, and when to ask for additional support. Mental health knowledge is not a mandatory component of initial teacher education and once in-service, teachers are left to fend for themselves.

Teachers and occupational health. Despite its importance, the mental health and well-being of teachers is another area that has received little attention (Lever, Mathis, & Mayworm, 2017). There is currently no mandated policy or legislation that promotes or addresses teacher well-being or a psychologically safe workplace. Ontario’s *Occupational Health and Safety Act* (2012), although recently revised to support workplace violence incident reporting, clearly indicates that there are limitations around teachers engaging in work/task refusal and does not mandate a psychologically safe workplace. The *National Standard of Canada for Psychological Health and Safety in the Workplace* (2013) was developed to provide workplaces with voluntary guidelines, resources, tools and guidance for organizations to promote mental health and reduce the risk of psychological harm in the workplace. Despite its development, it is not mandatory.

Without an acknowledgement of the need for an improved foundation in their initial education and quality preparation, teachers may be increasingly isolated from the necessary support or training. Believing they are ill-equipped to address the needs of their students while balancing the changing expectations of their roles, teachers are reporting an increased rate of disengagement and burnout; research demonstrates the significance and importance of workplace wellness, and its link to role disengagement, which has been identified as a contribution to increasing rates of teacher attrition (Datnow & Hubbard, 2016; Stone-Johnson, 2016; Yoon, 2016).

Initial Teacher Education and Mental Health Outcomes

Despite the desire from all sectors for relevant and consistent initial teacher education, professional standards and practices that meet the needs of teachers, students and communities, curriculum reform, changes in expectations, and the increasing demands of student needs, initial teacher education programs often fall far short in addressing other factors that may how teachers, students, and schools succeed; examples include the relationship between student mental health and well-being with teacher mental health and well-being and job satisfaction. Research suggests that student achievement and learning are directly associated with teacher quality (Michelli et al., 2017; Summers, Davis & Hoy, 2017). Some researchers suggest that minimal changes to the teacher role, including teacher reassignment, can result in adverse outcomes for students (Atteberry, Loeb, Wyckoff, 2017), and are even more pronounced for students with mental health concerns.

Teacher mental health. With the increasing pressure for teachers to provide suitable programming and meet increasingly numerous and complex education expectations and standards, they are at a heightened risk for developing mental health concerns themselves (Bernotaite & Malinauskiene, 2017; Ozu, Zepeda, Ilgan, Jimenez, Ata, & Akram, 2017). Although research in this area is limited, there is some evidence to suggest that teachers are more likely to report depression, anxiety, mental exhaustion, and withdrawn behaviours compared to those in other roles in the education system (Chang, 2009; Macdonald, 1999; Schaefer et al., 2012; Wang et al., 2015). These conditions and experiences may underpin factors such as increased isolation, lack of support and changing expectations, and may contribute to increased attrition rates amongst teachers. For example, in the United States, attrition amongst educators may be higher than in other professions, with rates as high as 40% to 50% within the first few

years after graduation (Ingersoll et al., 2014; With, 2017). Additionally, attrition rates for U.S. teachers have increased from 30% to 50% over the past 40 years, with 50% of teachers leaving their positions within five years and one-third quitting within three years (Wang et al., 2015; DeAngelis & Presley, 2011). These percentages highlight the need to explore these important concerns in a Canadian context.

Economic impact of poor teacher mental health outcomes. Some scholars suggest that failing to account for increased attrition rates amongst teachers and reports of poor mental health and wellness, including maintaining quality within initial teacher preparation programs, will likely account for fewer individuals seeking to participate in teaching roles (Sutcher et al., 2016). This lack of accountability may result in a teacher shortage (Sutcher et al., 2016). A recent demand-supply analysis examining teacher shortages in the United States estimated that by 2020, 300,000 teachers would be needed per year, and this figure would continue to increase by 16,000 teachers annually (Sutcher et al., 2016). Importantly, the economic cost of increasing teacher attrition has been estimated to be very high. Statistics suggest that the cost to replace teachers in the United States who take voluntary leave is approximately \$20,000 per teacher and nationally approximates \$8.5 billion dollars per year (Carroll, 2007; Podolsky et al., 2017). In a 2017 report by the Ontario College of Teachers, graduates applying to teacher education programs dropped by 12,399 in 2015 to 5,480 by 2018 due to the lack of available jobs. Northern Canada faces additional barriers, particularly in regions providing service to First Nations, Aboriginal, or rural communities. Teacher candidates have fewer incentives to apply for work experience or remain in the region and are more likely to live, work, and remain in urbanized areas (Kitchenham & Chasteauneuf, 2010).

Specialization and student needs are another important consideration. Diverse urban populations include English as a Second Language learners, differences in access to the social determinants of health, and complex learning and behavioural needs. Teachers require a comprehensive ‘toolbox’ of skills, training and workplace experience to tackle and support these needs. It is evident that despite the completion of initial education and meeting the minimum requirements outlined by a governing body, many teachers continue to lack the necessary preparation to thrive and appropriately support themselves and their students.

The Need for Mental Health Literacy in Schools

Despite the success of certain school systems in supporting mental health needs, research suggests there continue to be numerous barriers in doing so (Mendenhall, Iachini, & Anderson-Butcher, 2013). Educators and school personnel are generally ill-equipped to recognize and manage mental health-related needs due to a significant lack of preparedness during their initial education and early training experiences (Frauenholtz et al., 2015). Moreover, although some schools have piloted education-based programming for their staff and students, research suggests limited gains in their efforts (McLuckie et al., 2014; Wei, Hayden, Kutcher, Zygmunt, & McGrath, 2013). Importantly, the long-term impact of these pilot programs has yet to be explored, including the global understanding of how mental health literacy can be best applied in the context of the school system.

Research suggests that mental health learning is best applied when it is taught practically so that it is transferable within and beyond the classroom (Dods, 2016). Mental health literacy represents the knowledge, skills, and beliefs that influence the relationship between the student and teacher and include constructs related to social justice, equity, and advocacy (Dods, 2016; Kutcher et al., 2013). When it is successfully applied, it can include prevention, early

recognition, and early intervention, including a reduction of stigma related to mental health (Bourget & Chenier, 2007). However, these early intervention skills are beneficial when learned in early training and education experiences since they form teachers' foundational understanding of mental health. The school system can be a useful setting in the application of these learned skills given that educators and school-based personnel have universal contact with parents and children who spend most of their time at school (Rones & Hoagwood, 2000; Frauenholtz et al., 2015).

When mental health literacy is incorporated into the classroom, it is posited that access to care can result in symptom reduction, and a reduction of mental health stigma can be achieved (Jorm, 2012; Reavley & Jorm, 2011; Kutcher & Wei, 2014; Kutcher, Gilberds, Morgan, Greene, Hamwaka, & Perkins, 2015). Given this evidence, the inclusion of mental health literacy in initial teacher education can potentially shift paradigms regarding the significance of growing mental health issues at school and the need for early intervention.

The Ideals for Initial Teacher Education and Mental Health Literacy Promotion

The literature suggests there is a need for both formal and informal skill development in which initial education would utilize theoretically based teachings and practices as a two-fold learning strategy (Parding et al., 2017). Researchers recognize the growing intensification of the teaching role in terms of work productivity and curriculum change and suggest that in order to meet these increasing demands, this style of competence development would need to be quality based and continuous (Parding et al., 2017). Moreover, other important factors including the need for the inclusion of mental health literacy, have yet to be thoroughly explained among initial teacher education programs in North America.

Scholars further highlight the gap in initial teacher education between learned knowledge and application, despite the implementation of numerous school programs and early promotion (Weston et al., 2008). Although some programs aim to include mental health as a factor for supporting students, it fails to be addressed in a manner that reflects suitable intervention and support within the context of schools (Moon et al., 2017; Graham, Phelps, Madison, & Fitzgerald, 2011). Research suggests that teachers lack the knowledge and confidence to recognize and support mental health-related concerns, including a lack of positive self-care and coping strategies to manage their stress levels (Weston et al., 2008; Moon et al., 2017). Findings from a study on teacher candidate mental health and help-seeking behaviours reported that teacher candidates were unsure how or when to access support (Uzman & Telef, 2015). Other scholarly research findings indicate that teachers report negative perceptions and inadequate preparedness regarding mental health in their classrooms across North America (Moon et al., 2017).

Mental health literacy in the initial education framework. Although research recognizes ongoing concerns and suggests the critical need for mental health literacy within initial education for teachers, a significant gap regarding the specification of how to execute it exists (Moon et al., 2017). Weston et al. (2008) indicate that initial education must involve a clear conceptualization of mental health that can be delivered in a school context. The foundation of their framework includes six fundamental principals, including the provision of learning supports, an understanding of key policies and laws, communication and relationship building, collection and use of data, engagement in multiple systems, and a focus on professional growth and well-being. Furthermore, they emphasize the importance of stigma-reduction through consistency in terminology, including the use of the term ‘mental health’ instead of ‘mental illness’ or other

negatively bound terminology (Weston et al., 2008). The need for a culturally relevant framework that is rooted within a whole-child perspective is also highlighted (Weston et al., 2008). This whole-child perspective suggests that to support students successfully, they must be viewed as a central component of a more extensive, multifaceted, interconnected system that is influenced by numerous environments (Lewallen, Hunt, Potts-Datema, Zaza, & Giles, 2015). To date, these strengths-based ideologies have yet to embody a cohesive framework aimed to prepare teachers for their roles and enhance their abilities to feel equipped to manage their mental health as well as that of their students.

Mental Health Literacy and Wellness

Large-scale research indicates that in the past decade, the teaching workforce has experienced a significant increase in anxiety, depression, and stress-based leave, replacing physical ailments and injuries as the primary health problem for this large population (Anderko, Roffenbender, Goetzl, Millard, Wildenhaus, DeSantis, & Novelli, 2012). The lack of prevention and support, increased stigma, and an absence of health literacy are among the major contributing factors to this problem (Anderko et al., 2012). Jorm (2012) reports that, on average, individuals refrained from accessing mental health supports simply due to their lack of awareness about their symptoms and related concerns. Specifically, his research reports a significant delay in accessing mental health related support of an upwards of 8.2 years, and an average of 6.9 years before recognizing any concerns were present (Jorm, 2012).

Based on current research, it is posited that by appropriately addressing these factors, it is possible to shift the landscape for new teachers. Non-traditional settings including higher education institutions, are suggested as the ideal sites for initial wellness promotion and early prevention (Anderko et al., 2012).

The role of post-secondary education. Although many university and college campuses have implemented wellness and other support services within Canada and the U.S., it has yet to be incorporated into professional program curricula, and in many cases, policy. If incorporated correctly and during initial education, it is hoped that new teachers can increase their level of mental health knowledge and achieve heightened personal wellness and a reduction of stigma-related attitudes towards accessing care and support (Slade, 2010; Leadbeater, 2010; Pinfold, Toulmin, Thornicroft, Huxley, Farmer, & Graham, 2003).

Student wellness in schools. Currently, there is a lack of research in the implementation of mental health literacy into initial teacher education programs. However, research on the student population has produced findings that demonstrate mental health literacy programming is associated with a change in knowledge and wellness and a reduction of stigma. *Building Wellness*, a health literacy-based curriculum, targets children from low-income families and promotes physical activity, positive health strategies, and knowledge about health management (Diamond, Saintonge, August & Azrack, 2011). After approximately three years of initial implementation, early findings suggest a significant increase in knowledge and improved health behaviours (Diamond et al., 2011). A Canadian-based study evaluating the *Mental Health & High School Curriculum Guide* (The Mental Health Curriculum Guide) and teacher training on mental health in secondary schools reported significant increases in educators' knowledge and attitudes by educators (Kutcher et al., 2013). Other programs that focus on mental health literacy, specifically with students, including *Mental Illness Education*—an Australian based program—found modest improvements in stigma and attitude towards mental health but indicated significant improvements in mental health knowledge and the recognition of symptoms (Rickwood, Cavanagh, Curtis, & Sakrouge, 2004). The *Mental Health Awareness in Action*

program in the United Kingdom also found significant improvements in students' knowledge and stigma after only two, one-hour information sessions, including sustained improvement at a one-month follow-up (Pinfold et al., 2003).

Teacher resilience. Increasing teacher resiliency throughout their initial education is identified as another integral factor in promoting teacher wellness and preparedness (Day & Hong, 2016). Resilience refers to “the process of, capacity for, or outcome of successful adaptation despite challenging or threatening circumstances” (Masten, Best, & Garmezy, 1990, p. 426). Teachers who can be resilient and maintain teaching efficacy are likely to persevere through stressful circumstances and can quickly access suitable resources and tools for early intervention (Mankin, von der Embse, Renshaw, & Ryan, 2017). However, it is imperative to note that although experience is required to build expertise in mental health literacy, it is not required (Ward, Grudnoff, Brooker, & Simpson, 2013; Bostock, Kitt, & Kitt, 2011). Therefore, the present study posits that the quality of the content and dissemination of the information throughout initial education is critically important. For teachers to build resilience and develop integrated wellness strategies, they must first be introduced to what wellness entails, and furthermore, require entrance into a system that promotes it. Without these factors, it is unlikely there will be consistency amongst all teachers whether they are trained in the same way or not (Ward et al., 2013). Moreover, lifelong wellness as a teacher requires lifelong learning; wherein, Ward and colleagues (2013) suggest the need for the inclusion of skill development throughout the ‘three I’s’ in teacher education. The ‘three I’s’ include: initial teacher education, induction, and in-service learning.

Stress and the Teacher Experience

It is evident that teachers are not exempt from heightened personal and occupational stress given their lack of early training, adequate support, complexities regarding the provision of care they are mandated to provide, and exceedingly-high pressures to meet the standards for education and curriculum change (Kilderry, 2015; Yang, Ge, Hu, Chi, & Wang, 2009).

Unsupported stress can result in the chronicity of symptoms, subsequently leading to job strain, emotional exhaustion, psychological distress, burnout, and eventually, taking stress-based work leave (Ingersoll, 2001; Yang et al., 2009; With, 2017). Moreover, work-related stress, particularly for teachers, stems primarily from a mismatch between the capabilities of the teacher, their ability to access and utilize resources, and their capacity to meet the requirements of their workplace (Mei-Ju, Hsing-Ming, & Ho-Tang, 2016).

Violence against teachers. Given that teachers have the most direct contact with their students, they are crucial in guiding student success and developing competency from their previous training and skills to address and support complex student needs (King & Newman, 2000). Some scholars suggest there continues to be a great divide between teachers' abilities to transfer what they have learned throughout their initial education to the classroom (Zionts et al., 2006), including the holistic understanding of what the teaching profession entails (Pereira, Lopes, & Marta, 2015). Ongoing inconsistency, inadequate preparedness during initial education, and the intensification of productivity in the education system has led to a lack of quality education for students and poor work performance by their teachers who have been unable to evolve with it (Brown, Lee, & Collins, 2015).

Teachers who are unequipped in this manner may be at a heightened risk to experience victimization in the workplace (e.g., bullying and violence), given that they lack control of their

surroundings, and at times, their students and school personnel (Boshoff, Potgieter, van Resnburg, & Ellis, 2014; Wilson, Douglas, & Lyon, 2011). Dzuka and Dalbert (2007) indicated that 55% of the teacher respondents in their study had reported at least one act of violence during their tenure, including physical threats or assaults, indirect harmful behaviours, direct verbal abuse, or taken and destroyed property. The *National Center for Education Statistics* in the United States reported results from a survey of 253, 100 teachers, which indicated that 7% of the workforce were assaulted or threatened by students (Dinkes, Cataldi, Lin-Kelly, & Snyder, 2007). An earlier study in 2009 by the *Institute of Education Sciences* on crime and safety found that 11% of principals reported students being verbally abusive to their teachers in middle and high school (Espelage et al., 2013). In 2011, a study by the American Psychological Association of 3000 K-12 teachers found that approximately 80% of teachers reported having felt victimized by students, parents, and/or colleagues within the past year (Espelage et al., 2013). Moreover, more than half reported past incidents of victimization by students and parents (Espelage et al., 2013).

Although the impact of violence against teachers requires further exploration, victimized teachers are likely to develop clinical disorders including posttraumatic stress disorder, depression, anxiety, sleep disturbances and a fear of attending work (Wilson et al., 2001; Gluschkoff et al., 2017). Other research suggests that this level of chronic stress and fear can inherently impact teacher satisfaction with their personal life and a significant reduction of their overall well-being, coping skills, and resiliency (Wilson et al., 2001; Dzuka & Dalbert, 2007). Currently, in Canada, there is a significant knowledge gap in this area, suggesting the vital need for further exploration of the teacher experience.

Positive stress. Despite these important concerns, there are numerous positive factors that can mediate the effects of stress including individual capacity, perception, and the ability to appropriately utilize personal and social resources (Louw & Viviers, 2010; Boshoff et al., 2014). Positive stress is a normal part of healthy development that can enhance the individual's ability to cope with stress (Center on the Developing Child, 2017). Teachers who receive quality initial education to manage early stress and recognize the differences between positive and toxic stress are likely to implement the necessary skills and strategies to reverse negative outcomes. Addressing myths and increasing knowledge about the teaching profession during initial education can reduce stress and can facilitate better classroom management and personal coping (Geng & Midford, 2015; Geng, Midford, Buckworth, & Kersten, 2017). This type of initial education supports individual understanding of the differences between unhealthy stress and healthy—or positive—stress. Positive stress can contribute to existing personal qualities, including a desire to excel as a teacher, and has been found to lead to better health outcomes (Folkman & Moskowitz, 2004; Mujtaba & Reiss, 2013). Research indicates that an awareness of the onset of stress symptoms can be utilized to change the impact of stress on the cardiovascular system and subsequently reduce depression and anxiety symptoms (Seligman, 2008; Mujtaba & Reiss, 2013; Park, Peterson, & Seligman, 2004).

Coping strategies. With respect to healthy coping strategies and stress management, research suggests the importance of individual self-awareness (Richardson & Shupe, 2003; Schussler, Stooksberry, & Bercaw, 2010). Specifically, teachers are encouraged to develop awareness in recognizing that students will impact their mental and emotional processes and vice versa (Richardson, 2001; Richardson & Shupe, 2003). Teachers who can develop this level of self-awareness can subsequently learn to uncover their emotional triggers and augment the

circumstances that may cause negative feelings and future psychopathology (Richardson & Shupe, 2003). However, this strategy requires development before professional teaching, wherein individuals are encouraged to reflect on their own personalities and psychological history that has shaped their current worldview (Long, Morse, & Newman, 1996; Richardson & Shupe, 2003; Schussler et al., 2010). Other reflective practices, including journal-writing before and during professional teaching, are useful in supporting increased self-awareness (Farrell, 2013). By developing the skills to exercise personal and conscious control over these triggers, teachers can become empowered in managing their stress and reducing their susceptibility to other adverse factors (Richardson & Shupe, 2003).

Accessing social support can also be conducive to managing teacher stress wherein teachers are encouraged to access peer support or resources that provide assistance, including information- or emotion-based (Yu, Dong, Wang, & An, 2016). This strategy is referred to as active coping and is known to provide immediate counterintuitive effects to impending negative stress (Yu et al., 2016; Kim, Han, Shaw, McTavish, & Gustafson, 2010). Active coping skill development can be achieved through early peer mentoring and peer supports in initial teacher education (Mukeredzi, 2017; Le Cornu, 2007). Specifically, teachers can develop enhanced skills through team teaching, role modeling, instruction and feedback, counselling one another, and challenging false beliefs or misconceptions throughout each phase of their training (Mukeredzi, 2017). Ingersoll and Strong (2011) report that social support for teachers can further promote healthier coping, better adjustment to the classroom, a stronger commitment to the profession and a desire to facilitate student achievement.

Theoretical Underpinnings

Self-determination theory (SDT). Quality initial teacher education and training that promotes skill development in numerous areas including mental health literacy and personal wellness matches the framework of self-determination theory (SDT). SDT encapsulates the driving factors that support human motivation concerning life goals, psychological needs, self-regulation, unconscious processes, and the way the environment impacts an individuals' affect, well-being, behaviour, and motivations (Deci & Ryan, 2008). Mainly, SDT can explain which behaviours are necessary for individuals to self-manage and adapt (Veenker & Paans, 2016) through three basic psychological needs including relatedness, competence and autonomy (Korthagen & Evelein, 2016). Relatedness refers to the experience of being connected to others, the experience of providing care, and to feelings of belongingness (Ryan & Deci, 2002; Korthagen & Evelein, 2016). The ability for teachers to develop healthy relationships between their students, colleagues and parents, can reinforce positive outcomes (Evelein, 2005). However, when relatedness is negatively impacted, and the desire for connection is not met, outcomes change to protect and support the individuals' adjustment to their new circumstances, resulting in heightened feelings of withdrawal and depression (Korthagen & Evelein, 2016).

The second psychological need of competence in SDT is referred to as effectance motivation which is the desire to influence one's environment and manage any adverse outcomes that arise within that environment (Elliot, McGregor, & Trash, 2002; Korthagen & Evelein, 2016). Teachers have an inherent desire to be competent within their roles and in supporting their students. When this is threatened, or competence is weak, teachers are likely to overcompensate. They can develop negative mental health outcomes including anxiety, uncertainty, a lack of self-

confidence, and a desire to leave their role (Skinner & Edge, 2002; Korthagen & Evelein, 2016), emphasizing the need for strong skill development during initial education.

Lastly, autonomy refers to the need for individuals to experience harmony between their experiences, behaviours, and their self-image (Korthagen & Evelein, 2016). The fulfillment of autonomy can provide a teacher with the knowledge, understanding, and ability to make decisions to drive their professional and personal development further (Korthagen & Evelein, 2016; Evelein, 2005). When autonomy is absent, the teacher is likely to become defensive, indignant and resistant to external factors (Korthagen & Evelein, 2016). This phenomenon is currently evident with the inconsistency in initial teacher education, preparedness, and increasing pressures related to curriculum change and education reform, leaving teachers without the means to exercise control (Fullan, 2000; Burris & Keller, 2008; Alstete & Beutell, 2004; Datnow & Hubbard, 2016).

Social ecological theory. Social ecological theory is a useful framework for promoting and increasing health-related knowledge and practice and understanding barriers to the development of competence and skill (Stokols, Allen, & Bellingham, 1996). This theory posits that the attitudes and behaviours of individuals are shaped by pre-existing, multilevel network systems, including family, social networks, employment, schools, communities, and others (Bronfenbrenner, 1976; Espelage et al., 2013). The smallest system, or the microsystem, is one that includes individuals who have ongoing direct contact with family, friends, and work colleagues (Espelage et al., 2013). The interactions that occur between this system, known as the mesosystem, include teacher and student interactions and relationships (Espelage et al., 2013). The exosystem refers to a context that may not always have direct contact but can be indirectly influential through the microsystem, such as school policies and codes of conduct (Espelage et

al., 2013). The macrosystem is the largest layer and contains influences that are more abstract, such as customs, traditions, cultural values, and beliefs (Espelage et al., 2013). Lastly, the overarching historical context is called the chronosystem, which refers to internal events, such as low competence, self-confidence, and susceptibility to stress and poor wellness, and external events, such as relocation to a new school or classroom, or ongoing curriculum reform and policy (Espelage et al., 2013).

Quality initial teacher education can influence many of these interconnected systems by appropriately preparing teachers and enhancing their understanding of the teaching profession. By equipping teachers with the skills, competence, and knowledge to manage their own personal wellness, it is posited that they will develop the capacity to augment negative internal and external events (Mankin et al., 2017). Through enhanced skill and preparedness, teachers may become better equipped to discern the complex needs of their students and exhibit competence in recommending and utilizing appropriate resources and tools (Weston et al., 2008). Through this framework, this process is multifaceted and influenced by numerous factors and systems. Therefore, it is essential that initial education is carefully examined to be representative of mental health learning, and that this learning is consistent amongst higher education institutions and practicum training experience (Cochran-Smith, Ell, Grudnoff, Haigh, Hill, & Ludlow, 2016).

Chapter 3: Methodology

This research study aimed to examine the effects of a mandatory, online mental health literacy course for teacher candidates enrolled at a large central Canadian University on selected outcomes by utilizing a program evaluation approach. Specifically, by collecting and assessing quantitative and qualitative data, this study explored teacher candidates' attitudes about their mental health, mental health literacy, coping skills, and appraisals of previous negative experiences in the workplace and stress.

The Usefulness of a Program Evaluation

In the past decade, program evaluation has become an important and useful research method, with demonstrated positive outcomes (Tuononen, Parpala, & Lindblom-Ylänne, 2018; Chen, 2012; Chen, 2010). Despite the limited research on program evaluation and professional education programs, there is also a growing interest in health-related graduate programs, including nursing and medicine (Balmer, Rama, & Simpson, 2019; Nagge, Lee-Poy, & Richard, 2017; Henderson, Dalton & Cartmel, 2016). Program evaluations can provide comprehensive information about the strengths and needs of the program and create opportunities for improvement. There are typically three commonly used phases of a program evaluation, including a needs assessment, formative evaluation and summative evaluation (Bell & Cowie, 2001). An example of a needs assessment was conducted by Rodger et al. (2014) to shape a mental health curriculum for Canadian teacher education programs. Such needs assessments can (1) support the cultivation of programs, (2) perform a formative evaluation of the researcher or evaluator supporting the development of the program through pre-tests, and (3) lay the groundwork for a summative evaluation once the program has been implemented (Bell & Cowie, 2001; Villachia, Stieha, Giacumo, Becker & Fenner, 2019). Effective and comprehensive

program evaluations typically include all three phases. Bell and Cowie (2001) suggest the importance of the following four principles necessary for developing program goals and explication: (1) the program goals must match what the program is aiming to achieve; (2) the program evaluators working with program developers and decision-makers will benefit the reliability of the evaluation outcomes, and the program itself; (3) it is important to collect and explore empirical research to develop appropriate and realistic program goals; and (4) program evaluators and program developers must be aware of the potential positive and negative impacts of the program goals (e.g., side effects).

Program evaluations can provide useful information regarding the need for necessary change, gaps, and areas for improvement. As Bell and Cowie (2001) indicate, by including program developers, evaluators and participants in the program evaluation process it is possible to increase the likelihood of clarifying and identifying important needs. Villachica and colleagues (2019) examined the gap in early training and work readiness for graduate students. Utilizing a formative evaluation in their program evaluation of Masters-level students, they found that by evaluating their current educational programs they were able to conclude their students lacked professional skills training. Their summative evaluation allowed them to develop a career coaching course which supported students with identified appropriate job opportunities and improved their overall career readiness. Another example is found in a program evaluation by the University of Saskatchewan's, College of Medicine (2016), where it was determined that student involvement was a critical factor in the development and outcomes of the program. Student involvement included student feedback, performance, and goals and objectives through self-assessment which was incorporated through the needs assessment, and formative and summative evaluations.

However, despite widespread knowledge about the need and benefits of program evaluations, it remains challenging to develop expertly prepared evaluations, particularly within professional education programs (Sink & Lemich, 2018). Although educational institutions such as universities and colleges readily partake in the evaluations of their programs and courses, the application of their outcomes is not always known, and there is an uncertainty in the extent to which student feedback is incorporated in the quality improvement process. Furthermore, program evaluations are seldom applied to the broader education system, specifically for pre-service and in-service teachers. The changing nature of schools and educations makes this an important area for development.

With frequent changes in the political arena, teachers are left vulnerable to unfavorable outcomes including role ambiguity, increased role pressures and supporting mental health concerns without adequate pre-service training (Conley & You, 2018; Brown et al., 2019; Gray, et al., 2017; Blase & Blase, 2006). Program evaluations can provide vital information on identifying the specific concerns within the school system, and more importantly, how to address them. Darling-Hammond (2012) argued that including teachers in school-based program evaluations increases the legitimacy and utility of the overall system. Essentially, by involving teachers in evaluating and making decisions about their roles, it is possible to positively support the type of teachers they may become (Heinz, 2015). Researchers suggest that teachers are not only the ‘center’ of the largescale education system, but their career motivations, beliefs, and attitudes significantly influence their performance in the roles (Klassen & Chiu, 2010; Watt, & Richardson, 2008). By using a program evaluation approach, it is possible to incorporate teacher attitudes and perceptions about the gaps in preparation for their roles. Murphy, Chang, and Dispenza (2018) found that program evaluations can enhance, justify, and improve programs and

future interventions. This approach can essentially answer the questions ‘what works’ and ‘what does not work’.

An important component of an effective program evaluation framework is the inclusion of a variety of techniques and research strategies, including quantitative and qualitative methods. Pluye and Hong (2014) suggest that mixed methods (research combining qualitative and quantitative research questions and designs) have been an integral part of program evaluations for decades. This type of research design supports a deeper understanding of phenomena (qualitative data) and examines research gaps by measuring causes, effects, and trends (quantitative data) (Pluye & Hong, 2014). This approach remains the ‘gold standard’ according to Onwuegbuzie and Johnson (2006) who suggest that when executed well, mixed methodology can offer four positive rationales, including: (1) “participant enrichment” in which quantitative and qualitative techniques are applied within the sample; (2) “instrument fidelity”, maximizing the utility of the quantitative and qualitative data being utilized; (3) “treatment integrity”, which includes how mixed methods assess the fidelity of the treatment program; and (4) “significance enhancement”, ensuring there is a combination of mixed methods techniques to optimize the way researchers can interpret the data (p.54). These rationales, when used in conjunction, can optimize the effectiveness of a program evaluation and were utilized in the current study.

Although this program evaluation research study lacks the ‘rich and thick’ qualitative data that is a necessary part of a mixed methods approach, it incorporated both quantitative and qualitative techniques for data collection to explore the usefulness of a mandatory course on mental health literacy for teacher candidates. Pinderup (2018) indicates that to fully encompass and identify existing knowledge, attitudes, and practices of mental health practice, researchers need to include comprehensive questionnaires, interviews, field observations and other

opportunities to explore significant change in mental health literacy. This program evaluation utilized comprehensive questionnaires and aimed to examine and address the current and significant gaps in the education system, specifically within initial teacher education. As research suggests, there is a lack of pre-service training and preparation for teachers. Without adequate pre-service training, teachers are at a significant disadvantage in performing their roles to the best of their abilities, which can impact their success in supporting the complex needs of their students. Given the increased reports and widespread media focus on mental health and well-being, it is important that pre-service training equips teacher candidates with the skills and knowledge to take care of themselves and their students. The following program evaluation aimed to address these concerns by examining the following aspects related to pre-service training and mental health literacy:

- 1) Are the factors from the four-factor measure of mental health literacy (teaching and leading a mentally healthy classroom; expectancies; professional relational skills; and role clarity) and stigma toward mental illness predictive in practice teaching-related stress among teacher candidates?
- 2) Does the completion of the mental health literacy course influence mental health knowledge, positive attitudes and coping skills?

Demographic Information

This program evaluation study examines the efficacy of a mental health literacy course implemented for 269 second year Bachelor of Education (B.Ed.) students enrolled at a large central Canadian University. The quantitative and qualitative data was collected one week before the course began in October 2016, and one week after the course finished in February 2017. At the first time point, demographic information was collected about participants' gender, year of

study, cohort specialty, previous degree, previous training/learning in mental health, and experiences of mental health support. Participants were also asked to complete the Negative Acts Questionnaire Revised-US (NAQR-US), a four-item measure that explores experiences of negative acts in the ‘workplace’ which is described further in the next section.

Measures

Mental Health Literacy – Curriculum Resource Evaluation Tool (MHL-CR). This measure was developed by researchers from across Canada as part of the National Pre-Service Teacher Curriculum Project, a free curriculum resource, and designed to evaluate pre-service teachers’ mental health literacy using the model of mental health literacy. Items were selected from a larger test bank, to represent the content from the Curriculum Resource that was presented in the course. A total of 47 items were selected from three sections, including Section A: Mental Health Knowledge (34 True/False items), Section B: Stigmatizing Attitudes Toward Mental Health (8 items rated using a 7-point Likert scale (1= strongly disagree; 7 = strongly agree), and Section C: Help Seeking, or Behavioural Comfort (5 items rated using a 7-point Likert scale (1= strongly disagree; 7 = strongly agree). Items included: *“Mental health literacy is focused on reading about current treatments of specific mental illnesses”*; *“Most students will experience toxic stress daily”*; *“I would be willing to have a person with a mental illness at my school”*; *“I would be likely to see help if I am concerned about my own mental health”*. High scores on this non-standardized measure suggest high levels of mental health literacy (see Appendix A for all measures).

The Mental Health Literacy Questionnaire (MHLQ). The MHLQ was developed by Rodger, Johnson, and Weston (as described in Hatcher, 2018) to evaluate mental health literacy for educators. In brief, it uses Self Determination Theory (SDT; Deci & Ryan, 2002). SDT posits

that there are three basic universal needs which are shared by all of humanity, autonomy, competence, and relatedness. These three basic needs were reflected in the development of the MHLQ, by formulating questions for pre-service teachers around their sense of responsibility; their feelings of competence in relation to promoting their own mental health, as well as identifying and coping with mental health issues among their students (including the management of behavioural and emotional problems in the classroom); and asking questions in relation to communication and dealing with conflict with others in a school setting. It is comprised of 44 items on four scales: Teaching and Leading in a Mentally Healthy Classroom (Cronbach's alpha = .941), Role Clarity (Cronbach's alpha = .924), Professional Relational Skills (Cronbach's alpha = .884), and Expectancies (Cronbach's alpha = .959) with response items on a 5-point Likert scale (1= strongly disagree; 5 = strongly agree). Items included: *"I know the steps to take to make a referral for my student who seems to be struggling with behaviours or emotions"*, *"I can create a classroom that is emotionally safe for all students"*; and *"I can help/support others (teachers) cope with their stress"*. High scores on this instrument indicate high levels of mental health literacy.

The Negative Acts Questionnaire Revised-US (NAQR-US). The NAQR-US is a four-item, standardized measure that utilizes parsimonious predictors of 'workplace' bullying, job satisfaction, and intent to leave (Cronbach's alpha = 0.82) (Simons, Stark, & DeMarco, 2011). Participants are required to rate the frequency of experiencing negative acts in their workplace over the last six months on a five-point Likert scale: "Never"; "Now and then"; "Monthly"; "Weekly"; "Daily". 'Workplace' in the context of this measure and within this program evaluation refers to the teacher candidates practice teaching experiences. Items included *"Someone withholding information which affects your performance"*; *"Being humiliated or*

ridiculed in connection with your work"; *"Being ignored or excluded"*; *"Being exposed to an unmanageable workload"*. High scores on this measure suggest a greater susceptibility to victimization in the workplace and risk for attrition (Simons et al., 2011).

The Ways of Coping Scale (WOCS). The WOCS has multiple subscales investigating the adoption and use of a wide range of coping behaviours. Of interest are two of the subscales, namely "Seeking Social Support" (6 items) and "Self-Control" (7 items) (Cronbach's alpha = 0.76). Together, this 13-item set measures the positive coping processes an individual may utilize in a stressful situation (Folkman & Lazarus, 1985). Items included *"I got professional help"*; *"I tried not to act too hastily or follow my first hunch"*; *"I talked to someone about how I was feeling"*; *"I talked to someone to find out more about the situation"*. Participants were asked to provide the frequency of which they used two forms of coping skills, seeking social support, or utilizing self-control, on a four-point Likert scale: "Not Used"; "Used Somewhat"; "Used Quite a Bit"; "Used a Great Deal". This measure is useful in determining the coping skills of an individual in a specific context, and in this case, within initial teacher education. Higher scores on this measure suggest that the participant possesses and can utilize previously established coping skills (Brown, 1994).

The Opening Minds Scale (OMS-HC). The OMS-HC was developed to measure stigma among Canadian health care professionals (Modgill et al., 2014). This 15-item scale asks participants to respond to items on a 5-point Likert scale (1=strongly disagree, 5=strongly agree) (Cronbach's alpha = 0.766). Items address attitudes toward those who have mental illness, the desire for social distance from those with mental health concerns, disclosing mental health concerns, and helping and supporting those with mental health issues, *"Despite my professional beliefs, I have negative reactions toward people who have mental illness"*; *"I would be reluctant*

to seek help if I had a mental illness”; *“I struggle to feel compassion for a person with mental illness”*. Higher scores on this measure suggest the participant is reporting stigmatizing attitudes and a bias toward mental health concerns.

The Course

The Mental Health Literacy: Supporting Social-Emotional Development course, the first mandatory – and completely online – mental health literacy course in Canada for teacher candidates, was developed by a team of researchers and implemented online at a large Canadian university. The course aimed to support teacher candidates in understanding children’s development, family dynamics, mental health literacy, access to care, and how these issues can impact student learning. Students participated in this 10-week course through online discussions, quizzes, and other reflective assignments, using a case study approach in which each teacher candidate was assigned to a student case study that they followed throughout the course. Cases were assigned based on the specialization area (Primary, Junior, Intermediate/Senior). The purpose of this approach was to support applied learning through a simulated case that progressed and changed each week as more information was collected. For example, *“This is your student Harkanwal. He is new to Canada and speaks limited English. He has been exhibiting symptoms of separation anxiety and is experiencing bullying in the classroom”*. Teacher candidates were required to respond to a series of questions related to their student cases each week to promote the application of the course content (e.g., *“How would you support the mental health needs of this child given their limited English skills?”*).

Mental health literacy in the course was defined as “the knowledge and skills that enable people to access, understand and apply information for mental health” (Canadian Alliance on Mental Illness and Mental Health, 2008, pg. 2). The components of mental health literacy

include understanding mental health disorders, recognizing the early signs of concern, understanding and recognizing help-seeking and treatment options, understanding how to access self-help strategies, and mental health first aid skills (Jorm, 2012). The course implemented mental health literacy learning through a dual curriculum model, which highlighted mental health strategies that targeted the promotion and prevention for teachers and students through an evidence-based framework based on the work of Keyes (2007). This model identifies the need for the promotion and protection of optimal (or ‘flourishing’) mental health by recognizing the connection between mental health and mental illness. Keyes (2007) suggests the need for a combination of bio-medical and socio-cultural factors when identifying and treating mental health needs. Flourishing or optimal mental health is considered to be possible when an individual has a strong sense of well-being along with their perceived social and psychological functioning (Westerhof & Keyes, 2010).

Weston et al. (2008) developed a comprehensive, mental health competency-based curriculum framework that was utilized throughout the course development. Weston et al. (2008) identified six principles of the teacher mental health competencies:

1. “The teacher demonstrates understanding and application of key policies and laws that foster delivery of effective and ethical learning supports in schools” (p. 28). This course identified key Canadian policies and laws for teachers to be aware of including consent, privacy, and confidentiality.
2. “The teacher demonstrates knowledge and skills related to the provision of learning supports that promote academic achievement, healthy development and overall school success) (pg. 30). Research has demonstrated the important relationship between teacher preparation, student success, and well-being. Preparing teachers with the

knowledge to understand the mental health and well-being of their students and themselves, positively influences this relationship. This ideology was at the core of this course.

3. “The teacher demonstrates knowledge and skills in the collection and use of data measuring student behaviours, affect, and attitudes, as they relate to academic, social, and emotional needs and outcomes” (pg. 30). Throughout the course, teacher candidates learned to recognize the signs and symptoms of mental health concerns and how they would manifest in the classroom. For example, a student experiencing anxiety may present as withdrawn, disinterested, and may be reluctant to participate in classroom activities.
4. “The teacher possesses and demonstrates the skills to communicate effectively and build relationships with others”. Kutcher et al. (2013) indicate that teachers consider their relationships with their students to be the most challenging, including insecurity about their interpersonal effectiveness when interacting with parents and administrators. This course promoted the importance of when and how to access supports (e.g. contacting a mental health lead in their respective school board) so that teacher candidates could understand the process and feel comfortable doing so.
5. “The teacher engages multiple systems and people in practices that maximize students’ academic achievement, healthy development, and overall school success” is related to the larger education system at work and empowering teachers to feel they can be impactful. This course provided numerous opportunities for teacher candidates to provide direct feedback about their experiences and where they felt change was

needed. This feedback was considered throughout this program evaluation study to improve the course and teachers' professional early training experiences.

6. "The teacher demonstrates knowledge and skills that facilitate personal and professional growth, development and overall well-being". Kutcher et al. (2013) suggest the lack of focus on at-risk teachers, including the increased rates of attrition and burnout among teachers. This course aimed to explore these risk factors in a Canadian context and provide early intervention for teacher candidates to prevent future burnout, stress, and compassion fatigue by equipping teacher candidates with the knowledge and skills to care for themselves while caring for their students.

A significant component of this course and course assignments was the aligned and integrated model (AIM) developed by School Mental Health Assist. This model identifies the importance of school and classroom leadership, early identification, and intervention through the bridging of community services.

The guiding principles of the course were identified as follows (see Appendix B for the course outline):

1. Develop, enhance and support preservice teachers' competencies to create the conditions within a culturally aware framework, where children and youth will thrive, develop skills, resiliency and agency in decision-making about their holistic health and well-being;
2. Provide an introduction to, and suggestions for, evidence-based school-based health (including mental health) promotion, prevention of problems, and early intervention practices for children and youth who are in need;

3. Engage and encourage preservice teachers in developing a community of practice to share, learn, and support one another to build our collective capacity to create learning environments that attend to wellness;
4. Offer effective and practical strategies to support child and youth resiliency and mental health; and
5. Offer effective and practical strategies to support teacher resiliency and wellness, and, through the attention to resilience and mental health for both teachers and their students, help create positive, supportive, and growth-oriented relationships for all.

The learning outcomes of the course were identified as follows:

- How to use current research in teaching and learning.
- Understand child and adolescent development and student transitions from kindergarten to grade 12, and up to age 21.
- Appreciate the child, youth, and parental mental health issues relevant to the elementary and secondary school environment in Ontario.
- Follow the relevant policies in The College of Teachers of Ontario's "Standards of Practice for the Teaching Profession" and "Ethical Standards for the Teaching Profession".
- Develop knowledge of the Ontario context in which elementary or secondary schools operate
- Understand Ontario education law and related legislation, occupational health and safety legislation and legislation governing the regulation of the teaching profession in Ontario and the professional obligations of members of the College.

- Know how to create and maintain the various types of professional relationships between and among members of the College, students, parents, the community, school staff and members of other professions.

The 10-week course delivered the following topics:

- Week 1: Mental Health at School:
 - Social-emotional development
 - Language
 - Mental health and mental health literacy
 - Culture, social determinants of health and equity in access and support
- Week 2: The Context of the Lives of Children, Youth and Teachers
 - What comes to school with us?
 - The role of schools and teachers
 - Trauma-informed teaching
- Week 3: Mental Health in the Classroom
 - Prevalence and onset of mental illness
 - What good and poor mental health look like at work and at school
 - The influence of mental health on learning and working
- Week 4: Critical Issues
 - The stigma of mental illness
 - Diagnosis, treatment and outcomes
 - Professional issues
- Week 5: Stress
 - Defining and describing risk

- Developing healthy coping strategies
- Week 6: Learning, Teaching, and Working
 - Building relationships
 - Creating and leading a mentally healthy classroom
 - The Caring Adult
- Week 7: Caring for Students: Building Resilience and Responding to Challenges
 - What to look for
 - What to say
 - Working with students, parents and the community
- Week 8: Taking Action
 - The role of the teacher
 - Resources
 - Pathways to care in your school/district
- Week 9: Caring for Ourselves: Building Resilience and Responding to Challenges
 - Building awareness
 - Self-care
 - Working within the system
- Week 10: Creating and Leading the Mentally Healthy Classroom
 - Planning for a mentally healthy classroom
 - Creating a mentally healthy classroom
 - Knowing what is working and what needs attention

Data Collection

Consultation with the Non-Medical Research Ethics Board about the research resulted in an exception for quality improvement given students' enrolment in the mandatory course, and the data source for this dissertation was a program evaluation (see Appendix C for the Boards of Ethic Letter of Exemption).

Data collection was administered at two time-points, at the beginning of the course (pre: October 2016) and at the end of the course (post: February 2017). The measures were administered online. This methodology was organized this way to assess the usefulness of the mental health literacy course by including standardized measurement tools and an evidence-based framework. Additionally, no identifiable data was utilized for this program evaluation.

Participants

The course was taken by 275 Bachelor of Education (B.Ed.) students enrolled at a large Canadian university. Data was collected online using the Qualtrics platform. Of the 269 teacher candidates who participated in this study, 24% identified as male, 75% identified as female, 0.4% identified as transgender, and 0.4% preferred not to disclose their gender. Participants were asked to identify their specialization area of which 51% selected the primary stream, 10% were in Junior, 8% were in Intermediate, 30% selected the Senior population, and 1% indicated 'other'. Previous degree and previous training information was also collected, and most of the teacher candidates were previously enrolled in an undergraduate degree in the Arts and Humanities (e.g. English, History, Women's Studies, Philosophy, French) stream. 71% of teacher candidates indicated they had previous training in mental health, specifically through their undergraduate education (see Table 1).

Table 1

Demographic Information (N=269)

Variable	<i>N</i>	Percentage
Gender		
Female	201	74.7%
Male	64	23.8%
Transgender	1	0.4%
Prefer not to say/Other	3	1.1%
BEd Program Specialization		
Primary	137	50.9%
Junior	28	10.4%
Intermediate	21	7.8%
Senior	80	29.7%
Other	3	1.1%
Cohort		
International Education	48	17.8%
Early Childhood Education	70	26%
Urban Education	37	13.8%
French	49	18.2%
STEM	26	9.7%
Advanced Studies in the Psychology of Achievement, Inclusion and Mental Health	39	14.5%
Previous Degree		
Science (biology, chemistry, physics, mathematics)	34	12.6%
Psychology	21	7.8%
Child and Family Studies	19	7.1%
Health Sciences (kinesiology, nursing, medicine)	22	8.2%
Social Sciences (geography, sociology, anthropology, economics, political science)	30	11.2%
Arts and Humanities (English, history, women's studies, philosophy, French)	94	34.9%
Social Work	5	1.9%
Religion/Divinity	8	3%
Other	36	13.4%
Degree Obtained		
Undergraduate	258	95.9%
Masters	7	2.6%
PhD	1	.4%
Other	1	.4%
Previous mental health and/or mental illness learning		
Yes	191	71%

No	78	29%
Type of Previous Learning		
Undergraduate or Graduate Course	146	54.3%
Training or Learning by Mental Health Professional	41	15.2%
No Previous Learning	82	30.5%

Teacher candidates were asked to complete the Negative Acts Questionnaire Revised-US (NAQR-US), a four-item measure that is a predictor of workplace bullying, job satisfaction and intent to leave, in the context of their practicum placements. Participants were asked to rate their experiences on a 5-point Likert scale, “Never”; “Now and then”; “Monthly”; “Weekly”; “Daily”. See Table 2 for detailed results.

Table 2

Participant Ratings on the Negative Acts in the Workplace (NAQR-US) measure (Pre-test)

NAQR-US Item	N (%)				
	Never	Now and Then	Monthly	Weekly	Daily
Someone withholding information which affects your performance.	141 (52.4%)	87 (32.3%)	12 (4.5%)	18 (6.7%)	11 (4.1%)
Being humiliated or ridiculed in connection with your work.	205 (76.2%)	44 (16.4%)	6 (2.2%)	8 (3%)	5 (1.9%)
Being ignored or excluded.	140 (52%)	95 (35.3%)	7 (2.6%)	19 (7.1%)	8 (3%)
Being exposed to an unmanageable workload.	133 (49.4%)	87 (32.3%)	22 (8.2%)	18 (6.7%)	9 (3.3%)

Analysis Plan

Qualitative Data. The use of some qualitative data, in the form of responses to a framing question on the measure of coping, was driven by my experiences. As a graduate student in a school psychology program with supervised school experience, I attended numerous consultation meetings during in-school placements. During these meetings, the in-service teachers were often reluctant to ask questions or voice their lack of mental health knowledge for fear of being

labelled ‘unqualified’ or being reprimanded by their supervisors, and ultimately, losing contract positions or substitute roles. Moreover, when participating in school consultations regarding the mental health of specific students, the researcher witnessed many teachers emotionally express their desire to support their students despite facing numerous barriers, including personal stressors and a lack of understanding as to the boundaries and expectations for their role. For example, one teacher asked, “*Who can I speak to when the student’s stress is starting to feel like my own stress?*”

In my role as a teaching assistant and instructor for the pre-service course that provides the data for the current study, I was privy to the experiences of teacher candidates as they developed their knowledge and skills to take their places in classrooms. In addition to preparing for a teaching career, teacher candidates also have additional stressors, including searching for a balance between the roles of an up-and-coming professional with being a student (Smith & Sela, 2005; Gambhir et al., 2008; Woloshyn & Savage, 2018). Thus, teacher candidates may be experiencing stress and stigma and are reluctant to voice their concerns for fear of being unsuccessful in completing their educational program. It is important to recognize these concerns and increase role preparedness through early career training by exploring teacher candidates’ perspectives through a program evaluation approach.

When the opportunity to incorporate some of the qualitative data that was collected in the program evaluation was made available, it made sense to include the words of the teacher candidates themselves, collected when they responded to the question: “*Think about/describe in a few words the most stressful encounter you have experienced in the previous week.*” Using a thematic analysis, responses were coded by researchers in this project as: (1) program-related stress (e.g., stressful experience is related to the teacher education program); (2) practice-

teaching or professionally related stress (e.g., stressful experience is related to working in schools, working with students, or associate teachers); (3) personal stress (e.g., planning a wedding, breaking up with a romantic partner).

Quantitative Data. This program evaluation utilized quantitative data collected from 269 B.Ed. students in a Faculty of Education through an online questionnaire format via the online software Qualtrics. Students received 7 marks (of the total of 100 marks available in the course) at each time-point for their participation. Quantitative data was analyzed using SPSS Statistics software. Reliability analyses were completed for each measure and reported using Cronbach's alpha. See Table 3 for Descriptive Statistics from pre- and post-test time points.

Table 3

Descriptive Statistics for Pre- and Post-test

Measure	Pre-test		Post-test	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Mental Health Literacy Questionnaire	4.15	.434	4.42	.453
TLMHC	3.92	.544	4.30	.525
Expectancies	4.51	.612	4.57	.603
Professional Relationships	4.31	.548	4.52	.500
Role Clarity	4.78	.464	4.85	.455
Mental Health Literacy – Curriculum Resource				
A: Knowledge	22.69	3.78	23.40	3.97
B: Stigma	3.50	.377	3.49	.449
C: Help Seeking	5.80	.883	5.89	.877
Ways of Coping	5.10	.836	5.25	.774
Seeking Social Support	2.57	.726	2.58	.701
Self-Control	2.53	.630	2.67	.622
Opening Minds Scale (OMS-HC)	2.02	.529	1.93	.559

Research Question 1 asked, *Are the factors from the four-factor measure of mental health literacy (teaching and leading a mentally healthy classroom; expectancies; professional relational skills; and role clarity) and stigma toward mental illness predictive in practice teaching-related stress among teacher candidates?* As described above, participants were selected for these analyses based on their coded responses for professional stress, derived from the Ways of Coping Scale framing question, where participants were asked to describe a recent stressful encounter. In this analysis, participants who indicated ‘professional stress’ were selected ($N = 140$). Bivariate correlation, multivariate analysis of variance (MANOVA), and multiple linear regressions were conducted to examine teacher candidates’ professional stress in relation to the Ways of Coping Scale (WOC) (2 subscales: Seeking Social Support (WOC_SS); Self Control (WOC_SC), the Mental Health Literacy Questionnaire (4 subscales: Teaching and Learning in a Mentally Healthy Classroom (MHLQ_TLMHC); Professional Relational Skills (MHLQ_PRS); Expectancies (MHLQ_E); and Role Clarity (MHLQ_RC)), and the Opening Minds Scale (OMS-HC).

Research Question 2 asked, *Does the completion of the mental health literacy course influence mental health knowledge, positive attitudes and coping skills?* Using the findings from Research Question 1, those participants who expressed ‘professional stress’ were included in a repeated measures MANOVA to evaluate the canonical variate and examine the data for differences, comparing pre-test and post-test scores on the measures of interest.

Chapter 4: Data Analysis

This program evaluation explored the gaps in a mandatory course on mental health knowledge that addressed attitudes, coping skills, stress and negative experiences in the workplace offered in initial teacher education at a large Faculty of Education in Ontario. The course was taken by second year teacher education candidates.

Research Question 1: Are the factors from the 4-factor measure of mental health literacy (teaching and leading a mentally healthy classroom; expectancies; professional relational skills; and role clarity) and stigma toward mental illness predictive in practice teaching related stress among teacher candidates?

This process of investigation used data from several sources. First, teacher candidates completed two subscales of the Ways of Coping Scale before and after taking the Mental Health Literacy course as a mandatory component of their Bachelor of Education Program. Part one of the measure asks respondents to describe the most stressful encounter they have experienced in the previous week; they then complete the items pertaining to how they coped with that stress. Using these part one responses, the type of stress described was coded into two different categories, namely ‘professional stress’ (stress related to their teacher education program, schoolwork or their practicum placement) or ‘personal stress’ (stress related to their personal lives and included wedding plans, relationships and family challenges).

Participants who indicated personal stress described stressful experiences in relation to:

- Personal relationships: *“My fiancé and I are in the process of looking for our first home, a process I am already finding quite stressful. We went to look at a house last week that we both really like however, there is a lot of work the house needs, which my fiancé and I are willing to put in. He is an apprentice plumber and he*

will have to go back to school for two months this winter, with our wedding coming up next year, he and I both felt a great sense of stress. We are trying to take things one step at a time however, the unknown is scary and this is a new experience for us both!"; "Wedding planning disagreement -- already stressed out, feeling rather anxious overall, especially with mounting pressure, and now there's a disagreement between one of my main support systems and I."

- Employment outside of teaching: *"While I was at Tim Hortons working on the weekend, a customer was unsure of what she wanted to order. After every item she ordered, the following statement would be, "and um..". It was very frustrating listening to her indecisive order. After about five minutes at the speaker, she drove to the window to purchase her items. As a customer, I understand not knowing what you want, but in the drive thru I am expected to get cars in and out in approximately 120 seconds. She exceeded this time greatly and caused me unreasonable stress."; "To pay for university I work as a Customer Service Representative. I work 12.5 hour overnight shifts. Last night I had to speak with a gentleman who could not comprehend the concept that we could not fit 8 people (himself and his 7 passengers) in the tow truck. I tried explaining the situation in several different ways but the call ended with him using several expletives and derogatory remarks."*
- Other personal life circumstances, including:
 - Housing: *"trying to find a new apartment to move into while working and doing placement at the same time."*

- Commuting: *“Driving on the [highway]. I sometime get anxious in busy traffic because people on the [highway] drive like maniacs and cut in and out of lines so quickly. It can cause accidents and that is a bit stressful for me.”*
- Mental health: *“I have anxiety, so I'm always stress, I replay moments of things I think I have done wrong and how I should have done it to make it right.”; “I felt way too busy and broke down.”; “I have a minor stress disorder due to another health condition I have that is stress induced. Sometimes I become anxious over nothing; even though I know I have nothing to stress over. I worry more than I know is healthy and I am a perfectionist. This past week my most stressful situation would probably be falling sick with a cold and worrying that I would not be able to perform my best while teaching.”*

Participants who indicated professional stress described stressful experiences in relation to:

- Their workload: *“My associate teacher took a leave of absence during my last week of practicum and I had to take over an additional class-load, while also marking all of their assignments before progress reports were due.”; “At my placement, I had to wrap up a unit, design, issue and mark tests before Friday. Evaluate student presentations and start packing for [school]. It was incredibly stressful for me, and I had a headache for 3 days as a result.”*
- Being evaluated: *“The most stressful encounter in the previous week was my [school] evaluation where someone from the faculty came into the classroom to*

watch me teach.”, “When I received my final evaluation from my associate teacher...we had very different personalities. He/she liked to use authority and fear tactics throughout the practicum, while I did not agree with those ideas.”; and

- *Managing student behaviours and mental health needs: “A student who has a pattern of being disruptive in class was more disruptive than usual and initially chose not to listen to me when I asked him to return to his seat and join in group work.”; “In my placement, a student had a breakdown (throwing objects, screaming and hiding). I knew it was because she was having trouble at home, so I talked to her.”; “Last week, a student with a mental disability had a complete meltdown in the classroom to the point in which we had to evacuate the classroom. As a student teacher I am not supposed to be alone with the children but at this point in time I was forced to take charge and take all 19 other students to the library and focus them on another task to keep them busy and calm. Although my adrenaline was pumping after such a volatile event, I had to maintain my composure for the sake of the students. As someone who is often calm and with a low stress level, this event led to raised cortisol levels and very little sleep that evening.”.*

Given the current project’s focus as a program evaluation and recognizing that the course objectives include promotion of mental health literacy and related knowledge, skills and attitudes to assist in teacher candidates’ professional development, those indicating ‘professional stress’ were selected for these analyses ($N = 140$). Their scores on the following measures of interest were then examined through bivariate correlations to uncover any associates between variables:

- Two subscales of the Ways of Coping Scale (WOC):
 - Seeking Social Support (WOC_SS)
 - Self-Control (WOC_SC)
- Factor scores from the Mental Health Literacy Questionnaire (MHLQ; 4 subscales):
 - Teaching and Learning in a Mentally Healthy Classroom (MHLQ_TLMHC)
 - Professional Relational Skills (MHLQ_PRS)
 - Expectancies (MHLQ_E)
 - Role Clarity (MHLQ_RC)
- The total score of the Opening Minds Scale (OMS-HC).

Results can be found in Table 4.

Table 4

*Teacher Candidates Reports of Coping Skills, Mental Health Literacy Questionnaire Factor**Scores and the Opening Minds Scale: Correlations and Descriptive Statistics (N = 146).*

Variables	1	2	3	4	5	6	7
1. Seeking Social Support (Coping Skills) (WOC_SS)	-						
2: Self Control Behaviours (Coping Skills) (WOC_SC)	-.274*	-					
3. MHLQ – Teaching and Leading in a Mentally Healthy Classroom	.179*	-.127*	-				
4. MHLQ – Expectancies	.104	-.021	.328*	-			
5. MHLQ – Professional Relational Skills	.052	.002	.617*	.321*	-		
6. MHLQ – Role Clarity	0.89	-.001	.392*	.379*	.517*	-	
7. Opening Minds Scale (OMS-HC)	-.074	-.037	-.465*	-.392*	-.439*	-.570*	-

Note. * indicates $p < .05$

Direct linear regression analyses were undertaken to examine teacher candidates' coping skills as might be predicted by stigma (as measured by the OMS) and the 4-factor MHLQ model:

1. Teaching and Leading a Mentally Healthy Classroom; 2. Expectancies; 3. Professional Relational Skills; and 4. Role Clarity. The first regression equation, using the Seeking Social Support subscale of the Ways of Coping Scale as the dependent variable, was not significant ($F(5, 135) = 1.23, p > .05$), with an R^2 of .044. Further inspection of the analysis shows that 3 of the MHLQ factors (expectancies; professional relational skills; and role clarity) and stigma related attitudes (OMS-HC) were not significant in the prediction of participants' likelihood to

seek social support when they experience professional stress; however, factor 1 was a significant predictor of coping with professional stress. Unstandardized coefficients indicate how much the dependent variable varies with an independent variable when all other independent variables are held constant. The unstandardized coefficient, *B*, for MHLQA (Teaching and Learning in a Mentally Healthy Classroom - TLMHC) is equal to 0.34 (see Table 3), which suggested that for every unit increase in TLMHC, Seeking Social Support scores increased by .34 (please see Table 5).

Table 5

Multiple Regression Analysis for Ways of Coping – Seeking Social Support subscale.

Predictor	<i>b</i>	<i>Standard Error</i>	<i>beta</i>	<i>t</i>	<i>p</i>
(Intercept)	1.04	1.17		.89	>.05
MHLQ A	.34	.16	.23	2.05	0.04*
MHLQ B	.07	.12	.06	.63	>.05
MHLQ C	-.17	.17	-.12	-1.07	>.05
MHLQ D	.10	.18	.06	.56	>.05
OMS-HC	.04	.13	.04	.34	>.05

Note. * indicates $p < .05$. *b* represents unstandardized regression weights; *beta* indicates the standardized regression weights.

Multiple regression analyses were conducted to examine if participant's scores for stigma (as measured by the OMS) and the MHLQ factors: 1. Teaching and Leading a Mentally Healthy Classroom; 2. Expectancies; 3. Professional Relational Skills; and 4. Role predicted the second dependent variable, namely the score on the Self Control subscale of the Ways of Coping Scale, for those participants reporting professional stress. The multiple regression equation was not significant with respect to the influence of the OMS-HC ($F(5, 135) = .99, p > .05$), or the three of

the four subscales of the MHLQ, with an R^2 of .035. The analysis shows that MHLQ factors: 2. Expectancies; 3. Professional Relational Skills; and 4. Role Clarity and stigma related attitudes (OMS-HC) did not significantly predict participants' self-control when they experience professional stress; importantly, however, factor 1 was a significant predictor of coping using Self Control (WOC_SC). Unstandardized coefficients indicate how much the dependent variable varies with an independent variable when all other independent variables are held constant. The unstandardized coefficient, b , for MHLQA (TLMHC) is equal to -0.31 (see Table 3), which suggested that for every unit increase in TLMHC, Self-Control scores decreased by .31 (please see Table 6).

Table 6

Multiple Regression Analysis for Ways of Coping – Self Control subscale.

Predictor	b	Standard Error	$beta$	t	p
(Intercept)	3.91	1.04		3.77	<.05*
MHLQ A	-.31	.15	-.24	-2.12	0.04*
MHLQ B	-.02	.10	-.02	-.17	>.05
MHLQ C	.15	.15	.12	1.01	>.05
MHLQ D	-.05	.16	-.03	-.28	>.05
OMS-HC	-.13	.12	-.12	-1.08	>.05

Note. * indicates $p < .05$. b represents unstandardized regression weights; $beta$ indicates the standardized regression weights.

Research Question 2: Does the completion of the mandatory course influence mental health knowledge, positive attitudes, and coping skills?

Based on the results of Research Question 1, which identified that the only factor of the MHLQ that was predictive of other measures of interest at the post-test was the factor, Teaching and Leading in a Mentally Healthy Classroom (TLMHC) (27 items), it was decided that this factor would be used alone for the remaining analyses.

A repeated measures MANOVA was conducted to evaluate the canonical variate comprised of: MHLQ Factor 1 (Teaching and Leading in a Mentally Healthy Classroom), the Curriculum Resource Scales, namely the MHL_CR A (measuring knowledge), the MHL_CR B (stigma), and MHL_CR_C (help-seeking efficacy), coping skills for stress (seeking social support and self-control, as measured by the Ways of Coping Scale) and stigma (as measured by the Opening Minds Scale). There was a significant effect of time on the canonical variate, $F(7, 133) = 14.99, p < .001$. The univariate effects were evaluated without adjustment to the per-comparison alpha (Hummel & Sligo, 1971). Significant univariate effects were detected for TLMHC, $F(1, 139) = 93.95, p < .001$, the MHL-CR- A (knowledge), $F(1, 139) = 4.84, p < .05$, and MHL-CR- C (help-seeking), $F(1, 130) = 7.061, p < .01$, OMS, $F(1, 139) = 79.07, p < .001$, and WOC_SC (Self-Control), $F(1, 139) = 4.2, p < .05$.

Partial eta-squared effect sizes range from 0 to 1 and although these definitions are not universally accepted, description of effect sizes have been identified as small ($< .01$), medium ($.06$), and large ($.14$) (Cohen, Cohen, West, & Aiken, 2003). By this guide, the MHLQ factor, Teaching and Leading in a Mentally Healthy Classroom and stigma (as measured by the Opening Minds Scale) were found to have a large effect size, while the curriculum resource scales for stigma and help-seeking efficacy had a small effect size. They each contributed in a statistically

significant measure that contributes to the omnibus measures. Further results are found in Table 7.

Table 7

Multivariate and Univariate Results

Measure		<i>Partial η^2</i>
MHLQ Factor: Teaching and Leading in a Mentally Healthy Classroom (TLMHC)	$F(1,139) = 93.95, p < .001$.40
Mental Health Literacy – Curriculum Resource, Section A (MHL-CR, Section A)	$F(1,139) = 4.84, p < .05$.03
Mental Health Literacy – Curriculum Resource, Section B (MHL-CR, Section B)	$F(1,130) = .002$	
Mental Health Literacy – Curriculum Resource, Section C (MHL-CR, Section C)	$F(1, 130) = 7.061, p < .01$.05
The Opening Minds Scale (OMS-HC)	$F(1,139) = 79.07, p < .001$.36
The Ways of Coping Scale – Seeking Social Support subscale (WOC_SS)	$F(1,139) = 1.19$	
The Ways of Coping Scale – Self Control subscale (WOC_SC)	$F(1, 139) = 4.2, p < .05$.03

Chapter 5: Discussion

This study utilized a program evaluation approach to explore the efficacy of the first mandatory, online mental health literacy course at a Faculty of Education in Canada, *Mental Health Literacy: Supporting Social and Emotional Development* for teacher candidates enrolled at a large central Canadian University. Although there is growing interest in mental health in schools, the literature suggests that there are critical research and practice gaps in teachers' understanding of mental health in relation to themselves and their students (Woloshyn & Savage, 2018; Brown et al., 2019). Given these concerns, this study aimed to explore the influence of a mandatory, online mental health literacy course on teacher candidates' attitudes about their mental health literacy and their mental health, coping skills, and stress experiences. The purpose of the course was to support mental health learning within initial teacher education. The *Mental Health Literacy: Supporting Social and Emotional Development* course for teacher candidates was examined through a program evaluation framework and mixed methodology.

Why Teacher Candidates and Mental Health Literacy?

Mental health research in schools is multi-faceted; it involves numerous layers, microsystems and macrosystems which extend beyond students, teachers and their classroom (Sruogo, Groh, Jiang, Morrison, Hamilton, & Villeneuve, 2019; Cawthorpe, 2018), and thus, careful planning should be considered when incorporating mental health awareness and content into the classroom. A teacher's ability to notice the signs and symptoms of early mental health concerns, such as student behaviours that raise 'red flags' in the classroom, is an important component of engaging in early intervention (Rusch, Walden, Gustafson, Lakind, & Atkins, 2018; Malla et al., 2018). Schools are often a valuable source in early mental health prevention and intervention programming (Schulte-Korne, 2016) because students spend most of their time

in the classroom (Fazel, Hoagwood, Stephan, & Ford, 2014). However, these programs are only as effective as the teachers who deliver them (Canadian Teachers Federation, 2011; Kratt, 2019; Altan, Lane, & Dottin, 2017). Teachers play a critical role and serve as valuable partners in the delivery of mental health intervention and programming (Franklin, Kim, Ryan, Kelly, & Montgomery, 2012), and are often the first to notice and observe mental health concerns in their students (Whitley, Smith, & Vaillancourt, 2013). However, for teachers to feel confident in their abilities to support and promote children's mental health, they require the knowledge, skills, and training to do so (Climie, 2015; Brown et al., 2019).

Exploration of the literature as summarized earlier indicates that initial teacher education is often missed as a 'golden opportunity' to educate teacher candidates on mental health knowledge and strategies before they transition to their in-service roles (Cochran-Smith & Villegas, 2015; Brown et al., 2019). Historically, teacher education programs have oscillated between interactions of the government, the teaching profession, and the universities who are responsible for the programming (Perlaza & Tardif, 2016). It is through these bodies of governance that teacher candidates can define and understand their roles (Van Nuland, 2011). With this level of power, comes great responsibility in that teacher education programs can play a considerably strong role in molding what it means to be a teacher. By targeting initial education experiences, education programs can instill in new teacher candidates that their mental wellness is an important component of being successful in their roles (Whitley et al., 2012). Mental health learning in this respect within their initial teacher education experiences can educate them on positive mental health strategies (Jorm et al., 1997), and challenge their potentially negative attitudes or preconceived ideologies about mental health that are a result of lack of awareness and understanding (Dods, 2016). For example, in a Canadian study on teacher

candidates' mental health literacy, in their review of the literature, researchers found that some did not perceive mental illness as "real" and believed that severe mental illness resulted in dangerous and unpredictable behaviours (Dods, 2016, p.43).

These serious gaps in preparedness and training to support mental health is compounded by the research that highlights that teaching is the only profession that expects new graduates to integrate into their professional workplace with more seasoned staff, and new teachers receive little to no introductory, supervisory or organizational support (Le Maistre and Pare, 2010). It is no surprise then that teachers report feeling ill equipped to engage in mental health support for students. For example, a large-scale study conducted by the Congress of the Humanities and Social Sciences in Victoria, British Columbia, found that 93.3% of teachers did not feel their previous training prepared them to support their students' mental health needs (Boesveld, 2013). Similarly, in a national survey conducted by the Canadian Teachers Federation, 87% of teachers reported a lack of previous training regarding mental health (Froese-Germain & Riel, 2012).

Additionally, gaps in mental health training are further intensified by the apprentice model used in initial teacher education in which teacher candidates transition between the roles of student and professional. Teacher candidates must quickly learn about balancing between their educational and professional environments by managing their workload, responsibilities and expectations. Such pressures can have deleterious effects on wellness; in the current study, teacher candidates' ratings on the Negative Acts in the Workplace measure indicate that half of the participant sample ($N = 136$) responded affirmatively to the item asking about *'being exposed to an unmanageable workload'* with ratings that reflected their experience during the timeframe of the course (*'now and then'* to *'daily'*); they reported feeling overwhelmed with meeting their

program expectations and the expectations when teaching in the classroom. Here are some examples of the unmanageable workload teacher candidates shared:

“My most stressful encounter within the past week involved preparing for my upcoming 5 weeks of classes and commuting to [school]. It is a completely different environment from placement and is much more stressful due to the amount of classes I have to balance.”

“The amount of homework and assignments due during this last week of school has made it feel unbearable and I feel like I can't cope with anything else. I am stretched to my limit, the practicum information still isn't up and I can't wait to be done with all my homework”

“As our term two is coming to a close, there are quite a bit of final assignments, tests, and quizzes due. Last week I was feeling very overwhelmed and stressed that I wasn't going to accomplish everything on time. I actually had to take a step back and take some time for myself. I decided to go for a 30-minute run and have a couple relaxing bubble baths. It actually cleared my mind and gave me energy to complete a couple large assignments. I think that as I enter into my career I need to remember that I am going to experience stressful times and overwhelming work loads. That being said, I need to be able to acknowledge when I need to stop and give my body and mind a break, to live a healthy lifestyle and spend time with the ones I love.

Post-secondary education is often fraught with high stress and anxiety associated with learning and coursework (Woloshyn & Savage, 2018), but in professional education the apprenticeship model adds an extra ‘layer’ to the responsibilities of candidates, namely their practice teaching. The current findings reflect this previous research in that there is a dual role occurring when teacher candidates have to learn to shift back and forth between being a student

(program requirements, courses, timelines, exams, assignments) and as a teacher during their practicum experiences. Beauchamp and Thomas (2011) refer to this as an ‘identity disruption’ that often results in a destabilizing experience for teacher candidates and new teachers.

This notion of converging responsibilities and overwhelming workloads served as one of the focal points in this program evaluation study. The team who developed and implemented the course envisioned that it could:

1. Support teacher candidates in developing and enhancing their mental health literacy;
2. Help teachers feel confident in supporting their students’ mental health needs; and,
3. Teach them how to support themselves with healthier coping skills and improved stress management skills.

Using a program evaluation framework, this study aimed to critically examine the efficacy of the course in producing meaningful shifts for teacher candidates in their knowledge, beliefs and attitudes related to mental health in schools and at work. Specifically, these shifts were explored at the completion of the course in order to facilitate continuous for the next wave of teacher candidates. Below we discuss our findings and their implications.

Teacher Candidates and Teaching and Leading in a Mentally Healthy Classroom

In order to begin to make suggestions for improvement on teacher preparedness and initial teacher education in the context of mental health learning, it is important to recognize the complexity of the teaching role. The traditional teaching role served as a ‘gatekeeper of information’ (Johnson & McElroy, n.d.); however, with rapid and ongoing changes to the education system, such as technological changes (Chen, 2015), data driven assessment strategies (Coombs, DeLuca, LaPointe-McEwan, & Chalas, 2018), and the increasing mental health needs

of children and their families (Kutcher, Wei, & Morgan, 2015), the teaching role in the past decade has never been more stressful (Gray et al., 2017).

Being a teacher comes with considerable demands such as managing large class sizes to identifying and supporting diverse student needs (Gray et al., 2017). For example, with the increase in student mental health needs, schools have shifted to include a focus on mental health intervention and prevention (Mental Health Commission of Canada, 2012). Teachers are expected to notice red flags, respond accordingly and participate in a collaborative effort to support their students' mental health (Crum, Waschbusch, & Willoughby, 2015; Armstrong, 2018). However, teachers are often left with an unbalanced responsibility in which they are expected to carry out the mental health programming in their classroom while meeting the demands of their regular job expectations (Wang et al., 2015; Gray et al., 2017). While attempting to support their students' mental health, teachers also have limited access to mental health resources and are often under pressure to uphold stringent policies that mandate teacher accountability in this regard (Oullette et al., 2018).

Kyriacou (2001, p.28) defines teacher stress as “the experience by a teacher of unpleasant, negative emotions, such as anger, anxiety, tension, frustration or depression, resulting from some aspect of their work as a teacher”. The literature indicates that initially, teacher candidates tend to romanticize their role and present with confidence in their capabilities to be a successful teacher (Dods, 2016). For example, they tend to enter initial education programs with idealized views of their favourite childhood teachers and a service based ideology about their roles in which they feel it is important to subjugate their own needs for their students in their public declaration to change the world one child at a time (Brackenreed & Barnett, 2006; Molina, 2013; Dods, 2016). However, upon entering their practice teaching related experiences,

teacher candidates often experience a shift between this ideological dream and the pedagogical reality, in which they are required to explicitly demonstrate their pedagogical and curriculum knowledge, such as their competencies in lesson planning and demonstrable support towards their students' individualized learning needs (Lee & Jeong, 2019). When this shift occurs, teacher candidates who feel poorly prepared may feel heightened stress, experience difficulty in coping, and lack confidence in identifying how to support their students (Klassen, 2010; Gray et al., 2017). Preparedness in this regard is an important component for success in the teaching role (Freak & Miller, 2017) and in supporting oneself while supporting students (Reinke, Stormont, Herman, Puri, & Goel, 2011; Kratt, 2018).

In my practicum placement working in elementary schools, experienced teachers shared a self-perceived role conflict from the past 'traditional ideas' about teaching that centered on teaching practices and student academic growth, in comparison to the present, when they spend a majority of time engaging in 'behaviour management'. Behaviour management in this regard refers to supporting with various tasks outside the scope of the teaching role, including completing behaviour tracking sheets, writing student letters of observation for parents to provide to their pediatrician/family doctor regarding behavioural or mental health concerns, completing lengthy standardized measures for psychology assessments, and meeting with mental health experts (e.g., School Psychologist) to brainstorm ideas on how to meet their individual students' needs. The same teachers also shared that they seldom have any time when they are not directly teaching or supervising students for things like planning, collecting resources to support student needs, or refreshment breaks. These insights mirror similar findings in the research on teacher self-care practices and teacher wellness that identify the need for mental health training and support geared specifically to and for teachers (Kipps-Vaughan, Ponsart, & Gilligan, 2012).

In particular, teachers need to learn to develop the necessary skills to cope with stress and manage the increasingly complex aspects of their roles once in-service (Kipps-Vaughan et al., 2012; Hassan & Kavita, 2018).

The findings in this study reflected the existing research on teacher stress. Participants who described a recent stressful experience related to professional stress (including stress related to their teacher education program, schoolwork or their practicum) were selected for analyses to examine the impact of the course and the fulfilment of learning objectives on two styles of stress coping strategies, namely seeking social support and self-control. The only dimension from the four-factor model of mental health literacy tested (the MHLQ) that predicted participants' professional stress-related coping skills was Teaching and Leading in a Mentally Healthy Classroom (TLMHC). The TLMHC factor contains items measuring the confidence, or self-efficacy, that teacher candidates feel they possess in their knowledge, skills and attitudes towards noticing and supporting students and their knowledge on accessing appropriate mental health resources.

Confidence and self-efficacy are important components of coping and are intertwined in the coping process when an individual experiences stress (Chesney, Neilands, Chambers, Taylor & Folkman, 2006). The coping process, as described by Folkman and Lazarus (1985), first involves 'primary appraisal' in which the initial stressor occurs and is evaluated as 'personally significant'. When stress occurs, the individual is left to determine which of their existing coping resources or skills to utilize, essentially asking themselves "*what can I do?*" (Chesney et al., 2006). This is referred to as 'secondary appraisal' (Folkman & Lazarus, 1985). The individual must use their personal judgment, or self-efficacy, in this decision-making process to determine which of their coping strategies will best control the outcome of the situation and reduce their

stress (Chesney et al., 2006). In the context of teaching, when the ability to cope with stress is poor or lacking, feelings of confidence and self-efficacy are weakened and this can inherently affect teacher performance (Herman, Hickmon-Rosa, & Reinke, 2017).

The limited research on teacher candidates suggests that those who have “less anxiety, more efficacy, and more commitment to teaching tend to be more effective and resilient teachers than those who are weaker in these areas” (Daniels et al., 2011, p. 89). As Bandura’s (1986) social cognitive theory indicates, self-efficacy can impact performance outcomes. As such, the results obtained from this study suggest that when teacher candidates felt confident in their ability to teach and lead in a mentally healthy classroom, they were better able to access some healthier coping skills (self-control) when they experienced professional stress. These results are not surprising, and mirror findings that demonstrate the importance of teacher candidates feeling confident about their teaching practices (Black, 2015), such as knowing how to access supports for a student who is struggling (Whitley et al., 2018), and using healthy self-care practices (Woloshyn & Savage, 2018). Teachers who feel confident about their teaching practices tend to be more reflective and are more likely to think about how their teaching methods impact student performance and how to best engage their students based on their individualized needs (Black, 2015). The implication of these findings suggests that teacher candidates who complete a course on mental health literacy during their initial teacher education have an opportunity to bolster their confidence and skills in teaching and leading in a mentally healthy classroom. The findings of this study also support the association between teacher candidates’ beliefs about their abilities to teach and lead in a mentally healthy classroom and their appraisal of stress in relation to their practice teaching experiences.

In order to support teacher candidates with their self-efficacy, confidence and preparedness to teach and lead in a mentally healthy classroom, we must equip them with the practical skills to do so. For example, the findings in this study suggest that mental health learning is related to teaching confidence as measured by the TLMHC, which was correlated with coping skills, such as seeking social support and self-control.

The overarching question that teacher education as a field must respond to is “*How do we bolster a teacher’s confidence to do this work?*” The research suggests that equipping teachers with the mental health literacy knowledge and skills they need can begin with their initial teacher education experiences (Rodger et al., 2014). In a large-scale study completed by the Canadian Teachers’ Federation, new teachers (those with less than five years of experience) were found to be less likely than their senior colleagues to have received mental health professional development or training opportunities (Carr et al., 2017). By incorporating a mandatory mental health literacy course, such as the one in being evaluated in this study, initial teacher education can focus on opportunities to prepare new teachers for success as they transition into their careers. Through this mandatory coursework, teacher candidates are given the opportunity to: (1) increase their self-awareness about their current baseline knowledge of mental health in the context of schools and (2) critically examine and explore shifts in their confidence, understanding, knowledge and attitudes about mental health. This connects with the overarching finding of this program evaluation, and previous research, in that initial teacher education is a critically useful time to support teacher candidates’ in cultivating and enhancing their mental health skills to be able to support themselves and their students (Harris, 2011; Klassen et al., 2013).

Teacher Candidates and Mental Health Knowledge and Attitudes

Mental Health Knowledge. In this study, mental health literacy was defined as ‘the capacity to understand how to enhance and maintain good mental health; understand mental disorders and their treatments; decrease stigma against those living with mental disorders; and enhance help-seeking efficacy’ (McLuckie et al., 2014). Teacher candidates participated in the 10-week online course and learned about mental health in the classroom, its prevalence and what ‘good and poor’ mental health look like at work and in the classroom, in an effort to bolster their mental health knowledge, beliefs and attitudes. Utilizing the dual continuum model of mental health and mental illness developed by Keyes (2007), the course promoted mental health strategies and prevention for students and their teachers using an evidence-based framework (Weston et al., 2008).

The course aimed to:

1. Develop, enhance and support preservice teachers’ competencies to create the conditions within a culturally aware framework, where children and youth will thrive, develop skills, resiliency and agency in decision-making about their holistic health and well-being;
2. Provide an introduction to, and suggestions for, evidence-based school-based health (including mental health) promotion, prevention of problems, and early intervention practices for children and youth who are in need;
3. Engage and encourage preservice teachers in developing a community of practice to share, learn, and support one another to build our collective capacity to create learning environments that attend to wellness;

4. Offer effective and practical strategies to support child and youth resiliency and mental health; and
5. Offer effective and practical strategies to support teacher resiliency and wellness, and, through the attention to resilience and mental health for both teachers and their students, help create positive, supportive, and growth-oriented relationships for all.

Through a program evaluation framework, this study aimed to assess the effectiveness of the course in meeting these guiding principles. Findings from this study suggest that the skills related to teaching and leading in a mentally healthy classroom were predictive of how teacher candidates cope with professional types of stress. To further examine the significance of this finding, we explored shifts in teacher candidates' reports of their confidence in teaching and leading in a mentally healthy classroom before and after taking the course. Our findings from the MANOVA analysis using the MHLQ measure indicated that the course produced meaningful change in teacher candidates' beliefs about their abilities to teach and lead in a mentally healthy classroom.

Stigma and Attitudes. Mental health stigma in schools is often associated with social exclusion and rejection, barriers to seeking treatment, the absence of early intervention, and avoiding disclosure of mental health concerns in fear of being labelled (self-stigma) (Townsend et al., 2017; Cawthorpe, 2018; Sandhu, Arora, Brasch, & Streiner, 2019). Researchers typically refer to three dimensions of stigma including knowledge, attitudes and behaviour and further suggests that a “gold standard” anti-stigma intervention must target all three (Hanisch, Twomey, Szeto, Birner, Nowak and Sabariego, 2016).

In order to explore teacher candidates' stigmatizing attitudes before and after taking the mandatory course, data from the MHL-CR, Section B was included in a MANOVA analysis.

The findings indicated that there were no significant differences in scores before and after the course. As a set of items from a test bank developed by the authors of the Curriculum Resources, these items do not represent a scale, but rather a set of questions designed to assess learning of the curricular materials. That this collection of items did not reflect a significant change from time 1 to time 2 is not surprising given the nature of the questions (they were developed by the curriculum developers and this is the first time they have been examined), but they were included in the analysis as an exploration of the content learning. It was the use of a more formalized measure that allowed deeper examination and in examining stigma through the Opening Minds Scale (OMS) (Modgill, Patten, Knaak, Kassam, & Szeto, 2014) (a standardized measure of stigmatizing attitudes towards mental health, a significant change was detected.

These findings suggest efficacy in shifting stigmatizing attitudes through participation in an online course in relatively short period of time (10 weeks). Similarly, Carr et al. (2017) in an evaluation of a mental health literacy related professional development day for teacher candidates and six online classroom-ready modules, found a decrease in stigmatizing attitudes. In the context of mental health literacy and the guiding principles of this mandatory online course, stigma can impact teacher candidates' help seeking behaviours and self-efficacy. For example, St-Onge and Lemyre (2018) assessed teacher attitudes towards students with mental health disorders. They found in their research that although teachers did not express an inherent fear of students with mental health concerns, only 50% to 70% felt comfortable interacting with them. Further, only one-third of teachers indicated they felt comfortable in identifying whether a student had a mental health disorder (St-Onge & Lemyre, 2018).

Although the course produced meaningful shifts in reducing teacher candidates' stigma related attitudes (as measured by the OMS-HC), as literature suggests, it is important to note that

tackling mental health stigma long-term in general is no small feat, particularly in our school systems. In Canada, for example, despite the cultivation of the Opening Minds Initiative by the Mental Health Commission of Canada targeting stigma within the healthcare system (Knaak, Szeto, & Dobson, 2017), a review of the extant literature revealed no previous applications of this measure in the context of education.

Several researchers suggest the need for a multi-pronged approach in combatting mental health stigma. For example, the Committee on the Science of Changing Behavioural Health Social Norms (2016) have indicated that a combination of contact-based interventions and contact-based educational programs tend to have the strongest support for improving stigmatizing attitudes. For example, this online course was innovative and unique in its application of the OMS-HC content in an education setting and included student vignettes, or case studies, to support teacher candidates' application of the course material each week.

Teacher candidates were able to follow the mental health trajectory of their assigned student each week as their story progressed and apply their learning to support the mental health needs of their student. Meldrum et al. (2009) also encourage the incorporation of anti-stigma activities that go beyond just the classroom and school to include school curriculum initiatives.

Sustainability in mental health knowledge, positive attitudes and reduced stigma are important considerations for teacher candidates as they move forward in their pathway to becoming in-service teachers. The research suggests that long-term anti-stigma promotion would require ongoing learning regarding how stigma impacts teacher candidates' abilities to engage in early mental health intervention and prevention. Lipson, Speer, Brunwasser, Hahn, and Eisenberg (2014) found that although there is meaningful change in stigmatizing attitudes through intervention, such as this course, short-term gains often decrease in the long-term.

Continued learning can provide additional reinforcers to maintain positive anti-stigma attitudes about mental health (Carr et al., 2017). This suggests the need for a balance between initial teacher education to provide opportunities to complete mental health related coursework with opportunities for future professional development once teacher candidates have transitioned to their in-service roles. Carr et al (2017) suggest ‘refresher training interventions’ for teacher candidates as a recommendation for ongoing learning in mental health.

Coping Skills: Help-Seeking Behaviours and Self-Control

Teacher candidates’ coping skills in this study were explored by examining their self-reported use of two articular types of coping skills, namely self-control behaviours and seeking social support. The manner in which teacher candidates cope with stress is connected to their well-being and their commitment to teaching (Cancio et al., 2018). The literature suggests a link between teacher stress and seeking social support wherein teachers who have low social support at work tend to experience higher levels of job stress (Ferguson et al., 2017). The teaching profession is recognized as a stressful occupation and is associated with poor well-being and reduced job satisfaction (Harmsen, Helms-Lorenz, Maulana, & van Veen, 2018). This is particularly true for teacher candidates transitioning from school to the workplace, who are additionally more likely to experience increased stress, feel unequipped to manage the academic, behavioural and mental health needs of their students, and the absence of support (Dias-Lacy & Guirguis, 2017).

Researchers suggest the need for teacher candidates to acquire mental health knowledge and skills during their initial education training and experiences (Woloshyn & Savage, 2018). MacDonald (1993) found five coping methods that teacher candidates often utilized during their practicum experiences: (1) communication (e.g. speaking with a colleague), (2) conformity (e.g.

fitting in with others), (3) showing initiative (e.g. joining school initiatives and projects), (4) realistic goal setting (e.g. lesson planning), and (5) relaxation techniques (e.g. meditation, being active). Some of these methods are highlighted throughout the online course as positive coping strategies for teacher candidates during their personal and professional stress experiences, and the online course offered further methods to suggest to students who may be struggling. Below we discuss the findings from the help-seeking and self-control subscales as measured by the curriculum resource (MHL-CR, Section C), and the Ways of Coping measure.

Help-Seeking Behaviours. The results from the MANOVA indicated mixed findings on teacher candidates' help-seeking behaviours after taking the course. In particular, there was a significant univariate effect on help-seeking behaviours as measured by the curriculum resource test bank items, section C (MHL-CR, Section C); however, in using the standardized Ways of Coping Scale, there was no significant effect on the seeking social support subscale. Although the curriculum resource measure indicates a relative effectiveness of the course in positively shifting teacher candidates' help-seeking behaviours, the results demonstrated a small effect size. These findings are not surprising given the research. Throughout teacher candidates' early education experiences, which may include mental health learning, the focus is typically on self-protection, laws and policies, and their students, with little attention to self-care practices or their own mental health (Rodger et al., 2015; Dods, 2016). Teacher candidates often feel pressure to embody a strong duty of care approach in serving and supporting their students (Newnham, 2000). However, teacher candidates who solely focus on supporting their students' mental health can diminish and dismiss their own needs when they are feeling stressed, thus creating a critical barrier to help-seeking behaviours (Brackenreed & Barnett, 2006).

Research highlights the complexities in help-seeking, and particularly in the teaching profession. In their research on help-seeking behaviours between teachers and their principals, Berkovich and Eyal (2017) refer to a “help seeking dilemma”, in which the teacher is often left with two undesirable alternatives when accessing support: (1) “ask for help at a cost of a certain personal (self-image) and societal (associated stigma) price, or (2) continue suffering and coping alone.” (p. 426). This connects with the concept of *effectance motivation* in self-determination theory (SDT), in which teacher candidates may be reluctant to access support after their practicum experiences in fear of presenting as incapable of satisfying the responsibilities of being a new teacher and as they transition from student to professional. SDT posits that the psychological need of *effectance motivation* can drive an individual to control negative outcomes in their environment to present as competent in their role (Elliot et al., 2002; Korthagen & Evelin, 2016). To understand this inherent desire to present as a competent teacher, it is important to recognize how teachers define and rate their success in-service. For example, Butler (2007) conducted a factor analysis on teachers’ self-perceived achievement in teaching through four factors:

1. “Mastery Orientation” which involves “learning, developing, and acquiring professional understanding of skills”;
2. “Ability Approach” which involves “demonstrating superior teaching ability”;
3. “Ability Avoidance” which involves “the demonstration of inferior teaching ability”;
- and,
4. “Work Avoidance” which involves “getting through the day with little effort” (p.242)

Interestingly, their findings indicated that “mastery orientation” was the only factor that was positively correlated with positive help seeking behaviours, and more specifically, “the more

teachers were motivated by concerns to avoid the demonstration of inferior ability, the less likely they were to report that they approached others for help or advice”, and perceptions of help seeking were seen as “threatening” and abundantly clear evidence that they possessed “inadequate teaching abilities (Butler, 2007, p. 249). These results and the outcomes of this program evaluation suggest that there is an association between teachers’ understanding of mental health in relation to their likelihood to seek support.

Given the connection between mental health knowledge and help seeking, Armstrong and Young (2015) highlight the importance of a needs assessment through a program evaluation framework as an initial step into examining how to best disseminate mental health knowledge. The findings of the needs assessment utilized in this program evaluation suggest that teacher candidates who participated in this online course demonstrated gaps in their help seeking behaviours when experiencing professional stress. In order to engage in effective knowledge mobilization to achieve the guiding principles as outlined in this course, it is possible that teacher candidates require longer-term learning on positive help-seeking behaviours and the real-life application of their pre-service and in-service experiences. Further, it would be important for the application component of their long-term learning to address the relationship between teacher candidates’ perceived feelings of inadequacy or inferiority in their teaching skills in relation to help-seeking behaviours.

Self-Control. Self-control, as measured by the Ways of Coping Scale, refers to a dimension of coping skills that supports the individual in being able to manage, or control, their behaviour (Rosenbaum, 1993). An important component of self-control in relation to stress and mental health is the ability to inhibit undesired or maladaptive behaviours and emotions (e.g. burnout) (Schmidt, Neubach, & Heuer, 2007). Research suggests that there is a link between

self-control, mental health knowledge, and emotional resiliency (Fleming, Mackrain, & LeBuffe, 2013). Findings indicated in this study, and supported by the literature, suggest that individuals who have an increased sense of confidence and knowledge about mental health, are more likely to feel more resourceful and self-aware during periods of high stress (Rosenbaum, 1993; Schussler et al., 2010). This supports them in being better able to maintain personal stability in their behaviours (e.g., self-control) and reduce the negative effects of their stressors (Rosenbaum, 1993).

In the teaching context, Van Opstal (2010) suggests that the ability to engage in personal stability, or self-control, is related to self-empowerment. This notion suggests that self-empowerment must begin with (1) an acceptance of unchangeable circumstances (e.g., professional stress), and (2) personal responsibility to update personal coping skills that are healthier and more positive (Van Opstal, 2010). Although self-empowerment as a component of coping places increased accountability on teacher candidates, it also provides an opportunity within initial teacher education to support them in developing a broader repertoire of coping skills they can access throughout their careers and personal lives.

Teacher Candidates and Workplace Wellness

Occupational health is critical to the psychological and emotional well-being of employees (Goetzel et al., 2018). Adverse working environments are notably associated with chronic stress, burnout, job dissatisfaction, negative attitudes, and an increased likelihood to leave the occupation all together (Salvagioni, Melanda, Mesas, Gonzalez, Gabani, & de Andrade, 2017; Maslach & Leiter, 2016). Salvagioni et al. (2017) describe three main categorical kinds of burnout including: “*emotion exhaustion*”, in which the individual experiences ‘emotional depletion’ and reduced energy; “*depersonalization or cynicism*”, also known as

“dehumanization”, feeling emotionally detached from work, emotionally hardening; and “*reduced personal accomplishment of inefficacy*”, in which the individual experiences feelings of inadequacy which begin to impact performance, productivity and coping mechanisms (p.2).

Research has supported teachers’ in their identification of stress in that teaching is a considerably stressful job (Skaalvik & Skaalvik, 2018; Klassen et al., 2010). With complexities in their role and responsibilities that go beyond just teaching, including mental health intervention (Kutcher et al., 2016; St-Onge et al., 2018), behavioural management (Asikainen, Bloomster, & Virtanen, 2018), and policy and curriculum change (Walker & von Bergmann, 2013), researchers suggest that new teachers with gaps in their preparedness and training (Lever et al., 2019), and particularly teacher candidates (Dods, 2016;), are the most susceptible to early burnout (Stacey, 2019; Kutsyruba, Walker, Makhamreh, & Stasel, 2018; Watson, Harper, Ratliff, & Singleton, 2010).

The outcomes of workplace stress and burnout are correlated with high attrition rates in the profession (Gray & Taie, 2015; Barnatt et al., 2016), including increased absenteeism from work and sick leave (Klassen et al., 2010). For example, the Toronto District School Board, a largescale school board in Ontario, Canada, reported that in 2018, \$96.5 million was spent on teacher absenteeism, including illnesses (Howorun, 2018). Further, a report from 2017 from the Canadian auditor-general reported that more than 50 school boards experienced a 30% increase in sick day reporting from 9 days in 2011-2012 to 11.6 days in the 2015-2016 school year (Howorun, 2018).

These economic concerns indicate the critical need to re-examine the teaching role from an occupational health lens or a workplace wellness framework. Workplace wellness is associated with job satisfaction, motivation, positive career attitudes, productivity and resiliency

(Goetzel et al., 2018). Although there are mixed findings about wellness programs, scholars argue that they are often fraught with barriers including being too expensive, time consuming, not always effective and difficult and implement to monitor long-term (Lever et al., 2019). A useful consideration to mitigate such barriers links back to early career preparation, training and education. As Dods (2016) indicates, and as found in this program evaluation, there is a strong support for the need for mental health learning within initial teacher education to better prepare teacher candidates and bolster their confidence, beliefs and attitudes.

Self-Determination Theory

The theoretical underpinnings of self-determination theory (SDT) connect with the findings in this program evaluation. Parker, Growth, and Byers (2019) suggest that teacher candidates' early experiences are shaped by components of SDT including belongingness, competence, needs for autonomy, and positive teaching behaviours. Supporting teacher candidates' in their development of these skills is said to be associated with increased leadership behaviour and a stronger connection with the school environment (Korthagen & Evelin, 2016). However, when role preparation and educational training fail or impede teacher candidates' psychological needs—relatedness, competence, and autonomy—researchers suggest that they are at a greater risk of burnout and job dissatisfaction (Power & Goodnough, 2019). It is important then to recognize that in order to promote positive long-term outcomes there is a great need to support incoming teachers with their psychological needs as specified by SDT.

This study indicates that fostering teacher candidates' confidence in teaching and leading in a mentally healthy classroom can positively impact their coping skills. By enhancing their mental health knowledge and confidence in their knowledge, teacher candidates demonstrated better coping skills, namely self-control, when they experienced professional stress. Woloshyn &

Savage (2018) suggest a relationship between mental health knowledge and positive help-seeking behaviours, in that teacher candidates who are supported in their understanding of mental health are more likely to seek social support for themselves and their students. This relates to the SDT psychological need of *competence* (Ryan & Deci, 2002), also considered self-efficacy or mastery orientation as found by Butler (2007). The literature posits that teachers need to feel they are *competent* in their efforts to create a positive impact in the lives of their students (Lynch & Salikhova, 2017). Further, as Butler's (2007) findings support, mastery orientation in this regard was the only factor that was positively correlated with positive help-seeking behaviours.

It is evident that there is strong research support for teacher candidates in receiving mental health training during their early career experiences. By embedding a mental health course, such as the one examined in this program evaluation, education programs can bolster their students' *intrinsic motivation* (Black et al., 2016). *Intrinsic motivation* influences teachers' development in their values and the developmental level of their teaching practices (Liu, Li, & Zou, 2019) through inherent satisfaction. Black et al (2016) suggest that teachers have a genuine desire to learn and obtain new knowledge which is motivated by their curiosity and an "innate love of learning" (p.325). These components translate into teaching success when teacher candidates' can readily access their internal motivators to demonstrate teaching competency (Lynch & Salikhova, 2017). Competency requires skill development and thus demonstrates the critical need for mental health learning during initial teacher education.

Limitations

Although this study utilized a program evaluation approach to explore the efficacy of a mandatory mental health literacy course for teacher candidates, it does contain several

limitations. First, it is important to consider the generalizability of the findings. Although the *Mental Health Literacy: Supporting Social-Emotional Development Course* is the first mental health literacy course for teacher candidates' in Canada, the course was implemented online and in one Faculty of Education, at one specific University. Campbell and Stanley (1963, p. 5-6) suggest three threats to external validity that can impact the generalizability of the findings:

1. "Interactional effects of testing", in which participating in a pre-test may influence the participants' responsiveness to the experimental variables. In this case, teacher candidates who completed the pre-test may have felt compelled to respond a specific way (e.g. presenting with mental health competence or in favour of mental health support). This may impact the representativeness of the sample in comparison to the wider teacher candidate community.
2. "Reactive effects of experimental arrangements", this refers to the effects of the experimental variable or treatment program on individuals outside of the treatment setting. For example, although teacher candidates were asked about their previous mental health training and learning, it is possible that during their participation in the course, they were involved in other kinds of mental health learning. This may have influenced positive or negative shifts in their mental health literacy.
3. "Multiple treatment interference", this occurs when an individual has experienced similar treatment (e.g., previous mental health learning) or exposure to the environmental variable (e.g. current mental health learning) that could influence their performance, rendering it seemingly impossible to determine which learning or experiences influenced the shifts found in this study. Additionally, given there was no control group, the program evaluation design – all students received the course – cannot account for other plausible

explanations for the findings (e.g., cultural considerations, personal experiences, other educational experiences).

Second, although the mental health literacy course developed and utilized in this program evaluation incorporated a dual continuum model of mental health (Keyes, 2007), it is important to recognize and consider the implications of examining mental health solely from the bio-medical model. The bio-medical model of mental health suggests that mental health, or mental illness, is an outcome of brain diseases that require pharmacological intervention (Deacon, 2013). These brain abnormalities are typically the major focal point of diagnosis and treatment (Deacon, 2013). However, researchers have argued that the bio-medical model can negatively impact mental health identification and intervention by focusing on a limited, narrow scope of an individual's mental health concerns (Shepherd, 2019). They call for a new model that functions from a socio-cultural standpoint, or the biopsychosocial model, as proposed by Engel (1977, 1961). These updated models suggest that the bio-medical model fails to consider the 'whole person' and does not account for important external factors (e.g. social context, cultural considerations) that may influence an individual's mental health (Farre & Rapley, 2017). The course utilized in this program evaluation identified these concerns and incorporated the work of Weston and colleagues (2008) framework that emphasizes the need for a culturally relevant, whole-child approach in mental health identification, intervention and curriculum. Given the research and findings in this program evaluation, it is evident that there are numerous factors that may influence mental health and well-being that go beyond a biomedical approach.

Third, the literature demonstrates mixed findings on the efficacy of online learning (Oztok, Zingaro, Brett, & Hewitt, 2013). For example, Appana (2008) indicates that online courses may alienate students and faculty from engaging in meaningful rhetoric that is often encouraged in

traditional face-to-face learning environments. Some researchers suggest online courses make it difficult to ensure a ‘hands-on’ learning experience with limited instructor presence (Martin, Wang, & Sadaf, 2018). In this study, teacher candidates participated in weekly case vignettes that supported contact-based learning; however, as these were online simulations, they were left to formulate and conceptualize their ideas independently (e.g. completing the discussion forum posts independently at home) without the real-time conversational input of their colleagues. Despite the concerns with real-time presence, teacher candidates were required to comment on a colleague’s discussion post in sharing about their case each week and course instructors assessed and monitored all discussion forum activity and posts.

Further, given the sensitive nature of mental health topics, the sole online nature of the course may not be a favourable learning environment. It may be helpful in future iterations to consider for example the duality of an in-person or video conference tutorial as a supplement to the online lecture material. This would give teacher candidates an opportunity to participate in both face-to-face and online learning environments by asking clarification questions, engaging in meaningful dialogue and enhancing their mental health knowledge and skills.

Implications

This program evaluation study examined the efficacy of the mandatory, 10-week online mental health literacy course. The findings of the study indicated that the course generated meaningful shifts in teacher candidates’ mental health knowledge, stigmatized attitudes, and coping skills after taking the course. However, this study did not use a longitudinal design nor was there a follow up study after the teacher candidates transitioned to in-service. It would be beneficial to examine the long-term effects of the course and assess the stability of the positive outcomes for teacher candidates after completing their initial teacher education. For example,

during a real-life experience of professional stress while in-service, did their confidence in teaching and leading in a mentally healthy classroom continue to support their coping skills?

Through this research it would be additionally useful to specifically examine which components of their mental health literacy remained stable and which areas could benefit from professional development.

As Robinson (2016, p.94) indicates “culture is one of the three most complicated words that exists in the English language”. Cultural considerations are an important component of mental health literacy and play a crucial role in an individual’s development and understanding about mental health concepts, and access to treatment (Jimenez, Bartels, Cardenas, Daliwal, & Alegria, 2012). Although the case vignettes included diverse student profiles to support teacher candidates’ learning about the complexities around culture, mental health and diverse families, the cultural diversity of teacher candidates was not explored in this study. Future studies could explore the cultural diversity of teacher candidates through assignments or coursework that encouraged their reflection on how their cultural practices may influence their mental health beliefs and help-seeking behaviours. Further, given this course was implemented in a single Faculty of Education, a cross cultural study on the efficacy of this course would be meaningful in examining the generalizability of the content to other regions and diverse populations.

Conclusion

This program evaluation study examined the efficacy of a mandatory, online mental health literacy course for teacher candidates at a Faculty of Education at a large Canadian university. The study specifically examined teacher candidates’ mental health knowledge, attitudes, coping skills and stress experiences before and after taking the 10-week course. With strong research support, the findings suggest the crucial importance of incorporating mental

health learning into initial teacher education to support future teachers in being successful in their roles. Initial teacher education is considered a golden opportunity to provide teachers with the necessary tools and skills they will need to support not only their students but also themselves. By equipping them with the necessary mental health knowledge, it is also possible to mitigate negative outcomes including burnout, compassion fatigue, and high attrition that is currently consuming the teaching profession.

Further, this study was innovative in its efforts to use a program evaluation framework on the first mandatory, mental health literacy course for teacher candidates in Canada. This methodology highlights the need for ongoing quality assurance within initial teacher education. Bachelor of Education programs that incorporate this coursework into their future programs should also use ongoing program evaluations to assess the efficacy of the course in producing long-term, meaningful and positive outcomes. The program evaluation framework also allows for the reassessment and re-evaluation of the course for future iterations by using student feedback and data analyses as foundational means for course improvement. These are important considerations in educating and training future teachers to be able to support the complex mental health and behavioural needs of their future students, but also for their own mental health and wellness. Teachers who feel confident about teaching and leading in a mentally healthy classroom, and who feel competent in their roles, can create meaningful change in the lives of their students.

Personal Reflection

In completing this research, there are several reflections that come to mind. My research experience has primarily centered on the context of schools, from my undergraduate thesis research on feelings of safety on campus, to the roles of cyberbullies and traditional bullies in my Master's research. In this work, I was able to identify and highlight valuable programming recommendations for teachers and schools to combat important issues and contribute holistically to a positive school climate. However, in meeting with teachers and educators, I began to realize that my research was missing a critical component: the teacher experience. Teachers in my previous research had been labelled and considered the 'vessels for change', or those specific individuals who were responsible for implementing our recommendations. What was missing then were those external factors that could contribute to their skills, confidence and abilities to be able to carry out the programming, that were not clearly identified or highlighted. In recognizing this important limitation, it was important to incorporate these considerations in future research on mental health in schools. Teachers needed to be highlighted as key stakeholders in the early identification of children's mental health in schools and we needed to know what was required to support them in their efforts to do so.

As I began this research, it became apparent that I was naïve to the scope of the issue's and barriers teachers face. The complexity of the teaching role went beyond teaching and developing curriculum. There were numerous other factors that impacted their ability to perform their roles successfully, including job stress, job uncertainty, mental health needs of their students, and lack of support. The research, although limited on the teacher experience, suggested that low self-confidence, teacher stress and poor well-being were linked with student success, and further impacted how teachers were able to support their students. It became evident

in a very simplistic way, that in order for teachers to be able to perform their duties to the best of their abilities, they needed the skills, training and knowledge to do so.

Further, through my work in schools and in conversations with new teachers and senior teachers, I realized that although their increased time spent working in schools did support some learning on mental health, the majority of teachers collectively felt ill equipped. Teachers were quick to refer students to external supports, including psychology, and it was hit or miss in terms of their correct identification of their students' needs. In other cases, teachers who supported children with complex behavioural and mental health needs were more likely to be frequently absent or take sick leave several times throughout the year. It was clear: teachers were not managing well and I felt compelled to address and highlight these concerns as best I could.

In partnership with my PhD advisor, Dr. Rodger, and in review of the existing literature, we became aware of the value of initial education and training experiences. It was through this research then that we could identify an optimal learning opportunity for mental health in schools. By providing teachers with a course that highlighted mental health knowledge and building their confidence to apply their knowledge, we were disrupting a previously unchanged initial teacher education program. And although this does not necessarily resolve the barriers and complexities that in-service teachers currently face, by setting a standard in existing teacher education programs, we can, at the least, equip our future, incoming teachers with useful skills and confidence to teach and lead in a mentally healthy classroom. I can think of nothing more rewarding, particularly to bear witness to the daily challenges these important individuals face, and be able to, in some respect, acknowledge and highlight their experiences through my research.

References

- Aldridge, J., & McChesney, K. (2018). The relationship between school climate and adolescent mental health and wellbeing: A systematic literature review. *International Journal of Educational Research*, 88, 121-145.
- Alstete, J. W., & Beutell, N. J. (2004). Performance indicators in online distance learning courses: A study of management education. *Quality Assurance in Education*, 12(1), 6-14.
- Altan, S., Lane, J.F., & Dottin, E. (2017). Using habits of mind, intelligent behaviours, and educational theories to create a conceptual framework for developing effective teaching dispositions. *Journal of Teacher Education*, 70(2), 169-183.
- Anderko, L., Roffenbender, J. S., Goetzl, R. Z., Millard, F., Wildenhaus, K., DeSantis, C., & Novelli, W. (2012). Promoting prevention through the Affordable Care Act: Workplace wellness. *Prev Chronic Dis*, 9, 2-6.
- Appana, S. (2008). A review of benefits and limitations of online learning in the context of the student, the instructor, and the tenured faculty. *International Journal on E-Learning*, 7(1), 5-22.
- Arens, A.K., & Morin, A.J.S. (2016). Relations between teachers' emotional exhaustion and students' educational outcomes. *Journal of Educational Psychology*, 108, 800-813.
- Armstrong, D. (2018). Addressing the wicked problem of behaviour in schools. *International Journal of Inclusive Education*, 22(9), 997-1013.
- Armstrong, L.L., & Young, K. (2015). Mind the gap: Person-centred delivery of mental health information to post-secondary students. *Psychosocial Intervention*, 24, 83-87.
- Ashraf, T. (2019). Experiences and impact: The voices of teachers on math education reform in

- Ontario, Canada. *Global Education in Practice: Teaching, Researching, and Citizenship*, 17, 101-107.
- Asikainen, H., Bloomster, J., & Virtanen, V. (2018). From functioning communality to hostile behaviour: Students' and teachers' experiences of the teacher-student relationship in the academic community. *Journal of Further and Higher Education*, 42(5), 633-648.
- Association of Canadian Deans of Education. (2006). *Accord on initial teacher education*. Retrieved from <http://csse-scee.ca/acde/wp-content/uploads/sites/7/2017/08/Accord-Initial-Teacher-Education.pdf>
- Atkins, M., & Rodger, S. Pre-service teacher education for mental health and inclusion in schools. *Exceptionality Education International*, 26(2), 93-118.
- Atteberry, A., Loeb, S., & Wyckoff, J. (2017). Teacher churning: Reassignment rates and implications for student achievement. *Educational Evaluation and Policy Analysis*, 39(1), 3-30.
- Ballou, G. W. (2012). A discussion of the mental health of public school teachers. *International Journal of Business, Humanities and Technology*, 2(1), 184-191.
- Balmer, D.F., Rama, J.A., & Simpson, D. (2019). Program evaluation models: Evaluating processes and outcomes in graduate medical education. *Journal of Graduate Medical Education*, 11(1), 99-100.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice-Hall.
- Barnatt, J., Terrell, D.G., D'Souza, L.A., Jong, C., Cochran-Smith, M., Viesca, K.M.,...Shakma, K. (2016). Interpreting early career trajectories. *Educational Policy*, 31(7), 992-1032.
- Beauchamp, C., & Thomas, L. (2011). New teachers' identify shifts at the boundary of teacher

- education and initial practice. *International Journal of Educational Research*, 50(1), 6-13.
- Beck, C., & Kosnik, C. (2014). *Growing as a teacher: Goals and pathways of ongoing teacher learning*. Rotterdam: Sense Publishers.
- Bell, B., & Cowie, B. (2001). The characteristics of formative assessment in science education. *Science Education*, 85, 536-553.
- Berkovich, I., & Eyal, O. (2017). Help me if you can: Psychological distance and help-seeking intentions in employee-supervisor relations. *Stress and Health*, 34, 425-434.
- Berlin, L. J., Martoccio, T. L., & Jones Harden, B. (2018). Improving early head start's impacts on parenting through attachment-based intervention: A randomized controlled trial. *Developmental Psychology*, 54(12), 2316-2327.
- Bernotaite, L., & Malinauskiene, V. (2017). Workplace bullying and mental health among teachers in relation to psychosocial job characteristics and burnout. *International Journal of Occupational Medicine and Environmental Health*, 30(4), 629-640.
- Bethune, R., Soo, E., Woodhead, P., Van Hamel, C.,...Watson, J. (2013). Engaging all doctors in continuous quality improvement: A structured, supported programme for first-year doctors across a training deanery in England. *BMJ Quality & Safety*, 22(8), 613-617.
- Black, G. L. (2015). Developing teacher candidates' self-efficacy through reflection and supervising teacher support. *In Education*, 21(1), 78-97.
- Blase, J., & Blase, J. (2006). Teachers' perspectives on principal mistreatment. *Teacher Education Quarterly*, 33(4), 123-142.
- Boesveld, S. (2013, June 2). Most new teachers feel unprepared to help students deal with mental

- health problems: Study. *National Post*. Retrieved from <https://nationalpost.com/news/canada/teachers-feel-unprepared-to-help-students-deal-with-mental-health-issues>
- Boshoff, N., Potgieter, J. C., van Resnburg, E., & Ellis, S. (2014). Occupational stress and mental well-being in a cohort of Black South African teachers. *Journal of Psychology in Africa, 24*(2), 125-130.
- Bostock, J. A., Kitt, R., & Kitt, C. (2011). Why wait until qualified?: The benefits and experiences of undergoing mental health awareness training for PGCE students. *Pastoral Care in Education, 29*(2), 103-115.
- Bourget, B. & Chenier, R. (2007). *Mental Health Literacy in Canada: Phase One Report Mental Health Literacy Project*. Ottawa, ON: Canadian Alliance on Mental Illness and Mental Health.
- Brackenreed, D., & Barnett, J. (2006). Teacher stress and inclusion: Perceptions of pre-service teachers. *Developmental Disabilities Bulletin, 34*(1-2), 156-176.
- Brewer, H. J., Nichols, R., Leight, J. M., & Clark, G. E. (2017). Preparing physical and health education teacher candidates to create a culture of wellness in schools: New curriculum, new message. *Journal of Physical Education, Recreation & Dance, 88*(9), 14-20.
- Bronfenbrenner, U. (1976). The experimental ecology of education. *Teachers College Record, 78*, 157–204.
- Brown, A.L., Lee, J., & Collins, D. (2015). Does student teaching matter? Investigating teacher candidates' sense of teaching efficacy. *Teaching Education, 26*(1), 77-93.
- Brown, E. L., Phillippo, K., Rodger, S., & Weston, K. J. (2017). Preparing the teaching workforce

- for school mental health promotion. *Advances in School Mental Health Promotion*, 10(1), 1-4.
- Brown, E.L., Phillippo, K., Weston, K., & Rodger, S. (2019). United States and Canada pre-service teacher certification standards for student mental health: A comparative case study. *Teaching and Teacher Education*, 80, 71-82.
- Buettner, C. K., Jeon, L., Hur, E., & Garcia, R. E. (2016). Teachers' social-emotional capacity: Factors associated with teachers' responsiveness and professional commitment. *Early Education and Development*, 27(7), 1-22.
- Burris, S., & Keller, J. (2008). Professional roles and responsibilities: Challenges for induction teachers. *Journal of Agriculture Education*, 49(2), 118-129.
- Butler, R. (2007). Teachers' achievement goal orientations and associations with teachers' help seeking: Examination of a novel approach to teacher motivation. *Journal of Educational Psychology*, 99(2), 241-252.
- Byrne, J., Rietdijk, W., & Pickett, K. (2018). Teachers as health promoters: Factors that influence early career teachers to engage with health and wellbeing education. *Teaching and Teacher Education*, 69, 289-299.
- Campbell, C. (2017). Developing teachers' professional learning: Canadian evidence and experiences in a world of educational improvement. *Canadian Journal of Education*, 40(2), 1-33.
- Campbell, D., & Stanley, J. (1963). *Experimental and quasi-experimental designs for research*. Chicago, IL: Rand-McNally.
- Campbell, C., Osmond-Johnson, P., Sohn, J., & Lieberman, A. (2017). Teacher policies and

- practices in Ontario. In C. Campbell, K. Zeichner, A. Lieberman, & P. Osmond-Johnson, with J. Hollar, S. Pisani, & J. Sohn (Eds.), *Empowered educators in Canada: How high-performing systems shape teacher quality* (pp. 87–196). San Francisco, CA: Jossey-Bass.
- Canadian Alliance on Mental Illness and Mental Health. (2008). *National integrated framework for enhancing mental health literacy in Canada*. Retrieved from <https://mdsc.ca/documents/Publications/CAMIMH%20National%20Integrated%20Framework%20for%20Mental%20Health%20Literacy.pdf>
- Canadian Teachers' Federation. (2011). *The voice of Canadian teachers on teaching and learning*. Retrieved from the Canadian Teachers' Federation website: https://www.ctf-fce.ca/Research-Library/TeacherVoice2011_EN_WEB-2ed.pdf
- Cancio, E. J., Larsen, R., Mathur, S. R., Estes, M.B., Johns, B., & Chang, M. (2018). Special education teacher stress: Coping strategies. *Education and Treatment of Children, 41*(4), 451-476.
- Carr, W., Wei, Y., Kutcher, S., & Heffernan, A. (2018). Preparing for the classroom: Mental health knowledge improvement, stigma reduction and enhanced help-seeking efficacy in Canadian pre-service teachers. *Canadian Journal of School Psychology, 33*(4).
- Carroll, T. (2007), *Policy Brief: The High Cost of Teacher Turnover*. Retrieved from <http://nctaf.org/wp-content/uploads/2012/01/NCTAF-Cost-of-Teacher-Turnover-2007-policy-brief.pdf>
- Casey, C. E., & Childs, R. A. (2011). Teacher education admission criteria as measure of preparedness for teaching. *Canadian Journal of Education, 34*(2), 3-20.
- Cawthorpe, D. (2018). Improving youth mental health supports in Canada. *The Canadian Medical Association Journal, 190*(40), 1181-1182.

- Center on the Developing Child. (2017). *Toxic Stress*. Retrieved from:
<http://developingchild.harvard.edu/science/key-concepts/toxic-stress/>
- Centeio, E. E., Cance, J. D., Barcelona, J. M., & Castelli, D. M. (2018). Relationship between health risk and school attendance among adolescents. *American Journal of Health Education, 49*(1), 28-32.
- Ceulemans, C., & Simons, M., & Struyf, E. (2012). Professional standards for teachers: How do they “work”? An experiment in tracing standardization in-the-making in teacher education. *Pedagogy, Culture & Society, 20*(1), 29-47.
- Chang, M. L. (2009). An appraisal perspective of teacher burnout: Examining the emotional work of teachers. *Educational Psychology Review, 21*, 193-218.
- Chen, H. T. (2010). The bottom-up approach to integrative validity: A new perspective for program evaluation. *Eval Program Plann, 33*(3), 205-214.
- Chen H. (2012). Theory-driven evaluation: Conceptual framework, application and advancement. In: Strobl R., Lobermeier O., Heitmeyer W. (Eds.) *Evaluation von Programmen und Projekten für eine demokratische Kultur*. Springer VS, Wiesbaden
- Chen, B. (2015). Exploring the digital divide: The use of digital technologies in Ontario public schools. *Canadian Journal of Learning and Technology, 41*(3), 1-23.
- Chesney, M.A., Neilands, T.B., Chambers, D.B., Taylor, J.M., & Folkman, S. (2006). A validity and reliability study of the coping self-efficacy scale. *British Journal of Health Psychology, 11*(3), 421-437.
- Ciampa, K., & Gallagher, T. L. (2017). A comparative examination of Canadian and American pre-service teachers’ self-efficacy beliefs for literacy instruction. *Reading and Writing, 31*(2), 457-481.

Clandinin, D. J., Long, J., Schaefer, L., Downey, C. A., Steeves, P., Pinnegar, E.,... Wnuk, S.

(2015). Early career teacher attrition: Intentions of teachers beginning. *Teaching Education, 26*(1), 1-16.

Climie, E. A. (2015). Canadian children's mental health: Building capacity in school-based intervention. *Intervention in School and Clinic, 5*(2), 122-125.

Cochran-Smith, M., & Villegas, A.M. (2015). Studying teacher preparation: The questions that drive research. *European Educational Research Journal, 14*(5), 379—394.

Cochran-Smith, M., Ell, F., Grudnoff, L., Haigh, M., Hill, M., & Ludlow, L. (2016). Initial teacher education: What does it take to put equity at the center? *Teaching and Teacher Education, 57*, 67-78.

Coker, A.L., Bush, H. M., Brancato, C. J., Clear, E. R., & Recktenwald, E. A. (2019). Bystander program effectiveness to reduce violence acceptance: RCT in high schools. *Journal of Family Violence, 34*(3), 153-164.

Cohen, J., Cohen, P., West, S.G., & Aiken, L.S. (2003). *Applied Multiple Regression/Correlation Analysis for the Behavioural Science: Third Edition*. Mahwah, NJ: Lawrence Erlbaum Associates Inc. Publishers.

Cohen, D. & Mehta, J. (2017): Why reform sometimes succeeds: Understanding the conditions that produce reforms that last. *American Educational Research Journal, 54*(4), 644-690.

Committee on the Science of Changing Behavioural Health Social Norms. (2016). *Ending discrimination against people with mental and substance use disorders: The evidence for stigma challenge*. Washington, DC: National Academics Press.

Conley, S., & You, S. (2018). School organizational factors relating to teachers' intentions to leave: A mediator model. *Current Psychology, 1-11*.

- Coombs, A., DeLuca, C., LaPointe-McEwan, D., & Chalas, A. (2018). Changing approaches to classroom assessment: An empirical study across teacher career stages. *Teaching and Teacher Education, 71*, 134-144.
- Copp, D. (2019). Accountability testing in Canada: Aligning provincial policy objectives with teacher practices. *Canadian Journal of Educational Administration and Policy, 188*, 15-35.
- Cornelius-White, J. (2007). Learner-centered teacher-student relationships are effective: A meta-analysis. *Review of Educational Research, 77*(1), 113-143.
- Craig, C.J. (2018). Metaphors of knowing, doing and being: Capturing experience in teaching and teacher education. *Teaching and Teacher Education, 69*, 300-311.
- Crum, K.I., Waschbusch, D.A., & Willoughby, M.T. (2015). Callous-unemotional traits, behaviour disorders, and the student-teacher relationship in elementary school students. *Journal of Emotional and Behavioural Disorders, 24*(1), 16-29.
- Daniels, L. M., Mandzuk, D., Perry, R. P., & Moore, C. (2011). The effect of teacher candidates' perceptions of their initial teacher education program on teaching anxiety, efficacy, and commitment. *Alberta Journal of Educational Research, 57*(1), 88-106.
- Darling-Hammond, L. (2012). *Creating a Comprehensive System for Evaluation and Supporting Effective Teaching*. Stanford, California: Stanford Center for Opportunity Policy in Education.
- Darling-Hammond, L., Wei, R. C., Andree, A., Richardson, N., & Orphanos, S. (2009). *Professional Learning in the Learning Profession: A status report on teacher development in the United States and Abroad*. Stanford, California: National Staff Development Council.

- Datnow, A. F., & Hubbard, L. (2016). Teacher capacity for and beliefs about data-driven decision making: A literature review of international research. *Journal of Educational Change, 17*(1), 115-139.
- Davari, S., & Bagheri, M. (2012). Mental health status and demographic factors associated with it in teachers. *Middle-East Journal of Scientific Research, 12*(3), 340-346.
- Day, C., & Hong, J. (2016). Influences on the capacities for emotional resilience of teachers in schools serving disadvantaged urban communities: Challenges of living on the edge. *Teaching and Teacher Education, 59*, 115-125.
- DeAngelis, K. J., & Presley, J. B. (2011). Toward a more nuanced understanding of new teacher attrition. *Education and Urban Society, 43*(5), 598-626.
- Deacon, B.J. (2013). The biomedical model of mental disorder: A critical analysis of its validity, utility, and effects on psychotherapy research. *Clinical Psychology Review, 33*(7), 846-861.
- Deci, E. L., Ryan, R.M. (2008). Self-determination theory: A macrotheory of human motivation, development and health. *Canadian Psychology, 49*(3), 182-185.
- De Witt, D. J., Karioja, K., Rye, B. J., & Shain, M. (2011). Perceptions of declining classmate and teacher support following the transition to high school: Potential correlates of increasing student mental health difficulties. *Psychology in the Schools, 48*(6), 556-572.
- Diamond, C., Saintonge, S., August, P., & Azrack, A. (2011). The developing of Building Wellness, a youth health literacy program. *Journal of Health Communication: International Perspectives, 3*, 103-118.
- Dias-Lacy, S. L., & Guirguis, R. V. (2017). Challenges for new teachers and ways of coping with them. *Journal of Education and Learning, 69*(3), 265-272.

- Dinkes, R., Cataldi, E. F., Lin-Kelly, W., & Snyder, T. D. (2007). *Indicators of school crime and safety: 2007*. Washington, DC: National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education, and Bureau of Justice Statistics, Office of Justice Programs, U.S. Department of Justice.
- Dixon, L. B., Holoshitz, Y., & Nossel, I. (2016). Treatment engagement of individuals experiencing mental illness: Review and update. *World Psychiatry, 15*(1), 13-20.
- Dods, J. (2016). Teacher candidate mental health and mental health literacy. *Exceptionality Education International, 26*(2), 42-61.
- Ducharme, E. R., & Ducharme, M. K. (2017). Teacher education: Historical overview, international perspective. *State University, Education Encyclopaedia*. Retrieved from <http://education.stateuniversity.com/pages/2479/Teacher-Education.html>
- Dunley, P., & Papadopoulos, A. (2019). Why is it so hard to get help? Barriers to help-seeking in postsecondary students struggling with mental health issues: A scoping review. *International Journal of Mental Health and Addiction, 17*(3), 699-715.
- Dzuka, J., & Dalbert, C. (2007). Student violence against teachers: Teachers' well-being and the belief in a just world. *European Psychologist, 12*(4), 253-260.
- Ekornes, S. (2017). Teacher stress related to student mental health promotion: The match between perceived demands and competence to help students with mental health problems. *Scandinavian Journal of Educational Research, 61*(3), 333-353.
- Elliot, A., McGregor, H. A., & Trash, T. M. (2002). *The need for competence*. In E. L. Deci, & R. M. Ryan (Eds.). *Handbook of self-determination research* (pp. 361-387). Rochester: The University of Rochester Press.
- Engel, G. L. (1977). The need for a new medical model: A challenge for biomedicine. *Science,*

196(4286), 129-136.

Engel, G. L. (1961). Correspondence. *Psychosomatic Medicine*, 23(5), 427-429.

Espelage, D., Anderman, E. M., Brown, V. E., Jones, A., Lane, K. L.,...Reynolds, C. R. (2013).

Understanding and preventing violence directed against teachers: Recommendations for a National research, practice, and policy agenda. *American Psychologist*, 68(2), 75-87.

Eustache, E., Gerbasi, M. E., Smith, F., Fils-Aime, J. R., Severe, J., Raviola, G. J.,...

Becker, A. E. (2017). Mental health training for secondary school teachers in Haiti: A mixed methods, prospective, formative research study of feasibility, accessibility, and effectiveness in knowledge acquisition. *Global Mental Health*, 6(4), 1-16.

Evelein, F. G. (2005). *Basic psychological needs of student teachers: A study on the relation between the fulfilment of basic psychological needs of student teachers, their interpersonal behaviour and character strengths*. Utrecht: IVLOS.

Fagan, T. K., & Wise, P.S. (2007). *School psychology: Past, present and future*. (3rd ed.). Bethesda, MD: National Association of School Psychologists.

Farre, A., & Rapley, T. (2017). The new old (and old new) medical model: Four decades navigating the biomedical and psychosocial understandings of health and illness. *Healthcare*, 5(88), 1-9.

Farrell, T. S. C. (2013). Teacher self-awareness through journal writing. *Reflective Practice: International and Multidisciplinary Perspectives*, 13(4), 465-471.

Fazel, M., Hoagwood, K., Stephan, S., & Ford, T. (2015). Mental health interventions in schools. *Lancet Psychiatry*, 1(5), 377-387.

Ferguson, K., Mang, C., & Frost, L. (2017). Teacher stress and social support usage. *Brock Education Journal*, 26(2), 62-86.

- Firestone, W. A., & Donaldson, M. L. (2019). Teacher evaluation as data use: What recent research suggests. *Educational Assessment, Evaluation and Accountability*, 31(3), 289-314.
- Fives, H., Hamman, D., & Olivarez, A. (2007). Does burnout begin with student-teaching? Analyzing efficacy, burnout, and support during the student-teaching semester. *Teaching and Teacher Education: An International Journal of Research and Studies*, 23(6), 916-934.
- Fleming, J.L., Mackrain, M., & LeBuffe, P.A. (2013). Caring for the caregiver: Promoting the resilience of teachers. In S. Goldstein, & R. Brooks. (Eds.), *Handbook of Resilience in Children* (387-397). Boston, MA: Springer.
- Flores, M. A., & Day, C. (2006). Contexts which shape and reshape new teachers' identities: A multi-perspective study. *Teaching and Teacher Education*, 22, 219-232.
- Folkman, S., & Lazarus, R. S. (1985). If it changes it must a process: Study of emotion and coping during three stages of college examination. *Journal of Personality and Social Psychology*, 48(1), 150-170.
- Folkman, S., & Moskowitz, J. (2004). Coping: Pitfalls and promise. *Annual Review of Psychology*, 55, 745-774.
- Franklin, C.G.S., Kim, J.S., Ryan, T.N., Kelly, M.S., & Montgomery, K.L. (2012). Teacher involvement in school mental health interventions: A systematic review. *Children and Youth Services*, 34, 973-982.
- Frauenholtz, S., Williford, A., & Mendenhall, A. N. (2015). Assessing school employees' abilities to respond to children's mental health needs: Implications for school social work. *School Social Work Journal*, 19(2), 47-62.

- Freak, A., & Miller, J. (2017). Magnifying pre-service generalist teachers' perceptions of preparedness to teach primary school physical education. *Physical Education and Sport Pedagogy*, 22(1), 51-70.
- Froese-Germain, B., & Riel, R. (2012). *Understanding teachers' perspectives on student mental health: Findings from a national survey*. Retrieved from the Canadian Teachers' Federation: <https://www.ctf-fce.ca/Research-Library/StudentMentalHealthReport.pdf>
- Fullan, M. (2000). The three stories of education reform. *Phi Delta Kappan*, 81(8), 581-584.
- Gambhir, M., Broad, K., Evans, M., & Gaskell, J. (2008). *Characterizing initial teacher education in Canada: Themes and issues*. Retrieved from the Ontario Institute for Studies in Education:
<https://www.oise.utoronto.ca/guestid/ite/UserFiles/File/CharacterizingITE.pdf>
- Geng, G., & Midford, R. (2015). Investigating first year education students' stress level. *Australian Journal of Teacher Education*, 40(6), 1-13.
- Geng, G., Midford, R., Buckworth, J., & Kersten, T. (2017). Tapping into the teaching experiences of final year education students to increase support for students in their first year. *Student Success*, 8(1), 13-23.
- Giamos, D., Soo Lee, A.Y., Suleiman, A., Stuart, H., & Chen, S-P. (2017). Understanding campus culture and student coping strategies for mental health issues in five Canadian colleges and universities. *Canadian Journal of Higher Education*, 47(3), 120-135.
- Gluschkoff, K., Elovainio, M., Hintsala, T., Pentti, J., Salo, P.,...Vahtera, J. (2017). Organisational justice protects against the negative effect of workplace violence on teachers' sleep: A longitudinal cohort study. *Occup Environ Med*, 74(7).
- Goddard, R., & Goddard, M. (2006). Beginning teacher burnout in Queensland schools:

- Associations with serious intentions to leave. *Australian Educational Researcher*, 33(2), 61-75.
- Goetzl, R.Z., Roemer, E.C., Holingue, C., Fallin, M.D., McCleary, K., Eaton, W.,...Mattingly, C.R. (2018). Mental health in the workplace: A call to action proceedings from the mental health in the workplace: Public health summit. *Journal of Occupational and Environmental Medicine*, 60(4), 322-330.
- Good, T.L., Clark, S.N., Clark, D.C. (1997) Reform Efforts in American Schools: Will Faddism Continue to Impede Meaningful Change?. In B.J. Biddle, T.L. Good, I.F. Goodson. (Eds.), *International Handbook of Teachers and Teaching: Springer International Handbooks of Education Volume 3* (1387-1427). Springer: Dordrecht.
- Gordon, C., & Debus, R. (2002). Developing deep learning approaches and personal teaching efficacy within a preservice teacher education context. *British Journal of Educational Psychology*, 72, 483-511.
- Gott, J. (2003). The school: The front line of mental health development? *Pastoral Care in Education*, 21(4), 5-13.
- Graham, A., Phelps, R., Maddison, C., & Fitzgerald, R. (2011). Supporting children's mental health in schools: Teacher views. *Teachers and Teaching: Theory and Practice*, 4, 479-496.
- Gray, L., & Taie, S. (2015). *Public School Teacher Attrition and Mobility in the First Five Years: Results from the First through Fifth Waves of the 2007-08 Beginning Teacher Longitudinal Study* (NCES 2015-337). U.S. Department of Education; Washington, DC: National Center for Education Statistics. Retrieved from <http://nces.ed.gov/pubs2015/2015337.pdf>.

- Gray, C., Wilcox, G., & Nordstokke, D. (2017). Teacher mental health, school climate, inclusive education and student learning: A review. *Canadian Psychology, 58*(3), 203-210.
- Grimmett, P. P. (2009). The governance of Canadian teacher education: A macro-political perspective. In F. Benson & C. Riches (Eds.). *Engaging in conversation about ideas in teacher education* (22–32). New York, NY: Peter Lang.
- Grimmett, P. P., Young, J., & Lessard, C. (2012). *Teacher certification and the professional status of teaching in North America: The new battleground for public education*. Charlotte, NC: Information Age Publishing.
- Gustems-Carnicer, J., Calderon, C., & Calderon-Garrido, D. (2019). Stress, coping strategies and academic achievement in teacher education students. *European Journal of Teacher Education, 42*(3), 375-390.
- Hagger, H., & Malmberg, L. (2011). Pre-service teachers' goals and future-time extension, concerns, and well-being. *Teaching and Teacher Education, 27*(3), 598-608.
- Hamama, L., Ronen, T., Shachar, K., & Rosenbaum, M. (2013). Links between stress, positive and negative affect, and life satisfaction among teachers in special education schools. *Journal of Happiness Studies, 14*(3), 731-751.
- Hanisch, S. E., Twomey, C. D., Szeto, A. C. H., Birner, U. W., Nowak, D., & Sabariego, C. (2016). The effectiveness of interventions targeting the stigma of mental illness at the workplace: A systematic review. *BMC Psychiatry, 16*(1), 1-11.
- Harding, S., Morris, R., Gunnell, D., Ford, T., Hollingworth, W., Tilling, K...& Kidger, J. (2019). Is teachers' mental health and wellbeing associated with students' mental health and wellbeing? *Journal of Affective Disorders, 1*(242), 180-187.
- Harmsen, R., Helms-Lorenz, M., Maulana, R., & van Veen, K. (2018). The relationship between

- beginning teachers' stress causes, stress responses, teaching behaviour and attrition. *Teachers and Teaching*, 24(6), 626-643.
- Harris, G. E. (2011). Individual stress management coursework in Canadian teacher preparation programs. *Canadian Journal of Education*, 34(4), 104-117.
- Hassan, N.C., & Kavita, K. (2018). Work stress among teachers: A comparison between primary and secondary school teachers. *Intertional Journal of Academic Research in Progressive Education & Development*, 7(4), 60-66.
- Hatcher, A. (2018). *Measuring mental health literacy in education* (Master's thesis, Western University, London, Canada). Retrieved from Electronic Thesis and Dissertation Repository. 5313, <https://ir.lib.uwo.ca/etd/5313>
- Heinz, M. (2015). Why choose teaching? An international review of empirical studies exploring student teachers' career motivations and levels of commitment to teaching. *Educational Research and Evaluation: An Intertional Journal on Theory and Practice*, 21(3), 258-297.
- Henderson, S., Dalton, M., & Cartmel, J. (2016). Using interprofessional learning for continuing education: Development and evaluation of the Graduate Certificate Program in Health Professional Education for Clinicians. *Journal of Continuing Education in the Health Professions*, 36(3), 211–217.
- Henry, G. T., Bastian, K. C., & Forner, K. (2011). Stayers and leavers: Early-career teacher effectiveness and attrition. *Educational Researcher*, 40(6), 271-280.
- Herman, K.C., Hickmon-Rosa, J., & Reinke, W.M. (2017). Empirically derived profiles of teacher stress, burnout, self-efficacy, and coping and associated student outcomes. *Journal of Positive Behaviour Interventions*, 20(2), 90-100.

- Hoglund, W. L., Klinge, K. E., & Hosan, N. E. (2015). Classroom risks and resources: Teacher burnout, classroom quality and children's adjustment in high needs elementary schools. *Journal of School Psychology, 53*(5), 337-357.
- Holen, S., Waaktaar, T., & Sagatun, S. (2018). A chance lost in the prevention of school dropout? Teacher-student relationships mediate the effect of mental health problems on noncompletion of upper-secondary school. *Scandinavian Journal of Educational Research, 62*(5), 737-753.
- Hosein, A., & Rao, N. (2017). Pre-professional ideologies and career trajectories of the allied professional undergraduate student. *Research in Post-Compulsory Education, 22*(2), 252-270.
- Howard, K., Haskard-Zolnierek, K., Johnson, A., Roming, S., Price, R., & Cobos, B. (2017). Somatization disorder and stress in teachers: A comprehensive occupational health evaluation. *Journal of Applied Biobehavioural Research, 22*(4), 1-11.
- Howorun, C. (2018). Teacher absenteeism cost TDSB nearly \$100M last year. *CityNews*.
Retrieved from <https://toronto.citynews.ca/2018/12/04/exclusive-teacher-absenteeism-costs-tdsb-nearly-100m-last-year/>
- Hummel, T.J., & Sligo, J.R. (1971). Empirical comparison of univariate and multivariate analysis of variance procedures. *Psychological Bulletin, 76*(1), 49-57.
- Imran, N., Rahman, A., Chaudhry, N., & Aftab, A. (2018). On the frontline: Exploring the perceptions of Lahore's inner-city school teachers regarding children problems. *Iranian Journal of Public Health, 47*(10), 1537-1545.
- Ingersoll, R. M. (2001). Teacher turnover and teacher shortages – An organizational analysis. *Am Ed Res J, 38*, 499-534.

- Ingersoll, R. M., & Smith, T. M. (2004). Do teacher induction and mentoring matter? *NASSP Bulletin*, 88(638), 28-40.
- Ingersoll, R., & Strong, M. (2011). The impact of induction and mentoring programs for beginning teachers: A critical review of the research. *Review of Educational Research*, 81, 201-233.
- Ingersoll, R., Merrill, L., & May, H. (2014). *What are the effects of teacher education and preparation on beginning teacher attrition?* CPRE Research Reports (8/2014). Retrieved from http://repository.upenn.edu/cpre_researchreports/78/
- Jimenez, D. E., Bartels, S.J., Cardenas, V., Daliwal, S.S., & Alegria, M. (2013). Cultural beliefs and mental health treatment preferences of ethnically diverse older adult consumers in primary care. *The American Journal of Geriatric Psychiatry*, 20(6), 533-542.
- Johnson, B., & McElroy, T.M. (n.d.). The changing role of the teacher in the 21st century. Retrieved from <https://pdfs.semanticscholar.org/5a76/0476e274d11d3824f433a78f15d9d2d41c8a.pdf>
- Jorm, A. F. (2012). Mental health literacy: Empowering the community to take action for better mental health. *American Psychologist*, 67, 231–243.
- Jorm, A.F., Korten, A.E., Jacomb, R.A., Christensen, H., Rodgers, B., & Pollitt, P. (1997) Mental health literacy: A survey of the public's ability to recognize mental disorders and their beliefs about the effectiveness of treatment. *Medical Journal of Australia*, 166(4), 182-186.
- Justin, S. M. (2004). Examining barriers to professional development for science teachers. *ProQuest Dissertations Publishing*, 3156396.
- Kauppi, T., & Porhola, M. (2012). School teachers bullied by their students: Teachers'

- attributions and how they share their experiences. *Teaching and Teacher Education*, 28(7), 1059-1068.
- Kaur, B. (2012). Equity and social justice in teaching and teacher education. *Teaching and Teacher Education*, 28, 485-492.
- Kelly, C. M., Jorm, A. F., & Wright, A. (2007). Improving mental health literacy as a strategy to facilitate early intervention for mental disorders. *The Medical Journal of Australia*, 187(7), 26-30.
- Kessler, R.C., Berglund, P., Demler, O., Jin, R., Merikangas, K. R., & Walters, E. E. (2005). Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication. *Arch Gen Psychiatry*, 62(6), 593-602.
- Keyes, C. L. M. (2007). Promoting and protecting mental health as flourishing: A complementary strategy for improving national mental health. *American Psychologist*, 62, 95–108.
- Kidger, J., Brockman, R., Tilling, K., Campbell, R., Ford, T., Araya, R.,...Gunnell, D. (2016). Teachers' wellbeing and depressive symptoms, and associated risk factors: A large cross-sectional study in English secondary schools. *Journal of Affective Disorders*, 1(192), 76-82.
- Kilderry, A. (2015). The intensification of performativity in early childhood education. *J. Curriculum Studies*, 47(5), 633-652.
- Kim, J., Han, J. Y., Shaw, B., McTavish, F., & Gustafson, D. (2010). The roles of social support and coping strategies in predicting breast cancer patients' emotional well-being testing mediation and moderation models. *Journal of Health Psychology*, 15(4), 543-552.
- Kim, L. E., Jorg, V., & Klassen, R. M. (2019). A meta-analysis of the effects of teacher

- personality on teacher effectiveness and burnout. *Educational Psychology Review*, 31(1), 163-195.
- King, B., & Newman, F.M. (2000). Will teacher learning advance school goals? *Phi Delta Kappan*, 81(8), 576.
- Kipps-Vaughan, D., Ponsart, T., & Gilligan, T. (2012). Teacher wellness: Too stressed for stress management? *Communique*, 41(1), 26-28.
- Kirby, M. J., & Keon, W. J. (2006). Out of the shadows at last: Transforming mental health, mental illness, and addiction services in Canada. Ottawa, Ontario: The Standing Senate Committee on Social Affairs, Science and Technology.
- Kitchenham, A., & Chasteauneuf, C. (2010). Teacher supply and demand: Issues in Northern Canada. *Canadian Journal of Education*, 33(4), 869-896.
- Klassen, R.M. (2010). Teacher stress: The mediating role of collective efficacy beliefs. *The Journal of Educational Research*, 103, 342-350.
- Klassen, R.M., & Chiu, M.M. (2010). Effects on teachers' self-efficacy and job satisfaction: Teacher gender, years of experience, and job stress. *Journal of Educational Psychology*, 102(3), 741-756.
- Klassen, R. M., Usher, E. L., & Bong, M. (2010). Teachers' collective efficacy, job satisfaction, and job stress in cross-cultural context. *Motivation and Social Processes*, 78(4), 464-486.
- Klassen, R., Wilson, E., Siu, A.F.Y., Hannock, W., Wong, M.W., Wongsri, N.,... & Jansem, A. (2013). Preservice teachers' work stress, self-efficacy, and occupational commitment in four countries. *European Journal of Psychology Education*, 28(4), 1289-1309.
- Knaak, S., Szeto, A., & Dobson, K. (2017). Stigma towards mental disorders in healthcare:

- Research, findings and programs from the Mental Health Commission of Canada's Opening Minds Initiative. *Journal: The Official Publication of the Ontario Occupational Health Nurses Association*, 37(2), 37-41.
- Koenig, A., Rodger, S., & Specht, J. (2018). Educator burnout and compassion fatigue: A pilot study. *Canadian Journal of School Psychology*, 33(4), 259-278.
- Kopcha, T. J. (2012). Teachers' perceptions of the barriers to technology integration and practices with technology under situated professional development. *Computers & Education*, 59(4), 1109-1121.
- Korthagen, F. A. J., & Evelein, F. G. (2016). Relations between student teachers' basic needs fulfillment and their teaching behaviour. *Teaching and Teacher Education*, 60, 234-244.
- Kratt, D. (2018). Teachers' perceptives on educator mental health competencies: A qualitative case study. *American Journal of Qualitative Research*, 2(1), 22-40.
- Kutcher, S., & McLuckie, A. (2010). *Evergreen: A child and youth mental health framework for Canada*. Calgary, AB: Mental Health Commission of Canada.
- Kutcher S., & Wei, Y. (2014). School mental health literacy: a national curriculum guide shows promising results. *Education Canada*, 54, 22-26.
- Kutcher, S., Wei, Y., & Morgan, C. (2015). Successful application of a Canadian Mental Health Curriculum Resource by usual classroom teachers in significantly and sustainably improving student mental health literacy. *Psychiatry*, 60(12), 580-586.
- Kutcher, S., Gilberds, H., Morgan, C., Greene, R., Hamwaka, K., & Perkins, K. (2015). Improving Malawian teachers' mental health knowledge and attitudes: An integrated school mental health literacy approach. *Global Mental Health*, 2(1), 1-10.
- Kutcher, S., Bagnell, A., & Wei, Y. (2015). Mental health literacy in secondary schools: A

- Canadian approach. *Child and Adolescent Psychiatric Clinics of North America*, 24(2), 233-244.
- Kutcher, S., Wei, Y., McLuckie, A., & Bullock, L. (2013). Educator mental health literacy: A programme evaluation of the teacher training education on mental health & high school curriculum guide. *Advances in School Mental Health Promotion*, 6(2), 83-92.
- Kutcher, S., Wei, Y., Gilberds, H., Ubuguyu, O., Njau, T., Brown, A.,...Perkins, K. (2016). A school mental health literacy curriculum resource training approach: Effects on Tanzanian teachers' mental health knowledge, stigma and help-seeking efficacy. *International Journal of Mental Health Systems*, 10, 50.
- Kutsyruba, B., Walker, K., Al Makhamreh, M., & Stasel, R.B. (2018). Attrition, retention, and development of early career teachers: Pan-Canadian narratives. *In Education*, 24(1), 43-71.
- Kyriacou, C. (2001). Teacher stress: Directions for future research. *Educational Review*, 53(1), 27-35.
- Lambersky, J. (2016). Understanding the human side of school leadership: Principals' impact on teachers' morale, self-efficacy, stress, and commitment. *Leadership and Policy in Schools*, 15(4), 379-405.
- Lanier, J. T. (1997). Redefining the role of the teacher: It's a multifaceted profession. *Edutopia*. (07/1997). Retrieved from <https://www.edutopia.org/redefining-role-teacher>
- Lawrence, D., Dawson, V., Houghton, S., Goodsell, B., & Sawyer, M. G. (2019). Impact of mental disorders on attendance at school. *Australian Journal of Education*, 63(1), 5-21.
- Le Cornu, R. (2007). Peer mentoring: Engaging pre-service teachers in mentoring one another. *Mentoring & Tutoring: Partnership in Learning*, 13(5), 355-366.

- Le Maistre, C., & Pare, A. (2010). Whatever it takes: How beginning teachers learn to survive. *Teaching and Teacher Education, 26*(3), 559-564.
- Leadbeater, B. (2010). The fickle fates of push and pull in the dissemination of mental health programs for children. *Canadian Psychology, 51*(4), 221-230.
- Leadbeater, B. J., Sukhawathanakul, P., Thompson, K., & Holfeld, B. (2015). Parent, child, and teacher reports of school climate as predictors of peer victimization, internalizing and externalizing in elementary school. *School Mental Health, 7*, 261-272.
- Lee, B., & Jeong, H.I. (2019). Construct validity of the perceived stress scale (PSS-10) in a sample of early childhood teacher candidates. *Psychiatry and Clinical Psychopharmacology, 29*(1), 76-82.
- Lei, H., Cui, Y., Chiu, M. M. (2016). Affective teacher-student relationships and students' externalizing behaviour problems: A meta-analysis. *Frontiers in Psychology, 7*(1311), 1-12.
- Lester, S., Lawrence, C., & Ward, C. L. (2016). What do we know about preventing school violence? A systematic review of systematic reviews. *Psychology, Health, & Medicine, 22*(1), 187-223.
- Lever, N., Mathis, E., & Mayworm, A. (2019). School mental health is not just for students: Why teacher and school staff wellness matters. *Report on Emotional & Behavioural Disorders in Youth, 17*(1), 6-12.
- Lewallen, T. C., Hunt, H., Potts-Datema, W., Zaza, S., & Giles, W. (2015). The whole school, whole community, whole child model: A new approach for improving educational attainment and healthy development for students. *Journal of School Health, 85*(11), 729-739.

- Libbey, H. P. (2004). Measuring student relationships to school: Attachment, bonding, connectedness and engagement. *Journal of School Health, 74*, 274-283.
- Lipson, S.K., Speer, N., Brunwasser, S., Hahn, E., Eisenberg, D. (2014). Gatekeeper training and access to mental health care at universities and colleges. *Journal of Adolescent Health, 55*(5), 612-619.
- Liu, W., Li, X., & Zou, Y.M. (2019). The formation of teachers' intrinsic motivation in professional development. *Integrative Psychological and Behavioural Science, 53*(3), 418-430.
- Lo, K., Gupta, T., & Keating, J. L. (2018). Interventions to promote mental health literacy in university students and their clinical educators: A systematic review of randomized control trials. *Health Professions Education, 4*(3), 161-175.
- Long, N., Morse, W. C., & Newman, R. G. (1996). *Conflict in the classroom: The education of at-risk and troubled students* (5th ed.). Austin, TX: Pro-Ed.
- Louw, G.J., & Viviers, A.M. (2010). An evaluation of a psychosocial stress and coping model in the police work context. *Journal of Industrial Psychology, 36*(1), 442-453.
- Lynch, M.F., & Salikhova, N.R. (2017). Teachers' beliefs about the needs of students: Teachers as local experts (a qualitative analysis). *Education and Self Development, 12*(3), 33-43.
- MacBeath, J. (2011). Education of teachers: the English experience. *Journal of Education for Teaching, 37*(4), 377-386.
- MacDonald, C. (1993). Coping with stress during the teaching practicum: The student teacher's perspective. *The Alberta Journal of Educational Research, 39*, 407-418.
- Macdonald, D. (1999). Teacher attrition: A review of literature. *Teaching and Teacher Education, 15*, 835-848.

- Malla, A., Shah, J., Iyer, S., Boksa, P., Joobar, R., Andersson, N., Lal, S., & Fuhrer, R. (2018). Youth mental health should be a top priority for health care in Canada. *The Canadian Journal of Psychiatry*, *63*(4), 216-222.
- Mankin, A., von der Embse, N., Renshaw, T. L., & Ryan, S. (2017). Assessing teacher wellness: Confirmatory factor analysis and measurement invariance of the Teacher Subjective Wellbeing Questionnaire. *Journal of Psychoeducational Assessment*, 1-14.
- Martin, F., Wang, C., & Sadaf, A. (2018). Student perception of helpfulness of facilitation strategies that enhance instructor presence, connectedness, engagement and learning in online courses. *The Internet and Higher Education*, *37*, 52-65.
- Martin, R. R., Dolmage, R., & Sharpe, D. (2012). *Seeking wellness: Descriptive findings from the survey of the work life and health of teachers in Regina and Saskatoon*. Retrieved from: https://www.stf.sk.ca/sites/default/files/seeking_wellness.pdf
- Maslach, C., & Leiter, M.P. (2016). Understanding the burnout experience: Recent research and its implications for psychiatry. *World Psychiatry*, *15*(2), 103-111.
- Masten, A. S., Best, K. M., & Garmezy, N. (1990). Resilience and development: Contributions from the study of children who overcome adversity. *Development and Psychopathology*, *2*, 425-444.
- Mental Health Commission of Canada. (2012). *Changing directions, changing lives: The mental health strategy for Canada*. Calgary, AB: Author.
- Meldrum, L., Venn, D., & Kutcher, S. (2009). Mental health in schools: How teachers have the power to make a difference. *Health & Learning Magazine*. Retrieved from https://www.ctf-fce.ca/Research-Library/Issue8_Article1_EN.pdf
- McCann, T. M., & Johannessen, L. R. (2005). The role and responsibility of the experienced

- teacher. *The English Journal*, 95(2), 52-57.
- McIsaac, J.D., Read, K., Veugelers, P.J., & Kirk, S.F.L. (2017). Culture matters: A case of school health promotion in Canada. *Health Promotion International*, 32(2), 207-217.
- McKnight, K., O'Malley, K., Ruzic, R., Horsley, M. K., Franey, J. J., & Bassett, K. (2016). Teaching in the digital age: How educators use technology to improve student learning. *Journal of Research on Technology in Education*, 38(3), 194-211.
- McLean, L., & Connor, C. M. (2015). Depressive symptoms in third-grade teachers: Relations to classroom quality and student achievement. *Child Developmental*, 86(3), 945-954.
- McLean, L., Abry, T., Taylor, M., Jimenez, M., & Granger, K. (2017). Teachers' mental health and perceptions of school climate across the transition from training to teaching. *Teaching and Teacher Education*, 65, 230-240.
- McLuckie, A., Kutcher, S., Wei, Y., & Weaver, C. (2014). Sustained improvements in students' mental health literacy with use of a mental health curriculum in Canadian schools. *BMC Psychiatry*, 14(379).
- Mei-Ju, C., Hsing-Ming, L., & Ho-Tang, W. (2016). Emotion, psychological resilience and work stress: A study among preschool teachers. *European Journal of Psychological Research*, 3(1), 8-15.
- Mendenhall, A.N., Iachini, A., Anderson-Butcher, D. (2013). Exploring stakeholder perceptions of facilitators and barriers to implementation of an expanded school improvement model. *Children & Schools*, 35(4), 225-234.
- Merida-Lopez, S., & Extremera, N. (2017). Emotional intelligence and teacher burnout: A systematic review. *International Journal of Educational Research*, 85, 121-130.
- Michelli, N. M., Dada, R., Eldridge, D., Tamim, R. M., & Karp, K. (2017). *Teacher Quality and*

- Teacher Education Quality: Accreditation from a Global Perspective*. New York, NY: Taylor & Francis.
- Miller, A. D., Ramirez, E. M., & Murdock, T. B. (2017). The influence of teachers' self-efficacy perceptions: Perceived teacher competence and respect and student effort and achievement. *Teaching and Teacher Education, 64*, 260-269.
- Modgill, G., Patten, S., Knaak, S., Kassam, A., & Szeto, A. (2014). Opening minds stigma scale for health care providers (OMS-HC): Examination of psychometric properties and responsiveness. *BMC Psychiatry, 14*(1), 120-120.
- Molina, S. C. (2013). Romanticizing culture: The role of teachers' cultural intelligence in working with diversity. *The Catesol Journal, 24*(1), 1-25.
- Moon, J., Williford, A., & Mendenhall, A. (2017). Educators' perceptions of youth mental health: Implications for training and the promotion of mental health services in schools. *Children and Youth Services Review, 73*, 384-391.
- Monsen, J.J., Ewing, D.L., & Kwoka, M. (2014). Teachers' attitudes towards inclusion, perceived adequacy of support and classroom learning environment. *Learning Environments Research, 17*(1), 113-126.
- Mujtaba, T. & Reiss, M. (2013). Factors that lead to positive or negative stress in secondary school teachers of mathematics and science. *Oxford Review of Education, 39*(5), 627-648.
- Mukeredzi, T. G. (2017). Mentoring in a cohort model of practicum: Mentors and preservice teachers' experiences in a rural South African school. *Sage Journals, 7*(2), 1-15.
- Murphy, T.M., Chang, C.Y., & Dispenza, F. (2018). Qualitative clinical mental health program

- evaluation : Models and implications for counseing practitioners and educators. *Journal of Mental Health Counseling*, 40(1), 1-13.
- Nagge, J.J., Lee-Poy, M.F., & Richard, C.L. (2017). Evaluation of a unique interprofessional education program involving medical and pharmacy students. *American Journal of Pharmaceutical Education*. 81(10), 80-86.
- Nakamura-Taira, N., Izawa, S., & Yamada, K.C. (2018). Stress underestimation and mental health literacy of depression in Japanese workers: A cross-sectional study. *Psychiatry Research*, 262, 221-228.
- National Research Council. (2000). *Educating teachers of science, mathematics and technology: New practices for the millennium*. Washington, DC: National Academy Press.
- Neilsen, L., Meilstrup, C., Nelausen, M., Koushede, V., & Holstein, B. (2015). Promotion of social and emotional competence: Experiences from a mental health intervention applying a whole school approach. *Health Education*, 115, 339-356.
- Newnham, H. (2000). When is a teacher or school liable in negligence?. *Australian Journal of Teacher Education*, 25(1), 1-51.
- Newton, N.C., Stapinski, L., Slade, T., Champion, K.E., Barrett, E.L., Chapman, C.,... Teesson, M. (2018). Pathways to prevention: Protocol for the CAP (Climate and Preventure) study to evaluate the long-term effectiveness of school-based universal, selective and combined alcohol misuse prevention into early adulthood. *BMC Public Health*, 18(1), 1-10.
- O'Connor, C. A., Dyson, J., Cowdell, F., & Watson, R. (2017). Do universal school-based mental health promotion programmes improve the mental health and emotional wellbeing of young people? A literature review. *Journal of Clinical Nursing*, 27(3-4).
- O'Reilly, M., Svirydzhenka, N., Adams, S., & Dogra, N. (2018). Review of mental health

- promotion interventions in schools. *Social Psychiatry and Psychiatric Epidemiology*, 53(7), 647-662.
- Oberle, E., & Schonert-Reichl K. A. (2017). Social and emotional learning: Recent research and practical strategies for promoting children's social and emotional competence in schools. In J. L. Matson (Eds.), *Handbook of Social Behaviour and Skills in Children, Autism and Child Psychopathology Services* (175-197). Springer International Publishing.
- Ontario College of Teachers. (2014). *Accreditation Resource Guide*. Retrieved from https://www.oct.ca/media/PDF/Accreditation%20Resource%20Guide/2014_Accreditation_Resource_Guide_EN_WEB.pdf
- Ontario College of Teachers. (2017). *Professional Standards: Standards of Practice*. Retrieved from <https://www.oct.ca/public/professional-standards/standards-of-practice>
- Ontario Ministry of Education. (2019). *New Teacher Induction Program : Induction Elements Manual*. Retrieved from the Ontario Ministry of Education website: <http://www.edu.gov.on.ca/eng/teacher/pdfs/NTIPInductionElements2019.pdf>
- Onwuegbuzie, A.J., & Johnson, R.B. (2006). The validity issue in mixed research. *Research in the Schools*, 13(1), 48-63.
- Ouellette, R., Frazier, S. L., Shernoff, E. S., Cappella, E., Mehta, T. G., Marinez-Lora, A.,...Atkins, M. S. (2018). Teacher job stress and satisfaction in urban schools: Disentangling individual-, classroom-, and organizational-level influences. *Behaviour Therapy*, 49(4), 1-16.
- Oztok, M., Zingaro, D., Brett, C., & Hewitt, J. (2013). Exploring asynchronous and synchronous tool use in online courses. *Computers & Education*, 60(1), 87-94.
- Ozu, O., Zepeda, S., Illgan, A., Jimenez, A. M., Ata, A., & Akram, M. (2017). Teachers'

- psychological well-being: A comparison among teachers in U.S.A., Turkey and Pakistan. *International Journal of Mental Health Promotion*, 19(3), 144-158.
- Pantaleo, S. (2016). Teacher expectations and student literacy engagement and achievement. *Literacy*, 50(2), 83-92.
- Papastyliauou, D., Kaila M., & Polychronopoulos, M. (2009). Teachers' Burnout, Depression, Role Conflict-Ambiguity. *Journal of Social Psychology of Education*, 12(3), 295-314.
- Parding, K., Berg-Jansson, A., Sehlstedt, T., McGrath-Champ, S., & Fitzgerald, S. (2017). Differentiation as a consequence of choice and decentralization reforms: Conditions for teachers' competence development. *Professions & Professionalism*, 7(2), 1-15.
- Park, N., Peterson, C., & Seligman, M. (2004). Strengths of character and well-being. *Journal of Social and Clinical Psychology*, 23, 603-619.
- Parker, A.K., Groth, L.A., & Byers, C.C. (2019). Designing and implementing site-based courses in elementary teacher preparation. *The New Educator*, 15(2), 130-155.
- Paschall, M. J., & Bersamin, M. (2018). School-based health centers, depression and suicide risk among adolescents. *American Journal of Preventative Medicine*, 54(1), 44-50.
- Pereira, F., Lopes, A., & Marta, M. (2015). Being a teacher educator: Professional identities and conceptions of professional education. *Educational Research*, 57(4), 451-469.
- Perlaza, A.M., & Tardif, M. (2016). Pan-Canadian perspectives on teacher education: The state of the art in comparative research. *Alberta Journal of Educational Research*, 62(2), 199-219.
- Pinderup, P. (2018). Improving the knowledge, attitudes, and practices of mental health professionals regarding dual diagnosis treatment: A mixed methods study of an intervention. *Issues in Mental Health Nursing*, 39(4), 292-303.

- Pinfold, V., Toulmin, H., Thornicroft, G., Huxley, P., Farmer, P., & Graham, T. (2003). Reducing psychiatric stigma and discrimination: Evaluation of educational interventions in UK secondary-schools. *BR J Psychiatry*, *182*, 342-346.
- Pluye, P. & Hong, Q.N. (2014). Combining the power of stories and the power of numbers: Mixed methods research and mixed studies reviews. *Annual Review of Public Health*, *35*(1), 29-45.
- Podis, J., & Podis, L. (2007). Pedagogical in Loco Parentis: Reflecting on power and parental authority in the writing classroom. *College English*, *70*(2), 121-143.
- Podolsky, A., Kini, T., Bishop, J., & Darling-Hammond, L. (2017). Sticky schools: How to find and keep teachers in the classroom: To improve teacher recruitment, performance, and retention, education policymakers should consider five proven strategies. *Phi Delta Kappan*, *98*(8).
- Power, K., & Goodnough, K. (2019). Fostering teachers' autonomous motivation during professional learning: A self-determination theory perspective. *Teaching Education*, *30*(3), 278-298.
- Reavley, N.J., & Jorm, A.F. (2011). *National survey of mental health literacy and stigma*. Department of Health and Ageing, Canberra. (10/2014). Retrieved from http://pmhg.unimelb.edu.au/research_settings/general_community/?a=636496.
- Reavley, N. J., & Jorm, A.F. (2011). Recognition of mental disorders and beliefs about treatment and outcome: Findings from an Australian national survey of mental health literacy and stigma. *The Australian and New Zealand Journal of Psychiatry*, *45*(11), 947-956.
- Reichel, J. (2013, February 20). Overwhelmed Canadian Teachers Quitting in Droves. *The Epoch Times*. ON, Canada.

- Reinke, W.M., Stormont, M., Herman, K.C., Puri, R., & Goel, N. (2011). Supporting children's mental health in schools: Teacher perceptions of needs, roles, and barriers. *School Psychology Quarterly*, 26(1), 1-13.
- Rickwood, D., Cavanagh, S., Curtis, L., & Sakrouge, R. (2004). Educating young people about mental health and mental illness: Evaluating a school-based programme. *International Journal of Mental Health Promotion*, 6, 23-32.
- Richardson, B. G. (2001). *Working with challenging youth: Lessons learned along the way*. Philadelphia, PA: Brunner-Routledge.
- Richardson, B. G., & Shupe, M. J. (2003). The importance of teacher self-awareness in working with students with emotional and behavioural disorders. *Teaching Exceptional Children*, 36(2), 8-13.
- Rissanen, A. (2018). Student engagement in large classroom: The effect on grades, attendance and student experiences in an undergraduate biology course. *Canadian Journal of Science, Mathematics and Technology Education*, 18(2), 136-153.
- Robinson, H.M. (2016). Dynamics of culture and curriculum design: Preparing culturally responsive teacher candidates. *Early Childhood Development: Concepts, Methodologies, Tools, and Applications, Volume 3* (343-365). IGI Global.
- Rones, M., & Hoagwood, K. (2000). School-based mental health services: A research review. *Clinical Child and Family Psychology Review*, 3(4), 223-241.
- Rodger, S., Hibbert, K., Leschied, A., Pickel, L., Stepien, M., Atkins, M.A., ...Vandermeer, M. (2014). *Mental health education in Canada: An analysis of teacher education and provincial/territorial curricula*. Western University Centre for School-Based Mental Health: Physical and Health Education Canada.

- Rodger, S. Hibbert, K. Leschied, A., Pickel, L, Stepien, M. Atkins, M.A., ... Vandermeer, M. (2015). Shaping a mental health curriculum for Canada's schools: Rationale and a brief overview. *Physical and Health Education Journal (PHE)*, 80(3), 28–29
- Rose, T., Lindsey, M.A., Finigan-Carr, N.M., & Joe, S. (2017). Mental health and educational experiences among Black youth: A latent class analysis. *Journal of Youth and Adolescence*, 46(11), 2321-2340.
- Rosenbaum, M. (1993). The three functions of self-control behaviour: Redressive, reformatie and experiential. *Work & Stress: An International Journal of Work, Health, & Organisations*, 7(1), 33-46.
- Rowling, L. (2009). Strengthening 'school' in school mental health promotion. *Health Education*, 109(4), 357-368.
- Rusch, D., Walden, A.L., Gustafson, E., Lakind, D., & Atkins, M.C. (2018). A qualitative study to explore paraprofessionals' role in school-based prevention and early intervention mental health services. *Journal of Community Psychology*, 47(2), 272-290.
- Ryan, R.M., & Deci, E.L. (2002). Overview of self-determination theory: An organismic dialectical perspective. In E.L. Deci & R.M. Ryan. (Eds.). *Handbook of Self-Determination Research* (pp. 1-34). Rochester, NY: University of Rochester Press.
- Ryan, S.V., von der Embse, N.P., Pendergast, L.L., Saeki, E., Segool, N., & Schwing, S. (2017). Leaving the teaching profession: The role of teacher stress and educational accountability policies on turnover intent. *Teaching and Teacher Education*, 66, 1-11.
- Salvagioni, D.A.J., Melanda, F.N., Mesas, A.E., Gonzalez, A.D., Gabani, F.L., & de Andrade, S.M. (2017). Physical, psychological and occupational consequences of job burnout: A systematic review of prospective studies. *PloS one*, 12(10), 1-29.

- Sandhu, H. S., Arora, A., Brasch, J., & Streiner, D. L. (2019). Mental health stigma: Explicit and implicit attitudes of Canadian undergraduate students, medical school students, and psychiatrists. *The Canadian Journal of Psychiatry, 64*(3), 209-217.
- Schaefer, L., Long, J. S., & Clandinin, D. J. (2012). Questioning the research on early career teacher attrition and retention. *Alberta Journal of Educational Research, 58*(1), 106-121.
- Schmidt, K., Neubach, B., & Heuer, H. (2007). Self-control demands, cognitive control deficits, and burnout. *Work & Stress: An International Journal of Work, Health, & Organisations, 21*(2), 142-154.
- Schneider, S. C., Mond, J., Turner, C. M., & Hudson, J. L. (2017). Subthreshold body dysmorphic disorder in adolescents: Prevalence and impact. *Psychiatry Research, 251*, 125-130.
- Schulte-Korne, G. (2016). Mental health problems in a school setting in children and adolescents. *Deutsches Arzteblatt International, 113*(11), 183-190.
- Schussler, D. L., Stooksberry, L. M., & Bercaw, L. A. (2010). Understanding teacher candidate dispositions: Reflecting to build self-awareness. *Journal of Teacher Education, 61*(4), 350-363.
- Seligman, M. (2008). Positive health. *Positive Health, 57*, 3-18.
- Shepherd, S. M. (2019). Cultural awareness workshops: Limitations and practical consequences. *BMC Medical Education, 19*(14), 1-10.
- Short, K. H. (2016). Intentional, explicit, systematic: Implementation and scale-up of effective practices for supporting student mental well-being in Ontario schools. *International Journal of Mental Health Promotion, 18*(1), 33-48.
- Simons, S. R., Stark, R. B., & DeMarco, R. F. (2011). A new, four-item instrument to measure

- workplace bullying. *Research in Nursing & Health*, 34, 132-140.
- Sink, C.A., & Lemich, G. (2018). Program evaluation in Doctoral-level counselor education preparation: Concerns and recommendations. *American Journal of Evaluation*, 39(4), 496-510.
- Skaalvik, E.M., & Skaalvik, S. (2018). Job demands and job resources as predictors of teacher motivation and well-being. *Social Psychology of Education*, 21, 1251-1275.
- Skinner, E., & Edge, K. (2002). *Self-Determination, coping, and development*. In E. L. Deci, & R. M. Ryan (Eds.), *Handbook of self-determination research* (pp. 297e337). Rochester: The University of Rochester Press.
- Slade, M. (2010). Mental illness and well-being: The central importance of positive psychologist and recovery approaches. *BMC Health Services Research*, 10(26), 1186-1472.
- Smith, K., & Sela, O. (2005). Action research as a bridge between pre-service teacher education and in-service professional development for students and teacher educators. *European Journal of Teacher Education*, 28(3), 293-310.
- Specht, J. A., & Metsala, J. L. (2018). Predictors of teacher efficacy for inclusive practice in pre-service teachers. *Exceptionality Education International*, 28(3), 67-82.
- Srugo, S. A., de Groh, M., Jiang, Y., Morrison, H. I., Hamilton, H.A., & Villeneuve, P. J. (2019). Assessing the impact of school-based greenness on mental health among adolescent student in Ontario, Canada. *International Journal of Environmental Research and Public Health*, 16(22), 1-12.
- St-Onge, M., & Lemyre, A. (2018). Assessing teachers' attitudes towards students with mental health disorders in 16 postsecondary institutions in Quebec. *International Journal of Disability, Development and Education*, 65(4), 459-474.

- Stacey, M. (2019). 'If you're wrong for the place you just don't survive': Examining the work of early career teachers in context. *Teachers and Teaching*, 25(4), 404-417.
- Stokols, D., Allen, J., Bellingham, R. L. (1996). The social ecology of health promotion: Implications for research and practice. *Am J Health Promotion*, 10(4), 247-251.
- Stone-Johnson, C. (2016). Intensification and isolation: Alienated teaching and collaborative professional relationships in the accountability context. *Journal of Educational Change*, 17(1), 29-49.
- Sullivan, P., Blacker, M., Murphy, J., & Cairney, J. (2019). Levels of psychological distress of Canadian university student-athletes. *Canadian Journal of Higher Education*, 49(1), 47-59.
- Summers, J. J., Davis, H. A., & Hoy, A. W. (2017). The effects of teachers' efficacy beliefs on students' perceptions of teacher relationship quality. *Learning and Individual Differences*, 53, 17-25.
- Sutcher, L., Darling-Hammond, L., & Carver-Thomas, D. (2016). *A Coming Crisis in Teaching? Teacher Supply, Demand, and Shortages in the U.S.* Learning Policy Institute. Retrieved from https://learningpolicyinstitute.org/sites/default/files/productfiles/A_Coming_Crisis_in_Teaching_REPORT.pdf
- Tannock, R., Frijters, J.C., Martinussen, R., White, E. J., Ickowicz, A., Benson, N. J., & Lovett, M. W. (2016). Combining modality intervention for ADHD with comorbid reading disorders: A proof of concept study. *Journal of Learning Disabilities*.
- Tang, S. Y. F., Wong, A. K. Y., & Cheng, M. M. H. (2016). Examining professional learning

and the preparation of professionally competent teachers in initial teacher education.

Teachers and Teaching: Theory and Practice, 22(1), 54-69.

The Alberta Teachers' Association. (2013). *Problems in education series: Teachers' rights, responsibilities and legal liabilities*. Edmonton, AB: Barnett House.

The Joint Committee on Student and Teacher Time. (2015). *Understanding and exploration of teacher time and workload intensification*. Saskatchewan, CA: Saskatchewan Teacher's Federation.

Tian, L., Zhang, X., Huebner, S. (2018). The Effects of satisfaction of basic psychological needs at school on children's prosocial behavior and antisocial behavior: The mediating role of school satisfaction. *Frontiers in Psychology*, 9, 1-13.

Thomson, A., Griffiths, H., Fisher, R., McCabe, R., Abbott-Smith, S., Schwannauer, M. (2019). Treatment outcomes and associations in an adolescent-specific early intervention for psychosis service. *Early Intervention in Psychiatry*, 13(3), 707-714.

Townsend, L., Musci, R., Stuart, E., Ruble, A., Beaudry, M. B., Schweizer, B.,...Swartz, K. (2017). The association of school climate, depression literacy, and mental health stigma among high school students. *Journal of School Health*, 87(8), 567-574.

Tuononen, T., Parpala, A., & Lindblom-Ylänne, S. (2017). The transition from university to working life – An exploration of graduates' perceptions of their academic competences. In E. Kyndt, V. Donche, K. Trigwell & S. Lindblom-Ylänne (Eds.), *Higher Education Transitions: Theory and research*. EARLI book series 17 "New Perspectives on Learning and Instruction" (pp. 238–253). London: Routledge – Taylor & Francis group.

University of Saskatchewan, College of Medicine. (2016). *Undergraduate medical education*

- program evaluation strategy*. Retrieved from
<https://medicine.usask.ca/documents/ugme/EvaluationFramework.pdf>
- Uzman, E., & Telef, B. B. (2015). Prospective teachers' mental health and their help-seeking behaviours. *The Journal of Psychiatry and Neurological Sciences*, 28(3), 242-254.
- Valli, L., & Buese, D. (2007). The changing roles of teachers in an era of high-stakes accountability. *American Educational Research Journal*, 44(3), 519-558.
- Van Droogenbroeck, F., & Spruyt, B. (2015). Do teachers have worse mental health? Review of the existing comparative research and results from the Belgian Health Interview Survey. *Teaching and Teacher Education*, 51, 88-100.
- Van Nuland, S. (2011). Teacher education in Canada. *Journal of Education for Teaching: International Research and Pedagogy*, 37(4), 409-421.
- Van Opstal, M.J.M.C. (2010). A systematic, holistic and integrative process of self-control for voicing with optimal coping effects in teachers. 1. A process of awareness – An expert's opinion. *Folia Phoniatica et Logopaedica*, 62(1-2), 71-85.
- Veenker, H., & Paans, W. (2016). A dynamic approach to communication in health literacy education. *BMC Medical Education*, 16(280), 1-12.
- Villachia, S.W., Stieha, V., Giacumo, L., Becker, L., & Fenner, J. (2019). A formative evaluation of a Master's-level career-coaching course for performance improvement students. *Performance Improvement Quarterly*, 1-33.
- Volante, L. (2005). Accountability, student assessment, and the need for a comprehensive approach. *International Electronic Journal for Leadership in Learning*, 9(6), 1-8.
- Volante, L., & Jaafar, S.B. (2010). Assessment reform and the case for learning-focused accountability. *The Journal of Educational Thought*, 44(2), 167-188.

- Waddell, C., Georgiades, K., Duncan, L., Comeau, J., Reid, G. J., O'Brien, W.,...Boyle, M. H. (2019). 2014 Ontario child health study findings: Policy implications for Canada. *The Canadian Journal of Psychiatry*, 64(4), 227-231.
- Walker, J., & von Bergmann, H. (2013). Teacher education policy in Canada: Beyond professionalization and deregulation. *Canadian Journal of Education*, 36(4), 65-92.
- Wang, C., Berry, B., & Swearer, S. M. (2013). The critical role of school climate in effective bullying prevention. *Theory into Practice*, 52(4), 296-302.
- Wang, H., Hall, N. C., & Rahimi, S. (2015). Self-efficacy and casual attributions in teachers: Effects on burnout, job satisfaction, illness, and quitting intentions. *Teaching and Teacher Education*, 47, 120-130.
- Wang, W., Vaillancourt, T., Brittain, H. L., Krygsman, A., Smith, D, Haltigan, J.D.,... & Hymel, S. (2014). School climate, peer victimization, and academic achievement: Results from a multi-informant study. *School Psychology Quarterly*, 29(3), 360-377.
- Ward, L., Grudnoff, L., Brooker, B., & Simpson, M. (2013). Teacher preparation to proficiency and beyond: Exploring the landscape. *Asia Pacific Journal of Education*, 33(1), 68-80.
- Watson, J.C., Harper, S., Ratliff, L., & Singleton, S. (2010). Holistic wellness and perceived stress: Predicting job satisfaction among beginning teachers. *Research in the Schools*, 17(1), 29-37.
- Watt, H.M.G., & Richardson, P.W. (2008). Motivation, perceptions, and aspirations concerning teaching as a career for different types of beginning teachers. *Learning and Instruction*, 18(2), 408-428.
- Wei, Y., Hayden, J. A., Kutcher, S., Zygmunt, A., & McGrath, P. (2013). The effectiveness of

- school mental health literacy programs to address knowledge, attitudes and help seeking among youth. *Early Intervention in Psychiatry*, 7, 109-121.
- Wei, Y., Baxter, A., & Kutcher, S. (2019). Establishment and validation of a mental health literacy measurement in Canadian educators. *Psychiatry Research*, 279, 231-236.
- Weist, M. D., Bruns, E. J., Whitaker, K., Wei, Y., Kutcher, S., Larsen, T...& Short, K. H. (2017). School mental health promotion and intervention: Experiences from four nations. *School Psychology International*, 38(4), 343-362.
- Wergin, J.F. (2005). Higher education: Waking up to the importance of accreditation: Ramifications of proposed 2005 extension of the Higher Education Act. *Change*, 37(3), 35-41.
- Westerhof, G. J., & Keyes, C. L. M. (2010). Mental illness and mental health: The two continua model across the lifespan. *Journal of Adult Development*, 17(2), 110-119.
- Weston, K. J., Anderson-Butcher, D., & Burke, R. W. (2008). Developing a comprehensive curriculum framework for teacher preparation in expanded school mental health. *Advances in School Mental Health Promotion*, 1(4), 25-41.
- Whitley, J., & Gooderham, S. (2016). Exploring mental health literacy among pre-service teachers. *Exceptionality Education International*, 62-92.
- Whitley, J., Smith, J.D., & Vaillancourt, T. (2013). Promoting mental health literacy among educators: Critical in school-based prevention and intervention. *Canadian Journal of School Psychology*, 28(1), 56-70.
- Wilson, C.M., Douglas, K.S., & Lyon, D.R. (2011). Violence against teachers: Prevalence and consequences. *Journal of Interpersonal Violence*, 26(12), 2353-2371.
- With, M. L. (2017). Are teachers increasingly leaving the profession? *Professions &*

- Professionalism*, 7(2), 1-24.
- Woloshyn, V., & Savage, M. (2018). Increasing teacher candidates' mental health literacy and stress coping skills through an elective mental health and wellness course. *International Journal of Inclusive Education*.
- Woloshyn, V., & Savage, M. (2018). Sharing narratives to foster mental health literacy in teacher candidates. *The Canadian Journal for the Scholarship of Teaching and Learning*, 9(2), 1-17.
- Yang, X., Ge, C., Hu, B., Chi, T., & Wang, L. (2009). Relationship between quality of life and occupational stress among teachers. *Public Health*, 123, 750-755.
- Yazan, B. (2017). "It just made me look at language in a different way:" ESOL teacher candidates' identity negotiation through teacher education coursework. *Linguistics and Education*, 40, 38-49.
- Yoon, J. S. (2002). Teacher characteristics as predictors of teacher-student relationships: Stress, negative affect, and self-efficacy. *Behaviour and Personality: An International Journal*, 30(5), 485-494.
- Yoon, S. Y. (2016). Principals' data-drive practice and its influences on teacher buy-in and student achievement in comprehensive school reform models. *Leadership and Policy in Schools*, 15(4), 500-523.
- Yu, G., Dong, Y., Wang, Q., & An, R. (2016). Reducing teacher stress: Improving humanized management of Chinese teachers. *Journal of Chinese Human Resources Management*, 7(2), 82-99.
- Zayed, R., Davidson, B., Nadeau, L., Callanam, T. S., Fleisher, W.,...Steele, M. (2016).

- Canadian rural/remote primary care physicians perspectives on child/adolescent mental health care service delivery. *Journal of the Canadian Academy of Child and Adolescent Psychiatry*, 25(1), 24-34.
- Zeichner, K.M. (2003). Teacher research as professional development for P-12 educators in the USA. *Educational Action Research*, 11(2), 301-326.
- Zhang, S., Shi, Q., & Lin, E. (2019). Professional development needs, support, and barriers: TALIS US new and veteran teachers' perspectives. *Professional Development in Education*, 1-14.
- Zionts, L. T., Shellady, S. M., & Zionts, P. (2006). Teachers' perceptions of professional standards: Their importance and ease of implementation. *Preventing School Failure*, 50(3), 5-12.
- Zinsser, K., Christensen, C., & Torres, L. (2016). She's supporting them; who's supporting her? Preschool center-level social-emotional supports and teacher well-being. *Journal of School Psychology*, 59, 55-66.

Appendix A: Measures

<u>Mental Health Curriculum Resource – (MHL-CR)</u>		
Section A: Mental Health Knowledge	34 items	<i>True/False</i>
	1.	Mental health literacy is focused on reading about current treatments of specific mental illnesses.
	2.	Mental illnesses are usually caused by the stresses of everyday life.
	3.	Mental health problems will be experienced by almost everyone during the course of their life.
	4.	Mental distress is rare.
	5.	A person can have good mental health and a mental illness at the same time.
	6.	Mental illnesses are mostly unrelated to other health conditions, such as diabetes or heart disease.
	7.	People with mental illness rarely, if ever, get better.
	8.	Self-stigma is often the result of personal weakness of people with mental illness.
	9.	It is important to apply evidence-based approaches to stigma reduction programs and use those for which good evidence of positive impact exists.
	10.	Stigma about mental illness prevents people from seeking help for a mental illness, causing negative impacts on the type of health care they receive.
	11.	Treatments for mental illnesses are not as effective as treatments for other illnesses, such as diabetes and arthritis.
	12.	Students with mental illness usually are not able to achieve academic success.
	13.	According to the Yerkes-Dodson law, there is an optimal level of anxiety that improves our performance.
	14.	Mental distress, mental health problems, and mental illness are always caused by a negative event.
	15.	There is no valid scientific evidence supporting the claim that Autism Spectrum Disorder (ASD) is caused by vaccines or diet.
	16.	Eating a balanced diet and getting regular exercise are sufficient treatments for mental illness.
	17.	When someone has an Anxiety Disorder, his or her brain is responding to legitimate threats in the environment.
	18.	Someone with Panic Disorder can anticipate when a panic attack is likely to occur.
	19.	Sometimes separation anxiety is developmentally appropriate.

	20.	A diagnosis of Oppositional Defiant Disorder (ODD) or Conduct Disorder (CD) helps us to understand <i>why</i> someone acts a certain way.
	21.	Students who self-harm are usually suicidal.
	22.	Asking a student that you know well if he or she is thinking about suicide is unlikely to trigger a suicide attempt.
	23.	The parasympathetic nervous system is involved in ramping up the body's stress response.
	24.	The presence of a responsible, supportive, and caring adult is one of the more important protective factors against the potential negative impacts of overwhelming stress for young people.
	25.	It is very important for schools to teach students about the harmful effects of daily stress so that they can grow up to become more resilient people.
	26.	Faulty logic is one example of a behavioral and emotional response to a stressor.
	27.	Most students will experience toxic stress daily.
	28.	A mentally healthy classroom is one in which the teacher works to try and make sure that the environment is stress-free.
	29.	A family doctor is not trained in the diagnosis and treatment of mental illnesses and should therefore refer young people who have a mental illness to a psychiatrist or psychologist for treatment.
	30.	Case Studies and Case Reports provide stronger research evidence than Randomized Controlled Trials.
	31.	When examining research about a treatment, statistical significance is more important than clinical significance.
	32.	A treatment provider's experience is the gold-standard in determining what treatment your student should receive.
	33.	ALL of the following are important roles that a teacher can take regarding mental health for students: identification of students at risk for a mental disorder; providing a diagnosis for parental consideration; providing information on academic achievement to the health care team.
	34.	The overall purpose of treatment for mental illness is to cure the illness.
Section B: Stigmatizing Attitudes Mental Health	8 items	<i>7-point Likert Scale: Strongly Disagree, Disagree, Disagree a Little, Not Sure, Agree a Little, Agree, Strongly Agree</i>
	1.	It is easy to tell when someone has a mental illness because they usually act in a strange or bizarre way
	2.	A mentally ill person should not be able to vote in an election

	3.	Most people who have a mental illness are dangerous and violent
	4.	Most people with a mental illness can have a good job and a successful and fulfilling life
	5.	I would be willing to have a person with a mental illness at my school
	6.	I would be happy to have a person with a mental illness become a close friend
	7.	Mental illness is usually a consequence of bad parenting or poor family environment
	8.	People who are mentally ill do not get better
Section C: Help Seeking, or Behavioural Comfort	5 items	<i>7-point Likert Scale: Strongly disagree, Disagree, Disagree a little, Not sure, Agree a little, Agree, Strongly agree</i>
	1.	I am comfortable helping a student, friend, family member or peer when I am concerned about their mental health
	2.	I would be likely to suggest that a student, friend, family member or peer obtain care if I am concerned about their mental health.
	3.	I am comfortable personally seeking help if I am concerned about my own mental health
	4.	I would be likely to seek help if I am concerned about my own mental health
	5.	My friends or peers would be likely to suggest that I seek help if they are concerned about my mental health

<u>Mental Health Literacy Questionnaire (MHLQ)</u> (Rodger, Johnson, and Weston (as described in Hatcher, 2018))		
Teaching and Leading in a Mentally Healthy Classroom	26 items	<i>5-point Likert Scale: Strongly Disagree, Disagree Somewhat, Neither Agree nor Disagree, Agree Somewhat, Strongly Agree</i>
		I know.....
	1.	Who to talk to when my student seems to be struggling with behaviours or emotions.
	2.	The steps to take to make a referral for my student who seems to be struggling with behaviours or emotions.
	3.	About the resources available in my community to support students' mental health
		I can...
	4.	effectively address the situation wherein a student confides in me that he/she is contemplating suicide.

	5.	lead others to create effective supports for students who have had adverse experiences.
	6.	create a classroom that is physically safe for all students.
	7.	create a classroom that is emotionally safe for all students.
	8.	effectively teach students who have had adverse experiences, such as abuse, household dysfunction, or inadequate housing/nutrition/social support.
	9.	effectively teach/work with a student who is highly anxious.
	10.	communicate effectively with parents/family members about their child's behavior and emotions.
	11.	create positive relationships with parents or caregivers of my students who may be struggling with behaviour or emotions.
	12.	effectively teach students who seem overly sad.
	13.	adapt my curriculum or practices for students who are suffering from behavioral or emotional problems.
	14.	work with families who have done damaging things to their children.
	15.	cope with my own stress in my work as a teacher.
	16.	identify a student who is flourishing in the classroom.
	17.	identify a student who is languishing in the classroom.
	18.	identify a student who is mentally healthy in the classroom.
	19.	identify a student who is mentally unwell in the classroom.
	20.	explain the contextual factors that contribute to students' behaviours and emotions.
	21.	effectively explain to a colleague the early signs of a mental illness.
	22.	effectively explain to a colleague how to create a classroom environment that is supportive of students with behavioural or emotional problems.
	23.	create a classroom environment that is supportive of students with behavioural or emotional problems.
	24.	contribute to a student support team process when the student in question has behavioural or emotional problems.
	25.	access the resources available in my community to support students' mental health.
	26.	I can help/support others (teachers) cope with their stress.
Role Clarity	4 items	
		I have...
	27.	a responsibility to promote the mental health of students.
	28.	a responsibility to meet the needs of students with behavioural and emotional problems.
	29.	a responsibility to meet the needs of students with mental illness.
	30.	a responsibility to continue learning about the most effective ways to support students.

Expectancies	6 items	
		I will be...
	31.	working with children/adolescents who are sometimes violent.
	32.	teaching students who exhibit significant behavior problems.
	33.	teaching students who exhibit significant emotional problems.
	34.	teaching students who have multiple adverse childhood experiences.
	35.	teaching students who have significant attention problems.
	36.	teaching students who have significant learning problems.
Professional Relational Skills	9 items	
		I know how to build relationships with...
	37.	students
	38.	parents
	39.	administrators
	40.	other teachers
		I am confident in my ability to...
	41.	manage conflict with parents
	42.	manage conflict with students
	43.	manage conflict with administrators
	44.	manage conflict with other teachers
	45.	support students with their problems

The Negative Acts in the Workplace – US (NAQR-US)

(Somins, Stark, & DeMarco, 2011)

	4 items	<i>5-point Likert Scale: Never, Now and Then, Monthly, Weekly, Daily</i>
	1.	Someone withholding information which affects your performance.
	2.	Being humiliated or ridiculed in connection with your work.
	3.	Being ignored or excluded.
	4.	Being exposed to an unmanageable workload.

The Ways of Coping Scale (WOCS)

(Folkman & Lazarus, 1985)

Seeking Social Support	6 items	<i>4-point Likert Scale: Not Used, Used Somewhat, Used Quite a Bit, Used a Great Deal</i>
	1.	Talked to someone to find out more about the situation.
	2.	Talked to someone who could do something concrete about the problem.
	3.	I asked a relative or friend I respected for advice.
	4.	Talked to someone about how I was feeling.
	5.	Accepted sympathy and understanding from someone.
	6.	I got professional help.

Self-Control	7 items	
	7.	I tried to keep my feelings to myself.
	8.	Kept others from knowing how bad things were.
	9.	Tried not to burn my bridges, but leave things open somewhat.
	10.	I tried not to act too hastily or follow my first hunch.
	11.	I tried to keep my feelings from interfering with other things too much.
	12.	I thought about how a person I admire would handle this situation and used that as a model.
	13.	I tried to see things from the other person's point of view.

<u>Opening Minds Scale (OMS-HC)</u> (Modgill et al., 2014)		
	1.	I am more comfortable helping a person who has a physical illness than I am helping a person who has a mental illness.
	2.	If a colleague with whom I work told me they had a managed mental illness, I would be just as willing to work with him/her.
	3.	If I were under treatment for a mental illness I would not disclose this to any of my colleagues.
	4.	I would see myself as weak if I had a mental illness and could not fix it myself.
	5.	I would be reluctant to seek help if I had a mental illness.
	6.	Employers should hire a person with a managed mental illness if he/she is the best person for the job.
	7.	I would still go to a physician if I knew that the physician had been treated for a mental illness.
	8.	If I had a mental illness, I would tell my friends.
	9.	Despite my professional beliefs, I have negative reactions towards people who have mental illness.
	10.	There is little I can do to help people with mental illness.
	11.	More than half of people with mental illness don't try hard enough to get better.
	12.	I would not want a person with a mental illness, even if it were appropriately managed, to work with children.
	13.	Teachers do not need to be advocates for people with mental illness.
	14.	I would not mind if a person with a mental illness lived next door to me.
	15.	I struggle to feel compassion for a person with mental illness.

Appendix B: Course Outline



Faculty of Education
The University of Western Ontario
B.Ed Course Outline

Mental Health Literacy – Supporting Social-Emotional Development
EDUC 5018Q
Online
October 2016-February 2017 (10 weeks; 20 hours)

Instructors:

Calendar Description:

The ‘Mental Health Literacy – Supporting Social-Emotional Development’ course is designed to assist classroom teachers in understanding development, mental health, depression, family dynamics, self-esteem, and access to care, and the effect of these issues on student learning. Intended to raise teachers’ awareness of signs that students may be in need of support. First term .25 credit.

Guiding Principles:

- To develop, enhance and support preservice teachers’ competencies to create the conditions within a culturally-aware framework, where children and youth will thrive, develop skills, resiliency and agency in decision-making about their holistic health and well-being.
- To provide an introduction to, and suggestions for, evidence-based school-based health (including mental health) promotion, prevention of problems, and early intervention practices for children and youth who are in need.
- To engage and encourage preservice teachers in developing a community of practice to share, learn, and support one another to build our collective capacity to create learning environments that attend to wellness.
- To offer effective and practical strategies to support child and youth resiliency and mental health.
- To offer effective and practical strategies to support teacher resiliency and wellness, and, through the attention to resilience and mental health for both teachers and their students, help create positive, supportive, and growth-oriented relationships for all.

Learning Outcomes:

- How to use current research in teaching and learning.

- Child and adolescent development and student transitions from kindergarten to grade 12, and up to age 21.
- Educating students of a program of professional education in child, youth and parental mental health issues relevant to the elementary and secondary school environment in Ontario.
- The College’s “Standards of Practice for the Teaching Profession” and “Ethical Standards for the Teaching Profession”.
- Knowledge of the Ontario context in which elementary or secondary schools operate.
- Ontario education law and related legislation, occupational health and safety legislation and legislation governing the regulation of the teaching profession in Ontario and the professional obligations of members of the College.
- How to create and maintain the various types of professional relationships between and among members of the College, students, parents, the community, school staff and members of other professions.

Course Content: Block 1: Oct. 18-Nov. 20: Mental Health and Mental Illness: What it is and is not

Week 1: Mental Health at School: (Oct. 18)

- Social emotional development;
- Language
- Mental health and mental health literacy
- Culture, social determinants of health and equity in access & support

Week 2: The Context of the Lives of Children, Youth and Teachers (Oct. 25)

- What comes to school with us
- The role of schools and teachers
- Trauma-informed teaching

Week 3: Mental Health in the Classroom (Nov.1)

- Prevalence and onset of mental illness
- What good and poor mental health look like at work and at school
- The influence of mental health distress on learning and working

Week 4: Critical Issues (Nov. 8)

- The stigma of mental illness
- Diagnosis, treatment & outcomes
- Professional issues

Week 5: Stress (Nov. 15)

- Defining and describing risk
- Developing healthy coping strategies

Block two: January 10-February 12, 2017: Mental Health: What to ask, do and say

Week 6: Learning, Teaching and Working (Jan. 10)

- Building relationships
- Creating and leading a mentally healthy classroom
- The caring adult

Week 7: Caring for students: Building Resilience and Responding to Challenges (Jan. 17)

- What to look for
- What to say
- Working with students, parents, and the community

Week 8: Taking Action (Jan. 24)

- The role of the teacher
- Resources
- Pathways to care in your school/district

Week 9: Caring for ourselves: Building Resilience and Responding to Challenges (Jan. 31)

- Building awareness
- Self-care
- Working within the system

Week 10: Creating and Leading the Mentally Health Classroom (Feb.7)

- Planning for a mentally healthy classroom
- Creating a mentally healthy classroom
- Knowing what is working, what needs attention

Course Materials:

Each week, core readings and resources will be provided on the course website. Students are encouraged to see out other sources of information (readings, video, or other resources) to personalize the course in a way that aligns with their approach to working with children and youth with mental health challenges.

*Assignments and Other Course Requirements:*Preparation for Class

This course is designed to be engaging and collaborative, and students will be expected to participate and contribute to one another's learning experience, and interact in online discussions with your instructor and your peers. Prior to each class, students are expected to have completed the readings and activities in order to engage thoughtfully in the online dialogue and get the most out of the course.

1. Students will complete a pre-test and post-test to track program efficacy in meeting course goals. These are not graded, but are considered participation. These will be completed via a link on the OWL site. The pre-test will be available for completion beginning at 8 am October 11, and close at 11:59 pm on October 17. There is no need to study any materials for this pre-test, it is merely a baseline. The post-test will be available at 8 am on February 6, 2017 and close at 11:59 on February 12, 2017. The pre-test and

post-test are worth 7% each and students will receive 7 marks for completing each one (they will not be graded). (1 pre- test and 1 post-test x 7% each = 14% of final grade)

2. Students will complete weekly online quizzes weeks 2-10, based on material covered that week. These online quizzes will open at the beginning of each week (i.e. each Tuesday morning at 8 am) and close each Sunday evening at 11:59 pm. Students have 1 hour to take the quiz once they begin. While students may write it at any time during the time it is open, in order to have the complete 1 hour, they must start by 10:59 p.m. on the Sunday night of each week of the course (quizzes are written at the end of each week of the course). Quizzes will contain 8-10 questions each and each quiz is worth 4% of the final grade (9 quizzes x 4% each = 36% of total final grade). It is expected that students will complete quizzes independently.
3. Students will participate weekly in the Discussion Forums. Based on your program (P/J, J/I, or I/S), students will be assigned to smaller discussion groups of about 20 people (the same group for the whole course. Evaluation of your participation will be based on your ability to:
 - Respond thoughtfully within each discussion;
 - Make connections between the course content, readings and participants' discussion to date;
 - Critique ideas, and build on responses of others;
 - Raise probing questions that further the discussion;
 - Communicate in a professional dialogue, which includes negotiating differences.
 - Engage as an adult learner, responsible for taking and demonstrating initiative in the discussion in ways that foster a scholarly community of practice.
 - Each week you will be required to respond to key questions, and provide meaningful feedback to the contributions of at least one of your peers. Original responses to each question must be 40-75 words, and feedback to peers must be 40 words or less.

The Discussion Forum opens each week at 8 am on the Tuesday and closes at 11:59 pm on the Sunday of the same week and is graded based on the criteria above; each week's participation is graded out of 4% (each week, 1 mark for answering each of 3 questions in 40-75 words, 1 for responding in 40 words or less to the post of at least one other member)
(4% x 10 weekly discussions = 40% of final grade)

Summary of Assignments and Marks:

Assignment	Type of Grade	Due Date	Value
Pre-test (no preparation required)	Participation	Pre-test: opens 8am Oct 11/16 and closes 11:59pm Oct 17/2016	7%
Online quizzes (weeks 2-10)	Graded for accuracy	Weekly	4% each, 36% of final grade

Discussion (weeks 1-10)	Participation, but evaluated using criteria seen in the description of assignments	Weekly	4% each, 36% of final grade
Video assignments (2)	Evaluated based on criteria, details on OWL website	Nov. 20/2016 Feb 12/2017	5% each; 10% of final grade
Post-test	Participation	Post-test: opens 8am Feb 6/17 and closes 11:59pm Feb 17/2017	7%
			100%

Policy Statements:

Accessibility: The University of Western Ontario is committed to recognizing the dignity and independence of all students and seeks to ensure that persons with disabilities have genuine, open and unhindered access to academic services. Please contact the course instructor if you require course materials in an alternative format or if any other arrangements can make this course more accessible to you. You may also wish to contact Services for Students with Disabilities (SSD) for information about requesting academic accommodation

Attendance: The B.Ed. program is an intense and demanding program of professional preparation in which teacher candidates are expected to demonstrate high levels of both academic and professional integrity. Such integrity is demonstrated in part by commitment to and attendance at all classes, workshops, tutorials, and practicum activities.

Unexcused Absences: Any absence that is not a result of illness, bereavement, or religious observance is an UNEXCUSED absence and may incur penalties. If you feel you *must* be absent for reasons other than illness, bereavement, or religious observance, consult with your instructors and with the Teacher Education Office. If possible, do this before the absence occurs. You may be assigned make-up work and may incur a penalty for lack of participation in class.

Instructors, after consulting with the Associate Dean, may refuse to evaluate all or part of a Teacher Candidate's work if that Teacher Candidate's unexcused absences within a single term amount to 25% or more of the course hours within that term. The outcome for the Teacher Candidate will be failure of that course and possible withdrawal from the program.

Language Proficiency: In accordance with regulations established by the Senate of the University, all teacher candidates must demonstrate the ability to write clearly and correctly. Work which shows a lack of proficiency in the language of instruction is unacceptable for academic credit, and will either be failed or, at the discretion of the instructor, returned to the teacher candidate for revision to a literate level.

Late Penalties: Normally, the only acceptable reasons for late or missed assignments are illness (for which a doctor's statement may be required) or extreme compassionate circumstances. Unexcused late assignments will be penalized at a rate of 4% per day, and will not be accepted more than 7 days after the due date unless prior arrangements have been made with the instructor.

Academic Offences: Scholastic offences are taken particularly seriously in this professional Faculty. Teacher Candidates should read about what constitutes a Scholastic Offence at the following Web site

Plagiarism: Plagiarism means presenting someone else's words or ideas as one's own. The concept applies to all assignments, including lesson and unit plans, laboratory reports, diagrams, and computer projects. For further information, teacher candidates may consult their instructors, the Associate Dean's Office, and current style manuals. *Advice about plagiarism and how to avoid it can also be found on the Teacher Education website.*

Plagiarism-Checking:

- a. All required papers may be subject to submission for textual similarity review to the commercial plagiarism detection software under license to the University for the detection of plagiarism. All papers submitted for such checking will be included as source documents in the reference database for the purpose of detecting plagiarism of papers subsequently submitted to the system. Use of the service is subject to the licensing agreement, currently between The University of Western Ontario and Turnitin.com
- b. Computer-marked multiple-choice tests and/or exams may be subject to submission for similarity review by software that will check for unusual coincidences in answer patterns that may indicate cheating.

Appendix C: Board of Ethics Letter of Exemption

Research Ethics

June 23, 2016

Faculty of Education
Western University

Dear Dr. |

Re: NMREB Project – Program evaluation of a new, mandatory online course in Fall/Winter 2016/2017 (5018 Mental Health Literacy).

Thank you for your call and email regarding the program evaluation of your new course 5018 Mental Health Literacy.

Within your email of June 14, 2016 you indicated that none of the planned data collection is happening outside of the course (everything is done as part of normal curriculum) including completion and grading of assignments, discussion and quizzes.

You have indicated that students will complete a pre-test and post-test but that it will help tailor the learning materials for this course in the future.

Based on this information, as this is being done as program evaluation and quality improvement of your course, the Tri-Council Policy Statement Article 2.5 indicates that ethics approval is not needed.

I wish you the best of luck with your work.

Most sincerely,

✓ Ethics Officer
Office of Research Ethics

Curriculum Vitae

Name: Jasprit Pandori-Chuckal

Post-secondary Education and Degrees

Doctor of Philosophy, School and Applied
Child Psychology
2015-2020
Western University
London, Ontario, Canada

Doctor of Philosophy, Developmental
Psychology (candidate)
2013-2015
Wilfred Laurier University
Waterloo, Ontario, Canada

Master of Education, Counselling
Psychology
2011-2013
Western University
London, Ontario, Canada

Certificate in Rehabilitation Services
2008-2010
York University
Toronto, Ontario, Canada

Bachelor of Arts with Honors (Psychology)
2005-2010
York University
Toronto, Ontario, Canada

Honours and Awards

Ontario Graduate Scholarship (OGS)
2018-2019

Social Sciences and Humanities Research
Council (SSHRC)
Nominated (not awarded)
2018-2019

Ontario Graduate Scholarship (OGS)
2016-2017

Graduate Scholarship
Wilfred Laurier University
2014-2015

Ontario Graduate Scholarship (OGS)
2014-2015
Graduate Scholarship
Wilfred Laurier University
2013-2014

Ontario Graduate Scholarship (OGS)
2013-2014

Publication Honorarium
PREVNet
2012

Related Work Experience

Course Facilitator
CAMH
2017-2018

Course Instructor
Western University
2017-2018

Teaching Assistant
Western University
2016-2017

Guest Lecturer
Wilfred Laurier University
2015

Teaching Assistant
Wilfred Laurier University
2013-2015

Publications

Refereed contributions

Rodger, S., Hibbert, K., Leschied, A., Atkins, M.A., Masters, R., & Pandori-Chuckal, J. (2018), Mental health literacy as a fundamental part of teacher preparation: A Canadian perspective. In A. W. Leschied, D. H. Saklofske, & G. L. Flett (Eds.), *The Handbook for School Based Mental Health Promotion: An Evidence Informed Framework for Implementation*. Springer Publishing.

Josephson, W., Pandori, J. K., Spring, M., Shumka, E., Erichsen, C., Cummings, J, Pepler, D., Hong, I., Rickner, R. (2016). Stand Up! Bullying Awareness Week Teacher's Guide, 2016 Edition. Toronto: PREVNet and Family Channel.

Broll, R., Burns, S., Parkington, K., Pandori, J. K., & Doucette, J. D. (2015). Challenges and Lessons Learned in Cyber Bullying Research and Education. Volume 5 of the PREVNet Series.

Josephson, W., Pandori, J. K., Spring, M., Shumka, E., Doucette, J., Erichsen, C., Cummings, J, Pepler, D., Lamb, M., & Hong, I. (2015). Stand Up! Bullying Awareness Week Teacher's Guide, 2015 Edition. Toronto: PREVNet and Family Channel.

Josephson, W., Oakes, H., Spring, M., Pandori, J. K., Shumka, E., Doucette, J., Erichsen, C., Cummings, J, Pepler, D., Lamb, M., & Hong, I. (2014). Stand Up! Bullying Awareness Week Teacher's Guide, 2014 Edition. Toronto: PREVNet and Family Channel.

Oakes, H., Josephson, W., Spring, M., Pandori, J.K, Doucette, J., Shumka, E., Cummings, J, & Erichsen, C. (2013). Stand Up! Bullying Awareness Week Teacher's Guide, 2013 Edition. Toronto: PREVNet and Family Channel.

Doucette, J. D., Pandori, J. K., Jaffe, P., & Crooks, C. (2012). Respectful and responsible relationships: There is no app for that - the report of the Nova Scotia task force on bullying and cyberbullying. *Education Law Journal*, 22(1), 93-103.

Other refereed contributions

Co-Authored – Published in Conference Proceedings

Rodger, S., Bird, R., Chuckal, J., Masters, R. (2019). Teacher and Student Mental Health: Let's Start at the Beginning. Presentation at the Ontario Healthy Schools Coalition: Healthy Schools Conference 2019, Deerhurst, Ontario.

Pandori, J. K., Rief, K., & Jaffe, P. (2016). Adolescent Perceptions of Cyberbullying in Friendships and Dating Relationships. Poster submitted to the 48th Banff International Conference on Behavioural Science, Calgary, Alberta.

Krettenauer, T., & Pandori, J. K. (2016). Moral Identity in Cyberspace. Poster submitted to the 24th Biennial Meeting of the International Society for the Study of Behavioural Development, Vilnius, Lithuania.

Krettenauer, T., Murua, A., & Pandori, J.K. (2015). Moral Identity Development from Adolescence to Mid Age: The Importance of Context. Poster presented at the 2015 Society for Research in Child Development Biennial Meeting, Philadelphia, PA.

Pandori, J.K., & Doucette, J. D. (Jan 2013). Adolescents' Perceptions of Cyberbullying: A Mixed Methods Analysis. Paper presented at "The 11th Annual Hawaii International Conference on Education, Honolulu, HI.

Pandori, J., & Doucette, J. (June 2012). Adolescents' Perceptions of Cyberbullying: A

Mixed Method Analysis. Poster presented at *PREVNet's Sixth Annual Conference, Creating Healthy Relationships to Prevent Bullying: Get the Tools to Take Action*. Queen's University and York University, Toronto, ON.

Doucette, J. & Pandori, J. (2012). Adolescents' Perceptions of Cyberbullying. Poster presented at The Third Annual Graduate Research in Education Symposium, Western University, London, ON. (April 11, 2012), & Research Day 2012, Western University, London, ON. (March 19, 2012).

TEACHING RELATED EXPERIENCE

- | | |
|-----------------------|--|
| Sep 2017 – June 2018 | <p>Course Facilitator
<i>CAMH/Bell Let's Talk</i></p> <ul style="list-style-type: none"> • Course: Let's Talk in the Classroom Pilot Project |
| Sep 2016 – June 2018 | <p>Professor/Lecturer
<i>University of Western Ontario</i></p> <ul style="list-style-type: none"> • Course: Mental Health Literacy – Supporting Social-Emotional Development (EDUC 5018Q) |
| Sep 2015 – April 2016 | <p>Teaching Assistant
<i>University of Western Ontario</i></p> <ul style="list-style-type: none"> • Course: Mental Health Literacy – Supporting Social-Emotional Development (EDUC 5018Q) |
| January 2015 | <p>Guest Lecturer
<i>Wilfrid Laurier University</i></p> <ul style="list-style-type: none"> • Course: Educational Psychology (PS283) |
| Sep 2013 – Aug 2015 | <p>Teaching Assistant
<i>Wilfrid Laurier University</i></p> <ul style="list-style-type: none"> • Courses: <ul style="list-style-type: none"> ○ Introduction to Psychology (PS102) ○ Introduction to Psychology (PS101) ○ Introduction to Research Methods (PS295) ○ Research in Developmental Psychology (PS375) |

DOCTORAL TRAINING EXPERIENCE

- | | |
|----------------------|---|
| Sep 2018 – June 2018 | <p>Peel District School Board</p> <ul style="list-style-type: none"> • Psychoeducational Consultant |
| Sep 2016 – June 2017 | <p>Upper Grand District School Board</p> <ul style="list-style-type: none"> • Psychological Consultant |

Jan 2016 – June 2016

Mary J Wright/Merrymount: Family Support & Crisis
Center

- Psychology Doctoral Intern