Elementary Stress Remediation:

Educators’ Perspectives on the Remediation of Toxic Stress in the Elementary Classroom

By

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ABSTRACT

This Masters of Teaching Research Project is a qualitative study that aims to discover how a sample of two Ontario Certified Teachers in public elementary schools enact stress reduction strategies with students experiencing toxic stress induced by economic hardship, maltreatment, and/or social exclusion. At present, researchers have produced no data related to the prevalence of toxic stress in Canada. Yet, known correlates of toxic stress such as poverty, maltreatment, and social exclusion are increasingly prevalent. Teachers occupy a unique front-line position to respond to the mental health needs of students experiencing toxic stress. For this reason, this study aims to discover how teachers screen for indicators of toxic stress, how teachers enact stress reduction strategies in the classroom, and what perspectives teachers have related to the resources available to them. Findings suggest a need for schools to adopt a community-wide approach to screening for – and responding to – mental health needs. Findings also point to a need for improved professional development opportunities for teachers and also for teachers to partake in the self-care they promote.

Key Words: Toxic Stress, Mental Health, Stress Reduction
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CHAPTER 1: INTRODUCTION

“Without mental health there can be no true physical health”
– Dr. Brock Chisholm
First Director-General of the World Health Organization

1.0 Research Context

In May 2012, Member States of the World Health Organization (WHO) gathered at the sixty-fifth World Health Assembly to discuss the global burden of mental health disorders. This assembly unveiled its Mental Health Action Plan 2013-2020 which was built upon the central tenet of the WHO that "health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity” (WHO, 2013). Central to this definition of mental health is the understanding that social factors are inextricably linked to the health and wellbeing of a population. While there are multiple biological determinants of mental health (such as a genetic predisposition to depression), mental health and wellbeing are linked to, and partly determined by, a number of socio-economic and environmental factors including chronic poverty, unstable interpersonal relationships, and forms of social exclusion.

The WHO mandate to promote mental health necessitates two important actions: first, adopting a lifespan approach to mental health which considers the mental health of an individual from infancy to old age; and second, adopting a community-based approach that better serves the distinctive needs of particular communities (WHO, 2013). The practices of Canada’s network of mental health actors align with these two approaches. Aligning with the lifespan approach and in response to rising numbers of mental illness diagnoses for children, the Mental Health Commission of Canada (MHCC, hereafter) put in motion an initiative for school-based mental health in Canada (the School Based Mental Health and Substance Abuse Project, or SBMHSA) intended for the 14-25% (over 800,000) children who experience mental health issues in schools
and across the nation (SBMHSA, 2013). Specific to this province, yet indicative of a national community-based healthcare trend, the ministry of Ontario’s comprehensive mental health and addiction strategy, Open Minds, Healthy Minds (2011), launched a ten-tier strategy to increase community-based mental health services. The first three years of the strategy were dedicated to investing $93 million dollars in mental health resources for children and youth. This investment placed more than 770 new mental healthcare workers in schools and communities.

While these are welcomed initiatives, Canada still has concerning statistics related to its most vulnerable populations and their social wellbeing which is, as previously mentioned, a key part of WHO’s definition of health (CMHA, 2015; Family Service Ontario, 2013; OIS, 2013). Sources of social disease such as poverty, maltreatment, and social exclusion are widely experienced, often concurrently, by Ontario’s elementary school children (Family Service Ontario, 2013; Ontario Ministry of Education, 2013). Each source of stress contributes to a cumulative burden of stress (Harvard, 2015). If this stress response is left unmediated, a child may experience a toxic stress response – a psychobiological phenomenon that occurs when a child is exposed to prolonged and severe adversity from environmental sources (Franke, 2014; Harvard, 2015). Continual and pervasive toxic stress response affects the school readiness and the long-term physical and mental health of a child. These early life experiences, as well as the community and home environments of a child, have a profound and lasting effect on the development of brain architecture and long-term mental and physical health (CMHA, 2015; Franke, 2014; Shonkoff et al., 2012).

1.1 Research Problem

Researchers have produced no data related to the prevalence of toxic stress in Canada. However, known correlates of toxic stress such as poverty, maltreatment, and social exclusion
are increasingly prevalent (Ontario Family Service Ontario, 2013). One in seven children in Ontario, or approximately 383,000 children, live below the low-income cut-off (Family Service Ontario, 2013). For First Nations children, one in four lives below the LICO; worse, for children of immigrants, poverty rates soar to nearly one in two. Of the 125,281 investigations by Child Services for maltreatment in Ontario in 2013, 34% were substantiated for 43,067 cases of abuse (OIS, 2013). Socially excluded populations, such as First Nations, Inuit, and Metis (FNIM) peoples in Ontario, experience the poorest mental and physical health in general, as evidenced by a higher prevalence of mental and physical disorders, Post-traumatic stress disorder (PTSD), and poverty among these populations (Bombay, Matheson, and Anisman, 2009).

Despite this trend, Ontario lacks a coherent strategy to address the needs of these at-risk communities. Moreover, the available resources and strategies in Ontario used by teachers fail to adequately respond to the mental health needs of elementary school children as evidenced by provincial surveys which indicate that 80% of children’s mental health needs are unmet (People for Education, 2015; SBMHSA, 2013). Given the centrality of good mental health to the learning process, and the importance of developing resilience in school communities, additional research into this problem is crucial to the remediation of mental illness in Ontario’s elementary school students.

1.2 Research Purpose

In light of this problem, my research aims to study how educators in primary and junior Canadian classrooms mediate students’ stress and respond to the academic and social-emotional needs of students experiencing high levels of stress induced by poverty, maltreatment, and social exclusion. I aim to learn from them what outcomes they observe from their students and communities and to share these findings with my educational research community at OISE in
order to further inform instructional support for students experiencing a cumulative burden of stressors.

1.3 Research Questions

The central question informing my study is: how does a sample of elementary teachers enact stress reduction strategies with students experiencing toxic stress induced by economic hardship, maltreatment, and/or social exclusion and what outcomes do these teachers observe in the classroom?

Subsidiary questions guiding this study include:

- What indicators of stress do teachers observe among their students and what tools or frameworks do they employ to identify the needs of these students?
- What classroom strategies do these teachers use to attend to the emotional and educational needs of students experiencing a cumulative burden of stressors and what outcomes do they observe?
- What are the perspectives of these teachers on the support resources and programs available to them through the Ontario educational system?

1.4 Reflexive Positioning Statement

The topic of stress response in children compels me for two reasons. First, my experience as a sixth-grade student with significant health complications made me cognizant of, and curious about, the tremendous impact that stress has on the learning processes of a child. Second, my experience as a preschool program coordinator and childcare worker gave me insight into the attitudes and experiences of the parents and caretakers striving to attend to the needs of a child who is experiencing significant stressors.
From Grades 6 to 10, I was frequently hospitalized for long periods of time due to a chronic illness. The process of re-integrating into the classroom following each hospitalization was fraught with stress. Teachers noted that I was often unmotivated, unfocused, and removed from the social climate of the classroom. However, these teachers advised that it would only be a matter of time before I was reacclimatized and learning successfully. What was not clear to me at the time, but became apparent in the following years, was that stress was affecting my ability to learn. This experience informs my concern about the ways teachers assess and identify behaviors that may be indicative of chronic stress. Moreover, this experience led me to question what impact early intervention might have on a child’s ability to learn during periods of critical stress.

My experience with designing and implementing a community pre-school program for children ages 3 to 5 also informs my line of inquiry. In the three years that I spent working with parents and young children, I have witnessed behaviors symptomatic of stress disorders. Through discussions with parents, I learned the various environmental causes. When referring parents to resources, the two most common responses were worrying to me: first, parents often delegitimized or downplayed their child’s behavior –and second, parents often expressed defeat and frustration with provincial wait times and their own financial limitations precluding access to private medicine. An all too common response, this led me to think critically about the ways parents and teachers think about mental health issues affecting elementary students and the inaccessibility of resources available to them.

As a pre-service teacher in OISE’s Masters of Teaching program, it is my hope that this study contributes in a meaningful way to the dialogue related to the mental and social-emotional wellbeing of elementary school students in Ontario and across Canada.


1.5 Preview of the Whole

In response to research questions, I conducted a qualitative research study using purposeful sampling to interview two teachers about their strategies to mediate and reduce stress in their classrooms. In Chapter 2, I review the literature in the areas of toxic stress, its correlates, and the developing brain. Next, in Chapter 3, I elaborate on the research design. In Chapter 4, I report my research findings and discuss their significance in light of the existing research literature. In Chapter 5, I examine the implications of these research findings for my own teaching practice and for the educational research community, more broadly. I also articulate a series of questions raised by the research findings and point to areas for future research.
CHAPTER 2: LITERATURE REVIEW

2.0 Introduction

In this chapter, I review the literature related to the impact of toxic stress on elementary students. More specifically, I differentiate between positive stress response and toxic stress response, consider the health and learning impacts of prolonged toxic stress response, and review the benefits and barriers to early intervention. Next, I review three risk factors conducive to triggering a toxic stress response: poverty, maltreatment, and social exclusion. Finally, I review Ontario’s resources and how they may or may not aid teachers in meaningful ways within the classroom to mediate stress.

2.1 Types of Stress Response

A stress response is the body’s way of reacting to real or perceived threatening stimuli (CMHA, 2015). Harvard’s Center on the Developing Child is a principal voice in research pertaining to stress response in children. The center distinguishes between three categorized types of stress responses (Harvard, 2015) - positive, tolerable, and toxic - which refer to the triggered stress response and not the stimuli itself. This definition is useful in that it distinguishes between the stress response and the stressor thereby acknowledging that the severity of an individual’s stress response to any given stimuli is largely determined by factors specific to the individual. Indeed, a single stressor may produce varying degrees of stress response for different individuals based upon a number of factors further elucidated below.

2.1.1 Positive stress response

While stress might generally be understood as a damaging physiological and psychological response, not all forms of the stress response are harmful. The stress response in children, when mediated by a caring adult, is adaptive and can lead to better coping skills, stress
management, and improved quality of life (Pardon & Marsden, 2008). Positive stress responses are a normal and essential part of child development. These are brief, infrequently sustained, and quickly buffered by protective adult intervention (Harvard, 2015; Shonkoff et al., 2012; Franke, 2014). Intervention by a caring and attentive adult is central to the experience of positive stress. This intervention provides “a protective effect that facilitates the return of the stress response system back to baseline status” (Shonkoff et al., 2012, p. 235). Some situations that might trigger a positive stress response are the first day at a new school or sustaining a mild, accidental injury.

As caring adults responsible for attending to the social-emotional needs of their students, teachers can be integral facilitators of positive stress response.

2.1.2 Tolerable stress response

A tolerable stress response stimulates the body’s alert systems to a greater degree than positive responses (Shonkoff et al., 2012; Harvard, 2015). A tolerable stress response may be the result of more severe, longer-lasting adversities such as the loss of a loved one, witnessing a natural disaster or traumatic violence, or experiencing a serious injury or illness (Harvard, 2015). If the activation is not sustained and is mitigated by strong social and emotional relationships with adults who help the child adapt, the brain and organs recover from what might otherwise be a damaging response (Harvard 2015; Shonkoff et al., 2012; Franke, 2014). Again, central to a tolerable stress response is a caring adult able to reduce stress response by supporting the child through grief, enabling a child to cope, and helping the child to adapt by providing resources or support. Teachers may be central to the process of helping a child cope with more severe adversities. A teacher’s knowledge about - and sensitivity to - these happenings can help a child to cultivate resilience and gain ownership of new coping skills and mechanisms to deal with future adversity.
2.1.3 Toxic stress response

Toxic stress occurs when a child experiences strong, frequent or prolonged stress with insufficient buffering or attentive adult support (Harvard, 2015). Examples of adverse childhood experiences (ACEs) where toxic stress responses may occur include physical or emotional abuse, chronic neglect, caregiver substance abuse or mental illness, witnessing frequent interpersonal violence, economic hardship or poverty, and/or living in a succession of unstable foster homes (Harvard 2015, Shonkoff et al., 2012, Franke, 2014, Chen and Baram, 2015). When a child experiences an accumulation of these adverse childhood experiences, the cumulative burden of stress inhibits the brain’s capacity to develop neurotypically (Harvard, 2015).

Practitioners in child psychology, pediatrics, and neuroscience are currently researching the scope of toxic stress response to determine the extent to which stressful events have adverse, long-reaching effects (Harvard 2015, Shonkoff et al., 2012, Franke, 2014). This is “determined in part by the individual’s biological response (mediated by both genetic predispositions and the availability of supportive relationships that help moderate the stress response), and in part by the duration, intensity, timing, and context of the stressful experience” (Key Concepts: Toxic stress, n.d.). In other words, a toxic stress response occurs when a child chronically experiences stressors that are too major (objectively or subjectively) to be dealt with using the child’s available coping mechanisms that are influenced both by the child’s genetics and by their supportive relationships (Shonkoff et al., 2012).

2.1.4 Health impacts of adverse childhood experiences (ACEs)

While the prolonged and unmediated activation of stress response systems due to ACEs disrupts the development of brain architecture and other organ systems, the question is begged: to what end? One pivotal longitudinal study measures the emotional and physical impacts on
17,000 volunteer participants in seven categories of ACEs, including psychological, physical, and sexual abuse, exposure to violence, and living with a mentally ill or substance-dependent adult (Kirwan Institute, 2014). The findings illustrate the physical toll of cumulative ACEs: compared to children with no adverse childhood experiences, children with four or more ACEs were at greater risk of heart disease (220% increase), stroke (240% increase), diabetes (160% increase), and chronic bronchitis/emphysema (390% increase). The toll of other mental health and substance abuse risks was just as substantial. These children were 1,220% more likely to attempt suicide, 470% more likely to use illegal drugs, and 740% more likely to abuse alcohol (Kirwan Institute, 2014).

This study illuminates a need for early intervention. Timely response to mediate a cumulative burden of social factors may be key to preventing longstanding physical and mental repercussions. However, this response necessitates rallying together a network of actors in a number of fields across many communities. Since there are so many known social determinants of health, it is clear that a solution will require more than high-quality, accessible health care alone. A prevailing concern related to this is that even though co-ordination and consistent, research-informed practices across many community-based service systems is key, research tells us that these efforts are “unlikely to be sufficient if the systems are guided by different values and bodies of knowledge and the effects of their services are modest” (Shonkoff, 2012, p32). This means that further alignment of healthcare goals and strategies, while needed, may not be effectively implemented in Canada’s decentralized, community-based healthcare system.

2.1.5 Screening for toxic stress

Signs and symptoms of toxic stress response are varied and may manifest in a number of externalized and internalized behaviors. Externalized behaviors manifest in a child’s outward
behaviors and have impacts on a child’s external environments. These may include oppositional defiant disorder, aggression, and impulse control problems (Liu, 2006). Liu (2006) states that an observer might label this behavior as impulsive, defensive, or reactive. Internalized behaviors are not as evident and may therefore be missed by teachers. These behaviors affect the child’s internal psychology and may include anxiety, depression, and withdrawal. An observer might label this behavior as disengagement, timidity or fatigue (Liu, 2006).

While many social factors contributing to a student’s burden of stress may be invisible to a teacher within the classroom, some signs and symptoms of toxic stress or correlate mental illnesses can be identified. Supporting Minds (2013), Ontario’s mental health support guide for educators, stresses that teachers should educate themselves about symptomatic expressions of mental illnesses. Its main conviction is that teachers should work to create a positive classroom environment, reduce stigma related to mental illnesses, build trust with students, and talk openly about mental health with parents and students (Ontario Ministry of Education, 2013).

**2.1.6 Toxic stress and school readiness**

While toxic stress responses may arise in the post-natal stages of child development, they can continue throughout infancy and preschool years and extend into, and well beyond, primary and junior school years, if untreated. Toxic stress may inhibit school readiness in a number of ways. Toxic stress can cause permanent changes to brain structure and have damaging effects on learning, behavior, mood control, memory, and physical health (Harvard, 2015; Shonkoff et al., 2012, Chen and Baram, 2015).

During periods of moderate stress, the hippocampus turns off elevated cortisol and restores the body to a resting state (The American Academy of Pediatrics [AAP], 2012). However, significant chronic stress in early childhood can decrease the ability of the
hippocampus to turn off elevated cortisol (AAP, 2012). This results in impaired memory and mood-related functions that are controlled by the hippocampus. Toxic stress also inhibits contextual learning in the hippocampus thereby making it difficult for a child to discriminate between safe and dangerous situations (AAP, 2012). This may result in the exhibition of a perpetual fear state. These effects drastically inhibit the ability of a child to process information, adhere to school behavioral codes, or learn new social and emotional skills (Shonkoff et al., 2012). Altered brain architecture resulting from toxic stress in early childhood could explain, in part, the strong association between ACEs and subsequent problems in the development of linguistic, cognitive, and social-emotional skills (Shonkoff et al., 2012).

2.2 Benefits and Barriers to Early Mental Health Intervention

This section explores the effects of early intervention on the wellbeing of children experiencing toxic stress. It goes on to consider the barriers to mental health intervention and common restrictions to access in Ontario.

2.2.1 Benefits

Published by the Mental Health Commission of Canada (MHCC) in 2012, Canada’s national mental health strategy, Changing Directions, Changing Lives (CDCL), advocates the importance of early mental health promotion for all children. This document promotes “targeted prevention programs for those at highest risk due to factors such as poverty, having a parent with a mental health or substance use problem, or family violence” (MHCC, 2012, p. 24). The importance of early intervention is paramount. It is necessary to respond to early-onset mental health problems and mediate other risk factors, such as poverty or maltreatment, that have been shown to add to the cumulative burden of stress for children (Duncan, Brooks-Gunn, & Klebanov, 1994; Evans, 2004). Early interventions with children exhibiting toxic stress
responses have shown that some of the effects of toxic stress may be reversed when buffering, restorative connections with caring adults are created (Harvard 2015; Evans, 2004).

2.2.2 Barriers

In 2013, The School Based Mental Health and Substance Abuse Consortium (SBMHSA) launched a survey in order to scan the accessibility and prevalence of available school-based resources in Elementary Schools and High Schools in 177 boards across Canada. These programs were often struggling with funding, lacking youth and parental involvement, and were not required to undergo a formal, cohesive, evaluative process. SBMHSA noted that while 85% of respondents, including teachers and principals, expressed concern about students mental health problems (primarily concerns regarding anxiety and depression), over 80% of the respondents reported that student needs went unmet (SBMHSA, 2013). Moreover, the survey found that more programs serve students in high schools than elementary schools, suggesting that the needs of our youngest children during some of the most critical periods of development are being left unmet.

In sum, the survey found that very few boards offered coordinated, evidence-based services for mental health promotion, prevention and intervention. “Most provide a few mental health promotion and prevention strategies, and several intervention and crisis response strategies. Few reported providing a range of strategies across the continuum” (SBMHSA, 2012, p3).

2.2.3 Restrictions to access: Canada’s two-tiered system

While government-provided healthcare enables Canadians free access to psychological support services such as registered child psychologists and psychiatrist, it has some notable shortcomings. Waitlist times may extend up to one year and time between visits may be lengthy. However, if a family has the financial means, or is willing to undertake the cost, they can afford
to access mental health services provided by a psychologist or a social worker in the private sector. This can only be characterized as a two-tier health system in child and youth mental health (Kirby, 2013; Gallant, 2013; Picard, 2013). A two-tiered health care system gives those with financial security access to timely health intervention while allowing the client more choice when selecting the professional with whom they prefer to work. Those from economically disadvantaged households who cannot finance access to the private sector remain at the mercy of health care wait times.

2.3 Correlates of Toxic Stress

Children who are at the greatest risk for the poorest outcomes in learning, health and behavior are children experiencing a cumulative burden of risk factors (Shonkoff et al., 2012). For this reason, this section will review three risk factors conducive to triggering a toxic stress response: poverty, maltreatment, and social exclusion. These sources of stress are commonly interrelated and can often be experienced simultaneously, to varying degrees. For example, a child from a low-income, ethnic-minority family might experience social exclusion from peers at school stemming from prejudice related to both ethnicity and socio-economic status. Another child experiencing sexual abuse might withdraw or disconnect from adults and peers resulting in social exclusion.

2.3.1 Poverty

Poverty is a social condition in which a toxic stress response may be elicited. In Ontario, an estimated 546,000 children, or 1 in 7, live in poverty (Statistics Canada, 2011). Of these, 4 in 10 are children of Aboriginal, Metis, or Inuit descent (Colin, Chantal, and Jensen, 2009). Children living in low-income households are commonly subjected to social exclusion and discrimination and are approximately three times more likely than their non-impoveryished peers
to experience psychological distress, social-emotional difficulties, mental illnesses, and toxic stress responses (OHRC, 2015; Costello, 2014; Santiago et al., 2011; Lipman and Boyle, 2008). Moreover, living in a poor neighborhood with fewer resources, lower levels of community cohesiveness, higher prevalence of food insecurity, and higher crime rates is, in itself, a chronic stressor (Santiago et al., 2011).

2.3.2 Maltreatment

Maltreatment has adverse physiological effects on child development and mental wellness (McCrary, De Brito, & Viding, 2011; Wilson, Hansen, & Li, 2011; National Scientific Council on the Developing Child, 2012). Child maltreatment is any act by a caregiver that harms or may potentially be harmful. All forms of child abuse constitute maltreatment: caregiver neglect, caregiver disengagement, physical abuse, emotional abuse, sexual abuse and repeated exposure to interpersonal violence (CWRP, 2015). The latest official statistics from the Ontario Incidence Study of Reported Child Abuse and Neglect – 2013 identified that there were 125,281 investigated cases of child maltreatment in 2013 and of this investigated total, 34% of were substantiated for a total of 43,067 (CWRP, 2015). It should be noted that this statistic only reflects instances of reported maltreatment. Studies indicate that while individuals may witness what they suspect might be abuse, the instance my not be reported (Health Canada, 2004; CWRP, 2015). For example, Child Aid Society (CAS) must screen out calls made by individuals who report maltreatment but do not have sufficient information to identify the abuser or abused (Health Canada, 2004). This suggests that the number of actual maltreatment cases may be higher than reported.

The effects of maltreatment on the developing brain have been widely studied. Maltreated children often have reduced volume in the orbitofrontal cortex and the cerebellum
resulting in the possible inhibition of social and emotional regulation and reduced coordinated motor behavior and executive functioning respectively (Wilson, Hansen & Li, 2011; McCrory, De Brito, & Viding, 2011). Repeated trauma may also cause a persistent fear state and decreased electrical activity in the brain, slowing brain metabolism, and weakening neutral connections between areas of the brain that are key to integrating complex information (National Scientific Council on the Developing Child, 2012).

### 2.3.3 Social exclusion

Social exclusion involves the systemic denial of rights, resources, or services to people who are marginalized. It affects “[…] both the quality of life of individuals and the equity and cohesion of society as a whole” (Levitas et al., 2006). First Nations, Métis, and Inuit (FNIM) children may be subjected to the greatest cumulative burden of toxic stressors such as intergenerational cycles of poverty, poor health, and limited educational achievement which are ultimately linked to the traumas of colonization and the legacy of residential schools.

As of 2011, The First Nations unemployment rate was almost twice the national average of 7.7% for non-First Nations peoples in Ontario. Moreover, food insecurities affected more than 35% of urban First Nations children while child welfare and resources remained grossly underfunded. The rate of instances of substantiated neglect per 1000 children is 27.7 for First Nations children and 3.48 for Non-aboriginal children (MacLaurin et al., 2013). This is an increase of 695.9%. The rates of exposure to intimate partner violence (increase of 374.2%), physical abuse (105%), sexual abuse (171%) and emotional maltreatment (435.5%) were all substantially higher for FNIM children. However, it should be noted that there is controversy related to the overrepresentation of First Nations children reported to child welfare in Canada. These statistics have been criticized as being representations of confirmation biases. More
research is needed in this area to better elucidate these statistics and the biases present when collecting this data.

When conceptualizing a mental health strategy for FNIM peoples, the MHCC ensured that leaders from several nations informed the definitive document, *One Focus, Many Perspectives*. One way this document responds to FNIM mental health needs is to implement a “culture as therapy” approach. The central belief related to this concept is that,

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\text{[d]isconnection is from culture, from selfhood, from your own sense of agency; disconnect on a community level. It is pervasive. These are communities characterized by disconnection [within the community] and disconnection between the services and the population they are supposed to serve (S.P Whitehorse & MHCC, 2011, p. 18).}
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Culture as therapy seeks to foster mutual respect between FNIM peoples and other cultural groups. Moreover, it seeks to implement a recovery model that is reflective of indigenous ways of knowing, culture, values, and traditional healing methods (S.P Whitehorse & MHCC, 2011).

### 2.4 Treatment of Toxic Stress

Treatment of toxic stress requires timely intervention and must take into consideration the caregivers, family-members and the community in which the child lives (Franke, 2014). The most effective form of prevention reduces the exposure of a child to stressful or adverse conditions such as abuse, chronic neglect or violence (Harvard, 2015). Remedial strategies focus on strengthening the skills of the caregiver so that an attentive, caring, protective, and stress-reducing relationship can be cultivated with the child. For this reason, parenting classes, home visits to improve parenting practice, telephone support, family-based programs, access to social resources for parents, problem solving and information seeking skills, and peer support prove to be especially beneficial to caregivers with children experiencing toxic stress (Franke, 2014).
Another common approach to treating toxic stress includes teaching children how to cope with stressful environments with the help of a professional, caring adult such as a social worker, a child psychologist, or an occupational therapist (Franke, 2014). Forms of treatment may include cognitive behavioral therapy (CBT), parent-child interaction therapy, child-parent psychotherapy or intensive mindfulness-based cognitive therapy. Potential barriers to this treatment include long wait times to access a public healthcare professional or the high cost of working with a private sector professional.

2.4.1 Classroom strategies

Given the pervasiveness of mental health problems, and the relatively low rates of community service use, it is important to consider alternative sites for promoting the social-emotional wellbeing of children (MHCC, 2013). Ontario’s Ministry of Education has stressed the importance of the “development of the school as a site for the effective delivery of mental health services” (Kirby & Keon, 2006, p. 138). While school-based strategies for moderating toxic stress response have not yet been developed, teachers are in a unique front-line position to build positive, nurturing, respectful, and stress-mediating relationships with children experiencing toxic stress. Teachers may rebuild student resilience through many classroom strategies, two of which are reviewed below.

Mindfulness based stress reduction (MBSR) has neural bases and can moderate the impact of stress on the brain (Paulus, 2015). Mindfulness is the practice of being passingly attentive to present-moment thoughts and stimuli while withholding judgment. Paulus (2015) finds that “dispositional mindfulness has been related to structural and functional differences in several neural structures, including the medial prefrontal cortex, hippocampus, amygdala, anterior and posterior cingulate, and orbitofrontal cortex” (Paulus, 2015, p. 5). In other terms,
these findings suggest that mindfulness interventions have a positive effect on the parts of the brain that are important for mood and stress-related disorders. However, Franke (2014) cautions that while a casual mindfulness practice in schools may be a beneficial tool for preventative practice with neurotypical children, this may not be sufficient for a child needing an immediate and serious intervention for toxic stress. Moreover, when properly implemented, MBRS or mindfulness-based cognitive therapy are time-intensive therapies requiring accredited professionals.

One study in The Netherlands determines that students between the ages of 8 and 11 were able to provide reliable and accurate information (disclosing their perceived social support and their perceived stress in the form of a 4-point scale in a questionnaire) with moderate to good internal consistency (Snoeren, 2014). This study suggests that questionnaires (asking students to measure their levels of social support and stress) were a feasible and psychometrically adequate self-report measure for primary school children (Snoeren, 2014). With careful implementation, this may be an effective classroom strategy for junior grades. However, one possible limitation is that primary grades might lack the perception and language skills necessary to make this measurement technique successful.

2.4.2 Teacher attitudes towards mental health resources

According to the Ontario Curriculum for grades 1-8: Health and Physical Education, it is the responsibility of a teacher to promote positive mental health and emotional wellbeing because these states of health are closely related to the development of psychological and emotional resilience (Ontario Curriculum, 2010). However, while teachers are expected to be front-line promoters of mental health in the classroom, teachers often express dissatisfaction with the professional development opportunities presented to them to help them fulfill this important
role. This is evidenced in one survey related to the professional development opportunities being offered to teachers. 82% of board-level respondents indicate that professional development workshops about school-based mental health are offered to staff whereas only 61% of school-level respondents (teachers) indicate that workshops related to school-based mental health are offered (SBMHSA, 2013). The document does not ascribe meaning to this 21% gap; however, this gap may be indicative of poor communication between board and school about available opportunities or may speak to teachers’ perceptions of workshop availability or accessibility.

Moreover, educators commonly report system-level gaps that leave them unprepared such as “lack of clear protocol” when accommodating students with mental health issues and a failure to provide “adequate professional development” for educators (SBMHSA, 2013). This survey reports that 87% of teachers feel that they are not afforded adequate professional development opportunities and subsequently feel insufficient to the task of responding to mental health needs (Whitley, Smith, & Vaillancourt, 2012). Further dialogue between the Ministry of Education, board representatives, and teachers is needed to determine the scope of the responsibilities of an educator when disseminating mental health knowledge and responding to mental health needs. This conversation is essential to the development of effective school-based mental health and subsequently the development of resilience among the student body.

2.4 Conclusions and Further Questions

This literature review examines the research related to toxic stress in elementary school children, its correlates and its impact on student learning, and teacher preparedness when encountering mental health issues. It goes on to emphasize the importance of early school-based intervention and the development of the teacher as a stress mediator. This review also raises questions about the efficacy of Ontario’s disjointed approach to mental healthcare and the
professional development opportunities available to teachers as cultivators of mental wellness and resilience. This leads to further questions about how teachers respond to the experiences of students struggling with toxic stress induced by economic hardships, maltreatment, and/or social exclusion. It also merits further questions about helpful classroom strategies being practiced by teachers, and what resources, if any, set them up for success.

While teachers are not sufficient to the task of providing professional healthcare to students, they are still instrumental to the cultivation of resilience among students who experience adversity. It is therefore imperative that we seek out teachers with pronounced dedication to this cause and learn from them how to attend to the growing mental health needs of students. For this reason, I will conduct semi-structured interviews with teachers who practice stress mediation and stress reduction strategies not only for the benefit of students who experience stress, but also for the benefit of all students in their classrooms. In Chapter 3, I describe the research methodology used to collect data for this study and the broad and narrow implications of these methods.
CHAPTER 3: RESEARCH METHODOLOGY

3.0 Introduction: Overview of Chapter

Qualitative research methods and interviewing, in particular, have become hallmarks of social inquiry in education research (Seidman, 2013). In this chapter, I explain the style of interviewing in this study and explain the rationale for this method of inquiry, given its research questions. I begin by discussing the research approach – which is rooted in the “narrative turn” in social inquiry – and its associated procedures and go on to identify the main instrument of data collection. Next, I introduce the research participants, outline the sampling criteria, describe the sampling procedure, and detail the professional backgrounds of the research participants. I then describe the narrative technique employed in order to analyze the data, which is coded according to broad themes. Finally, I address any ethical issues encountered during this study and identify some of its methodological limitations while also speaking to its numerous strengths.

3.1 Research Approach and Procedures

This study approaches data collection through qualitative methodology to examine the strategies employed by two educators who have worked to reduce stress in public elementary classrooms across Ontario. It aims to uncover the specific and oftentimes divergent ways in which educators recognize signs of students’ stress and work to mediate this stress. Qualitative research offers a unique contribution to the research community because it uncovers “the truth value of multiple perspectives” in nuanced and highly descriptive ways (Whittemore, Chase, & Mandle, 2001, p. 524). For this reason, the collection of qualitative data best suits this study.

One of the benefits of qualitative inquiry is its ability to create narratives that reveal the complex, nuanced, and often confounding realities of life, both for students who are experiencing stress and teachers who must contend with the difficulties attendant to its remediation. As I have
intimated above, qualitative research is the most appropriate approach to the study of stress that arises in student populations due to poverty, maltreatment, and social exclusion. Qualitative inquiry allows the participant to tell stories that dramatize, in real terms, the experiences that students and teachers have when contending with this difficult and complicated issue. The causes of childhood stress are often multiple and the student may not clearly identify or understand them, but may only be aware of how they feel. Stress itself manifests in unusual ways and it is not always clear when a student is experiencing stress. Its mercurial nature is best captured by qualitative inquiry, which does not work within the strict confines of categorical studies, as are many forms of quantitative inquiry. Most of all, stress and its management is a personal issue, it is case sensitive, and this study has, at its core, questions related to beliefs, experiences, and attitudes.

This study employed basic coding techniques and, to an extent, reflects an empiricist approach to the study of its topic. It also strives to go beyond the limitations of this method, through an interpretivist approach that seeks to find meaning in the voices of the participants. In this way, there is a greater emphasis on the ordinary, on storytelling, and on categorizations that reflect the everyday reality of teachers and students. The “narrative turn” in qualitative research design is not new (Riessman, 1993), but it has introduced a “new language” into qualitative methods that successfully combines thematic and narrative analysis (Gubrium & Holstein, 2000, p. 232). Its focus on circumstance and particularity has led to its wide adoption across the social sciences and humanities (Gubrium & Holstein, 2012).

3.2 Instruments of Data Collection

This study used a semi-structured interview protocol as its main instrument of data collection. The value of qualitative inquiry in education and, in particular, the utility of semi-
structured interviews has been well established (Merriam, 2002). In order to tease out narratives, a series of questions were devised, based on the literature review. These questions probe deeper into the research questions and address gaps where the existing literature falls short. They address sensitive issues that are frequently stigmatized and, for this reason, careful attention has been given to the crafting of each question (Dickson-Swift, James, Kippen, et al., 2007; Schostak, 2002). Whereas most academic studies focus on youth and high school students, few address the mental health challenges of younger children enrolled in elementary schools. The literature on mediating stress resulting from poverty, maltreatment, and social exclusion has been limited to the United States and no studies exist in Canada. The methodology seeks to correct for this deficit through qualitative, semi-structured inquiry.

Twenty-three questions were devised and organized into four topics. The first topic, background information, asked a series of foundational, demographic, and normative questions. For example, they uncovered the demographics of students enrolled in the school, which this study identifies as one of the three most significant correlates of toxic stress. The questions also sought to uncover the normative beliefs of the teacher toward the topic of stress mediation. Through the use of broad lines of questioning, I uncovered some beliefs of teachers towards the stress of their students and also towards mental health management in schools more broadly.

The remaining three themes relate to broad topics within the academic literature that are relevant to the study of toxic stress. These included specific encounters with stress among students, teachers’ specific beliefs related to stress management, and teachers’ perceptions related to the availability of resources. In particular, I aimed to unveil narrative accounts through my line of questioning. In doing so, I hoped to reveal a deeper – or thicker – history of stress experiences. Various questions also included further probing questions designed to push a
respondent further; however, the semi-structured nature of the interview itself allowed for a degree of flexibility in response to the comments made by particular respondents.

Both participants were interviewed by telephone due to time constraints and the distance between my own location and the location of the participants’ school districts. Telephone interviews do not allow the interviewer to consider participants’ body language and expressions as admissible data. This may be considered a limitation of this study.

3.3 Participants

Here, I review the sampling criteria established for participant recruitment, review methods and avenues for teacher recruitment, and introduce each of the participants.

3.3.1 Sampling Criteria

I interviewed participants who fulfill the following criteria:

1. Participant has taught for five or more years.
2. Participant will have taught in Ontario schools for at least two of those years.
3. Participant demonstrates commitment to stress reduction within the classroom.
4. Participant will have some experience or education in the area of mental health.
5. Participants have experience working in communities with high rates of maltreatment, poverty, and/or social exclusion among student population.

This qualitative study interviewed a small sample of two participants. Due to the small sample size, I was specifically interested in teachers who have cultivated a wealth of experience related to in-class stress reduction for a period of time longer than five years. Additionally, my research aimed to see how teachers in Ontario mediate students’ stress and utilize the resources or strategies available to them. For this reason, I was interested in hearing from teachers who have taught in Ontario schools for at least two years. I was interested in teachers’ experiences
mediating students’ stress resulting from experiencing poverty, maltreatment, and/or social exclusion. Because toxic stress itself cannot be directly identified, teachers must focus on identifying these correlates. For this reason, I was interested in interviewing teachers who have worked in a school situated within a high-risk community where students are more often exposed to the aforementioned social factors.

### 3.3.2 Sampling procedures and recruitment

In order to recruit respondents, I used a combination of purposeful and convenience sampling. Convenience sampling was used due to time limitations and program restrictions. I adhered to a strict sampling criteria when scouting for participants to ensure purposeful sampling. In this way, I found information-rich cases which provided a deeper probing look into teachers’ experiences (Palinkas et al., 2015). I initially contacted a teacher who works in the arts community on issues related to the mental health challenges of students. I also relied on other personal contacts. These contacts encouraged me to distribute information related to this study to other teachers who are concerned about, and have had particularly illuminating experiences related to, the experiences of students with mental health. In addition, I contacted teacher’s associations and provided them with an overview of this research study. I outlined the participant criteria in this document and asked that interested teachers who fulfill these criteria contact me. This helped to ensure that teachers are volunteering of their own volition. One of the primary limitations of the sampling procedures was that time constraints and program restrictions allowed for only a small sample of two to three teachers to be interviewed. This severely limits the scope, depth, and generalizability of the comparative analysis.
3.3.3 Participant bios

This study collected data from two consenting participants who will be identified with the pseudonyms Skye and Lauren. Skye has taught in public school boards in Ontario for 22 years and has worked with students in Grades 1 through 9. She has spent most of her years working at schools in high-needs areas with considerably high rates of mental illness. Skye is devoted to speaking about First Nations culture and traditions with her students and the broader community. Skye coaches many of the extracurricular sports teams at her schools.

Lauren has taught in public school boards Ontario for 15 years. She has taught kindergarten through Grade 6 and also specializes in literacy intervention and assistive technologies for children with learning disabilities. Lauren teaches primary special education classes and runs a mindfulness group for teachers in her school.

3.4 Data Collection and Analysis

Two semi-structured phone interviews were conducted with participants outside of school time. After conducting semi-structured interviews with participants, I transcribed the recorded data. Then, I coded each transcript individually and identified categories of data according to themes that emerged during interviews which pertain to my research questions. Coding is an interpretive technique and it requires that researchers make non-trivial judgments related to the organization, comparison, and segmentation of data. It is more than a search for meaning, as researchers are actively involved in making meaning from their data (Lichtman, 2012). This allows social researchers to identify trends and patterns (Hay, 2005). Next, I identified frequently occurring thematic concerns in these interviews and synthesized themes from these interviews where appropriate. I employed thematic networks in order to achieve a more robust and systematic analysis of the transcriptions (Attride-Stirling, 2001). I also identified any
discrepancies in the findings and acknowledged any null data and its significance. Finally, I spoke to these findings with consideration of existing research from the literature review.

3.5 Ethical Review Procedures

All participants have been assigned a pseudonym and were notified of their right to withdraw from participating in the study at any point in time. Participant identities will remain confidential and identifying markers related to their schools or students have been left out of the study. There are minimal risks associated with this research study. It is possible that a particular question may trigger emotional responses from participants, which may in turn make them feel vulnerable. I have minimized this risk by providing participants with a sample of interview questions ahead of time. Additionally, I informed participants that they have the right to refrain from answering questions at any time. All data will be stored on a password-protected computer and will be destroyed after five years. Participants were asked to sign a consent letter (Appendix A) giving their consent to be interviewed as well as audio recorded. This consent letter provided the participant with an overview of the study, addressed ethical implications, and specified the expectations of participation.

3.6 Methodological Limitations and Strengths

Qualitative research is usually designed to study a phenomenon in greater depth than allowed by quantitative research, particularly in the context of educational research which concerns itself with social and normative issues (Seidman, 2013). Additionally, the semi-structured interview provides narrative detail and a textual richness that would be otherwise lacking in other data collection methods, such as questionnaires or surveys. (Boyce & Neale, 2006) Given the small sample size, which was limited by program requirements, quantitative approaches would be inappropriate and un-generalizable. By carefully selecting respondents, I
will be able to craft deep and compelling stories related to the experiences of children and teachers in specific contexts that may prove to be useful to future researchers.

The process of articulating semi-structured interviews necessitates the negotiation of meaning and a high degree of interpretation on the part of the interviewer. These tasks are not value-neutral and misunderstandings or misrepresentations are real concerns that must be met with through careful consideration (Mojtahed et al., 2014).

The limitations of a small sample size may preclude generalization of findings, but a thick account of multiple experiences nevertheless leaves available the possibility for comparative work in the future (Given, 2015). In order to do this, researchers must be cognizant of, and transparent about, the particular make-up of the research participants and the populations to whom their experience may be transferred. Over time, it is my hope that researchers may extend this work to allow for “broader transferability” through comparative analysis (Given, 2015).

While the limitations of semi-structured interviews will not allow for transferability of its findings, that was never a motivating goal behind this project, which is more interested in filling existing gaps in the literature related to the prevalence, intensity, and existing strategies to remediate stress in primary/junior classrooms in Ontario. To this end, the limitations of the methodological approach are not significant, as the dearth of inquiry into this important subject alone justifies any project that attempts to shed light on a vital and obscure problem.

The narrative turn in social inquiry and the interpretivist approach tends to discount highly structured approaches in lieu of more flexibility. The semi-structured interview gives room to stray from the interview protocol in order to re-direct the conversation towards topics that I may not have anticipated would arise. This leniency allows the interviewer and the participant a more natural and organic exploration of topics.
3.7 Conclusion

In this chapter, I described the research methodology employed in this study. I began by discussing the research approach and outlining the significance of qualitative research design, broadly speaking. Then, I identified the instrument of data collection, the semi-structured interview, which is ideally suited to this project because it creates the opportunity to tease out thick narratives. I described the sampling criteria and procedures, introduced the participants, and described my methodologies for data collection and analysis. Finally, I reviewed ethical procedures and identified some methodological limitations – such as the small sample size – and strengths – such as the textual richness of the interviews. Next, in Chapter 4, I report the research findings from the interviews.
CHAPTER 4: RESEARCH FINDINGS

4.0 Introduction

In this chapter, I present the findings from two semi-structured interviews conducted with teachers and discuss their significance in light of the existing research literature. As per the sampling criteria, both participants have experience working with student populations with high mental health needs, and one of these participants has worked in a school community with a high number of at-risk students with family histories of poverty, maltreatment, and social exclusion. The purpose of these interviews is to explore the central question informing my study: how does a sample of elementary teachers respond to the needs of students with high stress levels and mediate stress induced by economic hardship, maltreatment, and/or social exclusion and what outcomes do these teachers observe in the classroom? Findings have been organized into three overarching themes:

1. Teachers recognize student stress by scanning for common behavioural indicators that are more easily identifiable in an environment established to promote disclosure of stress.

2. Teachers recognize that strategies used in their classrooms are integral for stress reduction both in the classroom and in the community at large.

3. Teachers identify a combination of community-specific barriers and funding barriers to accessing resources and effectively mediating student stress.

For each sub-theme, I will first review the findings from the interviews, then connect these findings to the salient research from the Literature Review in Chapter 2, and finally speak to the significance of these findings for Ontario teachers who are committed to stress reduction in the classroom.
4.1 Teachers Recognize Student Stress by Scanning for Common Behavioural Indicators that are More Easily Identifiable in an Environment Established to Promote Disclosure of Stress.

In this section, I describe the externalized and internalized indicators of stress teachers commonly notice and the methods teachers use to identify them. Teachers occupy a unique front-line position in the identification of students’ mental health issues. These participants’ strategies may help educators to recognize common behavioural indicators of stress to identify students’ implicit needs and to help students to articulate their needs explicitly. Both participants noted certain common behaviours as indicators of stress, used a variety of identification tools and frameworks to identify stress within the classroom, and indicated that their own lived experience may often be a framework with which to identify student stress.

4.1.1 Teachers recognize certain common internalized and externalized behaviours as indicators of stress.

Skye and Lauren both emphasized the importance of recognizing that all student behaviour is communication. They stressed that it is therefore imperative for teachers to look for common internalized and externalized behavioural indicators of stress to identify students’ implicit needs. Both participants cited “meltdowns” or “outbursts” as the most common externalized behaviour indicative of student stress. Skye, who teaches in a school with a large population of students with behavioral challenges, noted that these outbursts are often characterized by swearing, stomping, yelling, and violent conduct. Skye described the lead-up to these outbursts as a “pressure cooker” effect:
There are kids sitting in a desk for an hour at a time … They get bored, they fidget, and then they start to think of a million different things going on in their lives … and then we wonder why they act out.

It is important to note that Skye believes that the school environment itself may be conducive to these outbursts. She offered an example stating that students in her community, many of whom are students with FNMI heritage, often live in overcrowded family homes that disallow them any privacy. Skye described these homes as “chaotic,” noting that adults will often smoke indoors, fights may break out at night, there are too few sleep stations, and noise levels prevent students from sleeping. She acknowledged that many students come to school “on high alert” or “completely exhausted,” and the school environment may exacerbate their stress. She impressed that the loudness or crowdedness of a classroom may add to a student’s cumulative burden of stress.

While Skye spoke at length about externalized behaviours, Lauren went on to impress the importance of recognizing internalized behaviours which, she noted, are more commonly overlooked. Internalized behaviours Lauren commonly notices include anxiety, depression, and withdrawal. Lauren identified that she most frequently sees students with particularly high levels of stress “shut down” or appear as if they have “vacated.” Skye also briefly commented on internalized behaviours indicative of stress, stating that she believes that, with such high levels of emotional pain, learning is no longer meaningful for students because “they are not open or able to learn.” Lauren noted a similar phenomenon and stated that, “It’s like they’re not even there when they’re at school.”

The externalized and internalized behaviours both participants identified are described in the literature as common markers of students’ stress (Harvard Centre on the Developing Child,
2015; Liu, 2004). The research also aligns with Lauren’s observation that internalized behaviours are commonly overlooked by educators (Liu, 2004). Indeed, often students’ mental health issues are not identified or attended to in the elementary classroom, leading to further mental health issues in the middle and secondary school years (Franke, 2014). Moreover, the literature and resources related to mental health do not identify the classroom as a source of stressful stimulus as Skye did. Resources such as Supporting Minds and One Focus; Many Perspectives imagine students’ stress as being derived from sources that are exclusively extrinsic to the classroom. Recognizing that teachers may inadvertently create stressful environments for students within the school is crucial to constructing safe, stress-mediating surroundings for students experiencing high levels of stress. Skye’s observations address a gap that is currently unexplored in the literature pertaining to students’ stress levels in schools. This gap means that many educators and administrators may not yet be vigilant of and responsive to the ways in which our schools contribute to students’ stress. This highlights the need for educators and administrators to examine the structure of the school day and the environment of the school as a whole to accurately identify sources of students’ stress intrinsic to the school environment.

4.1.2 Teachers use a variety of identification tools and frameworks to identify student stress.

Both participants stressed the importance of developing a framework for asking students questions about their wellbeing in order to identify students’ needs. Lauren noted that asking a student directly about how they are feeling fosters a strong relationship built on respect and genuine concern. She noticed that routinely inquiring after their wellbeing indicates to students that they are cared for by their teacher. Skye expanded this questioning framework when she stated that asking students questions to identify their needs is not just a routine for teachers to
undertake but also an important classroom community practice to initiate. Skye impressed the importance of having a community of students who identify stress and ask how they might help one another:

   You can’t just sweep it under the rug. You have to go, “okay what just happened?”
   And you really have to set the tone from day one that we’re all kind of like a family and we take care of each other. So when you see someone who’s really upset with something, it’s not time to laugh or make fun of them or look at them, you know, we ask each other “How are you doing? What happened? How can I help?”

Both educators also talked about the importance of “normalizing” stress and mental health problems, thereby making mental health needs safer to disclose and discuss in the classroom. Particularly, Skye noted that creating this safe space is often contingent upon the teacher’s willingness to be vulnerable with students. However, she emphasized the importance of teachers deciding how much they should disclose about their own stress in order to create a safe atmosphere. Of this, she stated, “You don’t want to disclose too much to make them uncomfortable, but enough to make it an atmosphere where it’s safe to say ‘you know actually, I’m not having a good day’.”

Both participants also spoke to the importance of opening a dialogue with parents as a tool to better identify and understand stress in students’ home lives. In order to facilitate this, Skye, who works with a large FNMI population, also argued the importance of being vulnerable with parents and guardians to help “develop rapport right off the bat.” She emphasized that parents in her community can often be guarded and defensive when she asks about students’ home lives. Skye mentioned that conversation flows more freely when she talks about similar struggles she has had with her own children. In this way, information about each family’s home
life is shared more freely. She revealed that by using this strategy, she has had some “game changing” conversations with parents about students’ homes lives which have helped her to identify and mediate student stress more effectively in the classroom.

Current identification practices rely upon the teacher’s ability to successfully identify internalized and externalized indicators of stress. While both participants did look for common indicators of stress, they were primarily concerned with creating a safe classroom community for students to self-disclose stress explicitly. This self-disclosure strategy is considered by Snoeren’s (2014) study which found that students between the ages of 8 and 11 were able to disclose their perceived stress on a 4-point scale with moderate to good internal consistent. This study suggests that questionnaire may be a feasible and psychometrically adequate self-report measure for elementary students. While Ontario Ministry of Education’s (2013) mental health support guide for educators, Supporting Minds, notes that teachers should work to create a positive classroom environment, reduce stigma related to mental illnesses, build trust with students, and talk openly about mental health with parents and students, there is not yet an identification framework in place encouraging educators to teach students how to self-disclose their stress levels.

Moreover, Skye’s practice of disclosing her own experiences to show vulnerability and promote dialogue parallels a strategy outlined in Mental Health Commission of Canada’s (2011) document, One Focus; Many Perspectives. With a focus on cultural healing for FNMI populations, this document speaks to the benefits of each individual sharing stories of difficulties, healing, and change in an effort to inspire and guides others. The literature finds this approach to be particularly effective with populations experiencing social exclusion and intergenerational trauma (Whitehorse & MHCC, 2011). Skye’s approach of sharing her experiences to invite conversation with students and parents, including a large FNMI population,
may be helpful to other educators looking to participate in collaborative, healing discourse with FNMI students and their families.

4.1.3 Teachers indicate that their own lived experience may often be a framework with which to identify student stress.

Lauren noted that getting to know students and working with them closely helps her to intuitively recognise their stress more readily. She explained that she can instantly pick up on body language, posture, and facial cues – all of which tell her how students are feeling throughout the day. Skye, echoing this finding, stated that because of her years of teaching experience, she can tell “within the first two minutes a kid walks in the door what kind of day they’re going to have.” Additionally, both participants spoke to the value of recognizing students’ emotional state at the start of the school day and promptly having a conversation about their feelings. In this way, both participants found it easier to mediate stress and de-escalate stress-motivated behaviour.

While creating safe spaces to disclose stress and engaging in active questioning were central to both participants’ approaches to identifying students’ stress, Skye also identified that her own lived experiences prepare her to identify students’ needs more precisely. Skye imparted that many of her experiences as a child and adult parallel students’ and parents’ experiences in her community. She believes that similar circumstances in her own life gave her the capacity to better identify instances of abuse. To illustrate, Skye recalled noticing some bruises on a student during a gym class. When asked about it, this student disclosed to her that she had been beaten by a parent. When faced with this situation, Skye said she was able to relate back to a similar instance in her own life, “I was able to tell her exactly in that moment what she needed to hear… ‘I get it, [your parent] is not a bad person’.” Skye described this interaction as an “ah ha”
moment, stating that she was glad that the student had chosen to disclose this information to someone who “gets it.” She noted that reflecting upon her own experience allowed her to approach discussion with this student in a gentle, supportive, and informed way. Moreover, her background enabled her to choose sensitive responses that helped to mediate this student’s stress.

These teachers’ use of intuition and personal experience to identify student stress was a common theme in the interviews. This aligns in some ways with Ontario’s current framework for identification, which relies entirely upon educators building familiarity with a list of mental health problems and scanning for the corresponding signs and symptoms of each (Supporting Minds, 2013). Participants did indeed build awareness and familiarity with signs and symptoms through years of lived experience cultivated in and out of classrooms. However, both participants seemed to highlight that they identify students’ stress not only by being familiar with this list of signs and symptoms but also by drawing upon their own lived experiences with stress and by implementing an identification framework wherein students can self-disclose their own stress. These findings highlight the gaps in Ontario’s current identification framework which does not currently draw upon the expertise of experienced educators or call upon students to learn how to identify and disclose their own stress levels.

For inexperienced educators, with life experiences dissimilar to those in their school communities, identification may prove to be more difficult. Research indicates that educators commonly struggle with the identification process due to lack of training and professional development opportunities (People for Education, 2015). Educators commonly report system-level gaps in this framework, noting that there is a lack of clear protocol when identifying and reporting mental health problems (People for Education, 2015).
4.2 Teachers Recognize that Strategies Used in their Classrooms are Integral for Stress Reduction Both in the Classroom and in the Community at Large.

In this section, I describe the stress-reduction strategies participants used with their students and the impacts they observed both within the classroom and in the broader community. These strategies are important to share with teachers because the school serves as the leading site for promoting the social-emotional wellbeing of children. Participants spoke to the value of fostering respectful communities not only amongst teachers and students but also between the school staff and the broader community of parents and guardians. Moreover, both participants recognized the need for classroom activities that promote self-awareness and community awareness of stress levels in order to advocate for stress reduction. Finally, participants emphasized the importance of teacher self-care to promote wellbeing amongst teachers and to model self-care for students.

4.2.1 Teachers indicate that fostering a community of respect amongst students and amongst teacher and the broader community is an effective stress-reducing strategy.

Skye reflected upon the notion of flexible seating plans in order to create a classroom atmosphere where students feel as if their personal space is being respected. Skye explains that a flexible seating plan replaces traditional seating models wherein students sit in rows or in groups at desks throughout the day in the same assigned seat. Skye has provided students with “comfy chairs,” body pillows, a coffee table, a comfortable carpet, high-top tables with barstools, and exercise balls. She believes that from a mental health standpoint, a flexible seating plan may allow students to “escape” other students that cause them distress. It may also give students from loud or busy households some much-needed quiet time. Skye stated that giving students the
freedom to choose where they sit demonstrates respect for their individual needs and preferences and helps to build community. As Skye elaborated,

[A flexible seating plan] recognizes that some kids work better on their own. Some kids work better sprawled out on the carpet. Some kids work better if they can bounce – like they can move around. So it’s providing kids with different alternatives for where they can work and with whom they can work.

Skye also explained that while it is imperative to build and bestow respect in the classroom to reduce stress levels, it is equally important to cultivate “close-knit” working relationships amongst school staff members and the community of parents and guardians. Skye affirmed that “The staff has a really close knit relationship with the community and vice-versa where the community is very trusting of the staff as well.” As a result of this unity, Skye noted that while her official role is that of a teacher, the community also accepts her as an “aunty” figure to her students. She often reiterates to her class, “I treat you guys like I would treat my own kids.” Moreover, she states that parents’ stresses are often mediated when, “parents know you have their back as well and that you are always looking out for their kids. That’s a huge thing. That the parents know that you really, really like their children. That’s huge.”

Skye believes that developing trust with parents leads to building trust within the community, which is essential in a school where students and their families have experienced systemic social exclusion, poverty, and pervasively mental health issues. Levitas (2006) notes that the denial of rights, resources, or services to people who are marginalized affects “both the quality of life of individuals and the equity and cohesion of society as a whole” (Levitas, 2006, p 12). Whitehorse and the Mental Health Commission of Canada (2011) expand on the consequences experienced by socially excluded populations:
Disconnection is from culture, from selfhood, from your own sense of agency; disconnect on a community level. It is pervasive. These are communities characterized by disconnection [within the community] and disconnection between the services and the population they are supposed to serve. (p. 18)

Skye has made a point of fostering connections amongst school services and the First Nations population her school is meant to serve – a connection that Whitehorse and the Mental Health Commission of Canada note is seldom effectively made.

4.2.2 Teachers value classroom activities that raise self-awareness and community awareness of stress levels.

Lauren recognized the need for students to be given the opportunity to report their own stress levels. She stated that her emoji stress identification system helps students to “check in” with their emotions at the start of the day. Lauren has attached a number of emojis with different facial expressions to a string. She encourages students to attach their name to an emoji that closely aligns with their state of mind each morning. Lauren spoke to their utility saying, “So it’s a quick little view, right? So say you’ve got four kids who are feeling sad, well then you might change course before you do your lesson.” Lauren stated that following this check-in, she might ask if students want to share their worries or participate in a mindfulness exercise to acknowledge their anxieties and engage in positive self-talk exercises to bolster resilience.

Lauren seemed to speak for both participants when she stressed the importance of placing student wellbeing ahead of the curriculum. Specifically, she insisted that educators should prioritize students’ social-emotional concerns and mental health needs by pausing, when necessary, to ask students what they need and how you can help them. The primary motivation for doing this, Lauren said, is not only to mediate students’ stress but also to demonstrate your
commitment to and solidarity with the individuals in the classroom. Lauren seemed to recognize that these individuals are first human beings with social-emotional needs and then students with learning needs. While her primary concern is students’ wellbeing, Lauren also mentioned a second added benefit,

I’m not just trying to get them to stop the behaviour, I’m trying to be with them wherever they’re at. It’s amazing though too because I find that I can get through my curriculum just as well if not even better because the kids then know that I will take the time with them when they need it. I’m not going to try to rush through something – I’m there for them every step of the way.

Skye mentioned that while students should be encouraged to be self-aware of stress levels, as Lauren suggested, it is also important for low-SES communities with high mental health needs to raise awareness about prevalent communal stressors. She insisted that this communal awareness incites conversations and promotes understanding about mental health needs and solutions. Specifically, Skye described the need for intergenerational understanding about the stressors that the youth in her community often cope with. In order to promote understanding, Skye asked students to participate in a Twitter project anonymously broadcasting things they wish their family members understood about their experiences. Skye commented on the process of conceptualizing the content,

We did it as a brainstorm on my smartboard and [students] were just toppling out answers and it included things like abuse, people fighting at home, got little sleep, sometimes I’m so worried I can’t sleep at night, there’s no food in the house, there’s too much noise in the house. Like, they felt safe enough to brainstorm a list of –wow– mind-blowing things.
Skye noted that the communal impact was widespread and effectual. Once she had tweeted students’ concerns on a community page, these messages were re-tweeted by community members and were discussed more extensively between students and their parents or guardians.

The literature notes that a toxic stress response occurs when the individual experiences a cumulative burden of stress incurred from many concurrent stressors (Harvard Centre on the Developing Child, 2015). Students in both participants’ communities experience poverty, maltreatment, and social exclusion which are all risk factors conducive to triggering a toxic stress response as delineated by Shonkoff et al. (2012). Remedial strategies for toxic stress response focus on strengthening the skills of the caregiver so that an attentive, caring, protective, and stress-reducing relationship can be cultivated with the child (Harvard Centre on the Developing Child, 2015). Lauren’s work to form caring, stress-mediating relationships with her students places her in a caregiving role whereas Skye’s work with inviting intergenerational discussion about stressors provides an opportunity for children and caregivers to begin an open and honest dialogue about stress levels. Both of these strategies are beneficial for educators wishing to normalize mental health discussions and incite conversation about the importance of stress reduction.

4.2.3 Teachers indicate that teacher self-care and collaboration with colleagues is beneficial for managing both teacher and student stress levels.

Both participants emphasized the need for teachers to support their own mental wellness by managing stress levels. Lauren noted that it was crucial for her to find ways to manage her own stress when working in a high-needs school. Lauren expressed feeling unable to fathom the difficulty of her students’ lives and powerless to help these students to improve their situations. This left her feeling frustrated, upset, and emotional the end of the day. Lauren realized that if
she was going to stay in the teaching profession, she would need to find ways to manage her own stress. As part of her self-care routine, Lauren goes to the gym, meditates, and has a mindfulness group of colleagues at work. Using the *Calm* app, this group participates in a guided meditation for ten minutes at the start of the day to “centre and refocus.” Lauren affirmed, “If I am calm, relaxed, focused, then I am my best possible person. So I teach from a very different place. I am not reactive to the situations as much.”

Skye expanded on this by stating that she believes that teachers who practice self-care openly and model this behaviour with students are setting good examples for students to follow. She elaborated by mentioning that she has always played hockey, and began training for marathons four year ago. Skye noted,

I’m not a natural runner … [students] see me signing up for these things and I’ll fully admit “Well, I’m not very good at this but I’m going to give it a try.” And that’s actually really good role modeling.

Lauren noted that finding like-minded educators who support your self-care efforts is an integral part not only of practicing stress reduction as an individual, but also of establishing mental wellness as a school-wide objective. Lauren also impressed the importance of staying away from negative staffroom talk and making good use of time, emphasizing that educators should, “Find people that are positive to be with. Find people that want to learn and grow with you. Read up on [resources] and then give them a try with your own kids in the classroom.”

Teacher self-care – which both participants emphasized is essential to being effective teachers and stress mediators – is largely absent from the research related to stress mediation strategies in the classroom. Indeed, this interview finding was unexpected yet resolutely emphasized by both participants. While teacher “burn-out” is addressed in one article on the
Canadian Education Association’s website, teacher self-care is entirely absent from notable Ontario documents such as *Foundations of Professional Practice* (2016) and *Supporting Minds* (2013). Teacher self-care is particularly important given the high teacher turnover rates especially in inner-city school and schools with large populations of high-needs students (Karsenti & Collins, 2013). Both participants emphasized their responsibility to model responsible self-care choices for students. This highlights a gap in the literature which often excludes discussions about the mental healthcare choices of the educators. Given this gap in the research, these findings point to a need for more literature focused upon promoting teacher self-care.

**4.3 Educators Identify a Combination of Board-level Barriers, Community-specific Barriers, and Funding Barriers to Accessing Resources and Effectively Mediating Students’ Stress.**

In this section, I discuss the barriers to implementing effective stress mediation in schools and accessing mental health resources in the broader community. In the province of Ontario, it is reported that 80% of students’ mental health needs are unmet by schools (People for Education, 2015). Both teachers spoke to this deficit, highlighting three main concerns. First, participants find that a lack of human resources hinders teachers’ ability to adequately respond to the mental health needs of their students. Additionally, teachers report that efforts to reduce students’ stress are often unsupported by parents. Finally, teachers note that funding is a large barrier to supporting students and teachers in their mental health initiatives.
4.3.1 Teachers find that the lack of human resources hinders their ability to adequately respond to the mental health needs of their students.

Skye adamantly asserted that the biggest barrier to acquiring mental health support in the classroom is the lack human resources, specifically, the lack of educational assistants (EAs, hereafter). There has been a shortage of EAs at Skye’s school for the past two years. She explained that the EA who is assigned to assist her classroom in the afternoons is seldom there because she is often called elsewhere to deal with urgent student behavioural issues within the school.

Moreover, both participants spoke about the need for more licenced counselors and mental health professionals in the school. Skye noted that many students in her school need professional counseling, however her school does not possess the resources to provide for this need. She stated, “there is one school counselor and a million different mental health needs in the building.” Lauren expressed a similar sentiment noting that there is just one mental health professional who visits the school weekly. Moreover, the local community mental health centre only offers what Lauren described as “one-off” counseling sessions. These are ultimately unhelpful, as Lauren admitted, “there’s not really much follow-through with that.”

Participants’ findings parallel findings from People for Education’s 2016 survey which states that elementary schools have only one full-time counselor for every 5000 elementary students leaving 83% of all elementary schools with no guidance counselors (Hamlin, Hagen, & Watkins, 2016). Given the centrality of good mental health to the learning process, and the importance of developing resilience in school communities, a greater number of mental health care professionals and EAs in schools is crucial to the mediation of stress – and the remediation of mental health problems – in Ontario’s elementary school students. The research and both
participants suggest that the needs of Ontario’s youngest population are unmet during some of the most critical periods of development in the elementary years. This confluence of findings highlights a need for more mental health care professionals within elementary schools to respond to the growing needs of students and their families.

4.3.2 Teachers report that efforts to reduce students’ stress are often unsupported by parents.

Lauren stated that the social-emotional progress made with students in class often comes “undone” when children go home. She mentioned the importance of programs that work with parents and guardians so that they might also practice stress management with their children at home. Lauren said, “We can structure the day all we want and try to use all these mental health resources at the school but if the kids are going home to chaos, it all can come undone.”

Skye is also concerned that even with community support available, parents lack the time to research and locate suitable counseling and transport their child to and from these sessions. Skye noted,

There’s so many ways you can get counseling in the community … But I think that most parents, and I know our family’s the same, you know, it’s busy. So you don’t have time to seek out a million different ways you can get counseling.

Skye insisted that even the process of trying to locate adequate and effective support can often create more stress for parents, “adding one more thing to their plate.”

Both participants recognized the need for school-based mental health to be reinforced by parents in an out-of-school context using community-based facilities and school-based resources. Indeed, both teachers listed numerous school-affiliated institutions and resources available to parents yet also noted lack of parental involvement. Participants agreed that a lack of follow-
through from parents is a barrier to students’ making social-emotional progress. Yet, while participants cited lack of time as the primary reason for lack of follow through, the research finds that long wait times for community-based resources may be the reason that parents are unable to obtain the help they need outside of schools (Mental Health Commission of Canada, 2013). This divergence of opinions highlights some ambiguity related to pinpointing why parents and guardians are under involved with the numerous school-affiliated institutions and resources available to them.

Moreover, the research finds that the quality of school-based programs varies. Indeed, one survey launched by the School Based Mental Health and Substance Abuse Consortium (SBMHSA) notes that most of Ontario school programs were found to be struggling with funding and were lacking in quality (Mental Health Commission of Canada, 2013). The shortcomings of Ontario’s school-based programs may disappoint parents and affect parents’ willingness to seek out and participate in support programs. There is no research yet that seeks to discover why these programs are poorly attended by students and parents alike. There are also currently no school-based programs in Ontario that offer at-home support to help reinforce stress-mediation strategies within the home environment. With little support in schools, and no professional support at home, the stress mediation techniques that Skye and Lauren practice with students may not be effectively enacted in homes, thereby reducing the efficacy of these strategies overall and impeding any social-emotional progress these teachers make with students.

4.3.3 Teachers find that funding is a large barrier to supporting students and teachers in their mental health initiatives.

Lauren noted that that her particular school board is currently focusing on mental health and wellness. This means that administrators within the board are given more licence to budget
for mental health resources and are encouraged to make mental health a focus in their schools. However, Lauren also stated that regardless of board focus, the amount of support—and the type of support—educators receive for school-based mental health initiatives is often entirely dependent upon the administration in each school. Lauren insisted, “I’m blessed to have two amazing administrators that are completely supporting learning mindfulness.” She described that her school’s administration supports mental health both ideologically and financially by providing some professional development opportuneness for staff members. However, she declared that other administrators might decide that math initiatives or technology takes precedence and may allot funds accordingly.

Even with new board-wide focuses on mental health, both participants noted that professional development opportunities are underfunded. Lauren described her frustration with lack of funding for mindfulness workshops. She said that after arranging a one-hour introduction to mindfulness for the teachers in her school, 22 of her colleagues were interested in further professional development on the subject. When considering the logistics of taking these teachers to a three-day workshop on the subject, Lauren said, “The boards are not going to give us release time… it cost $7,600 to have 22 teachers be released to the EAs for half days. Not even three full days. It’s a huge amount of money.”

While teachers are expected to be front-line promoters of mental health in the classroom, research finds that teachers often express dissatisfaction with the professional development opportunities presented to them to prepare them for this important role (Mental Health Commission of Canada, 2013). This is evidenced in one survey related to the professional development opportunities being offered to teachers. 61% of teachers indicate that workshops related to school-based mental health are offered. Moreover, this survey reports that 87% of
teachers feel that they are not afforded adequate professional development opportunities and subsequently feel insufficient to the task of responding to mental health needs (Whitley, Smith, & Vaillancourt, 2012). The research and both participants cited funding as the main barrier to more professional development opportunities for teachers. Yet, Lauren also highlighted another potential reason, not identified in the research, for the lack of professional development opportunities related to mental health. Lauren noted that teachers may simply be called upon by their school boards to focus more prominently upon other board-wide initiatives (e.g. Math initiatives, literacy score improvements, STEM integration). This means that other professional development opportunities, such as math and STEM workshops, may be in high demand by teachers and principals and may therefore more readily available and affordable. This means that educators like Lauren and Skye must find the support of administrators and schools boards to support mental health initiatives in the midst of board-wide focuses on other pressing initiatives.

4.4 Conclusion

In this chapter, I presented the findings from two interviews with teachers who practice stress mediation within classrooms of students with high mental health needs. This study found that teachers locate stress most effectively not only by looking for common behavioural markers of stress but also by creating a classroom and community environment that is conducive to disclosing stress. The practice of student-initiated disclosure of stress is not yet a common theme in the literature. This study also found that teachers use strategies to promote stress reduction within the classrooms and also in the broader community – thereby encouraging wide-spread dialogue about mental health. One finding unique to this study was that participants placed great emphasis on modelling responsible stress-mediating choices for their students. Finally, this study found that educators cite system-level barriers such as lack of human resources and lack of
funding which stunt growth opportunities that would be conducive to stress mediation. These findings may be important specifically to Canadian researchers who have produced no data pertaining to the prevalence of toxic stress. However, the correlates of toxic stress, poverty, maltreatment, and social exclusion, are increasingly prevalent social conditions within Ontario. While teachers are not sufficient to the task of providing professional healthcare to students, they are still instrumental to the cultivation of resilience among students who experience adversity. In the future, it is important to continue to seek out teachers with pronounced dedication to this cause and learn from them how to attend to the growing mental health needs of students. In Chapter 5, I discuss the implications of the research findings, and give recommendations for further areas of research.
CHAPTER 5: IMPLICATIONS

5.0 Introduction

In this chapter, I discuss broad and narrow implications of this research study. I first provide an overview of the key findings and their significance. Next I discuss the implications of this study for the educational community, school boards, and for my own professional identity and practice. I go on to make recommendations for schools, teachers, and school boards. Finally, I identify areas I believe may benefit from further research in light of this study’s findings.

5.1 Overview of key findings and their significance

The findings from the semi-structured interviews can be organized into the three following overarching themes:

1. Teachers recognize student stress by scanning for common behavioural indicators that are more easily identifiable in an environment established to promote disclosure of stress.

2. Teachers recognize that strategies used in their classrooms are integral for stress reduction both in the classroom and in the community at large.

3. Teachers identify a combination of community-specific barriers and funding barriers to accessing resources and effectively mediating student stress.

In this section, I describe the aforementioned themes and connect them to the literature.

The literature finds that Ontario’s current framework for identifying students’ stress relies upon the teacher’s ability to scan for the common externalized and internalized behavioral indicators of stress delineated in the Ontario Ministry of Education’s (2013) mental health support guide for educations, Supporting Minds. Skye and Lauren are both knowledgeable about
these common behavioral indicators. Yet, both participants emphasized that students’ stress is more effectively identified when students are taught to take the initiative to recognize and disclose their own stress. Both educators noted the importance of having a safe classroom environment in which students can do so. Additionally, both participants spoke to the importance of establishing a routine of inquiring after students’ wellbeing. Skye expanded the scope of this questioning framework when she stated that asking students questions to identify their needs is not just a routine for teachers to undertake but also an important classroom community practice for students to enact with each other. This questioning framework is particularly important given that educators commonly struggle with the identification process due to a lack of professional development and clear protocol when identifying and reporting mental health problems (People for Education, 2015). Moreover, the literature and resources related to mental health do not identify the classroom as a source of stressful stimulus as Skye did in her interview. Resources such as Supporting Minds and One Focus; Many Perspectives imagine students’ stress as being derived from sources that are exclusively extrinsic to the classroom. Recognizing that teachers may inadvertently create stressful environments for students within the school is crucial to constructing safe, stress-mediating surroundings for students experiencing high levels of stress.

Both participants recognized that the strategies used in their classrooms were integral for stress reduction both in the classroom and in the community at large. Skye noted that encouraging dialogue about common stressors with students and families was the most important stress-mediating tactic when working with student populations and communities who experience high levels of stress. One way Skye accomplished this was by starting a Twitter project which asks students to anonymously disclose things they wish their parents understood about their worries and stress levels. Skye also mentioned the importance of showing vulnerability by
selectively disclosing some of her own experiences with stress to students and parents. These strategies serve to bring parents, teachers, and students closer together as a community. This is particularly important since Levitas (2006) notes that the denial of rights, resources, or services to people who are marginalized affects “both the quality of life of individuals and the equity and cohesion of society as a whole” (Levitas, 2006, p. 12). The task of building cohesion may begin in the classroom between students and teachers and extend to the surrounding community as parents become more involved with these talks about stress. Additionally, both educators emphasized the importance of teacher self-care as a method of modelling responsible mental health practices for the classroom and the community at large. Presently, teacher self-care is entirely absent from Ontario’s notable educational documents such as *Foundations of Professional Practice* (2016) and *Supporting Minds* (2013). This gap in the literature points to the need for teacher self-care to become a topic of discussion among Ontario’s school boards. However, until this practice is sanctioned by Ontario’s Ministry of Education, teachers like Skye and Lauren may not receive the support they need from their administrators to implement a culture of teacher self-care.

Both participants noted the need for more licenced counselors and mental health professionals in elementary schools. Indeed, this finding echoes *People for Education’s* 2016 survey which states that elementary schools have only one full-time counselor for every 5000 elementary students leaving 83% of all elementary schools with no guidance counselors (Hamlin, Hagen, & Watkins, 2016). The research and both participants suggest that the needs of Ontario’s youngest population are unmet during some of the most critical periods of development in the elementary years. More importantly, both participants recognized the need for school-based mental health to be reinforced by parents and guardians in an out-of-school
context using community-based facilities and school-based resources. However, while both participants cited lack of time as the primary barrier to parents accessing these resources, the research finds that long wait times and poor program quality is the primary reason that parents are unable to obtain the help they need outside of schools (Mental Health Commission of Canada, 2013). This disparity highlights the uncertainty related to identifying why parents and guardians are under involved with the various school-affiliated institutions and resources available to them.

5.2 Implications

In this section, I describe the implications of this study’s findings as it relates to the educational community, Ontario’s school boards, and my own professional identity and practice.

5.2.1 Educational community

Both participants highlighted the importance of scanning for stress in the classroom and implementing strategies to promote self-disclosure of stress among students. They emphasized the need for teachers to implement a culture of openness and discussion about stressors and mental health not only with their classrooms but also with parents, guardians, and other teachers. While both participants engage in this practice routinely with classes, research indicates that due to a lack of training and professional development opportunities, many educators struggle with the identification process (People for Education, 2015). Since teachers are in a frontline position to identify students’ stress, it is imperative that they also have a working knowledge of common behavioral indicators of stress. For this reason, professional development and educational opportunities may be valuable. However, professional development opportunities may not wholly prepare teachers to recognize and respond to the many manifestations of stress that students may exhibit. For this reason, it is vital for teachers who are committed to stress
reduction to find ways to proliferate their experiences with identifying and mediating students’ stress.

This study also has implications for the ways in which educators model responsible mental health care habits within the teaching profession. Both participants agree that teacher self-care is not often spoken about with students, parents, or other educators. Indeed, the literature tells us that teacher self-care is not a prevalent topic in important Ministry of Ontario documents for educators such as *Foundations of Professional Practice* (2016) and *Supporting Minds* (2013). However, Skye and Lauren asserted that modeling responsible mental health care habits, such as mindfulness, positive self-talk, physical exercise, and seeking out help when it is needed is an ethical responsibility for educators. Both educators noted that teachers often choose to overwork themselves and overlook their own mental health needs in order to meet demands and expectations. While educators can teach responsible mental health care and strategies for stress regulation, intentionally modelling this self-care lends authenticity and integrity to these practice. Educators like Skye and Lauren are participating in a paradigm shift that envisages teachers as people who conscientiously look after their own mental health needs as opposed to professionals who do not have mental health needs. This shift in philosophy may become more prominent among educators which, in turn, may prompt the ministry of education to proliferate more literature related to teacher self-care.

### 5.2.2 Ontario’s school boards

The literature finds that once students’ stress has been identified, there are currently no comprehensive and consistent measures in place in Ontario for helping students and families with next steps (People for Education, 2015). These steps are specific to the school district and the school-based or community-based mental health programs available. This means that the
quality of care each student receives varies greatly across the province. Both participants agree that school-based mental health programs do not respond adequately to the needs in their communities. This highlights a need for school boards to carefully review the efficacy of school-based mental health initiatives. As teachers like Skye and Lauren continue to pursue more administrative support, school boards may be required to place more emphasis upon school-based mental health programs that offer high-quality, consistent responses to students’ needs across board districts.

5.2.3 My professional identity and practice

Prior to this study, my interest in stress-mediating practices compelled me to regard self-care as an ethical imperative. My interviews with Skye and Lauren have led me to regard modeling self-care for my own students as a responsible and ethical teaching practice. For this reason, I will continue to seek out ways to exemplify the ethics of self-care for my own students. Additionally, both participants noted that making the classroom a safe space for disclosing stress is an effective tool for stress identification which, in turn, leads to more efficient mediation. Establishing an identification framework in my own classroom will be essential to my practice as an educator. While screening for stress by looking for behavioral indicators is a necessary practice, I believe that de-stigmatizing mental illness, educating students explicitly about stress responses, and teaching students about stress-mediating tactics will help promote a culture conducive to helping students identify and disclose their own stress levels.

5.3 Recommendations

In this section, I propose recommendations for research-informed action for schools, teachers, and school boards.

5.3.1 Schools
It is important for schools to adopt a school-wide approach to promoting mental health and mediating stress. This must involve the de-stigmatization of mental illnesses and the explicit teaching of stress mediation strategies. Moreover, it is essential that educators and administrators thoughtfully reflect upon the ways in which the school environment might contribute to students’ stress. This means inviting students to examine and reflect upon the environment of the school as a whole to accurately identify sources of students’ stress intrinsic to the school environment.

It is also advised that administrators seek out experienced educators with a commitment to stress identification who can share their expertise more widely. This may bolster teachers’ awareness of the signs and symptoms of mental illnesses stemming from chronic stress such as anxiety, depression, and toxic stress syndrome. Furthermore, sharing this expertise more widely may contribute to earlier identification of mental illnesses in elementary students which the literature states is imperative (Mental Health Commission of Canada, 2013). Timely response to mediate a cumulative burden of stressors may be key to preventing longstanding physical and mental repercussions (Evans, 2004).

5.3.2 Teachers

Given the front-line position teachers occupy in the identification and mediation of students’ stress, it is important that teachers look after their own mental wellbeing with diligence and integrity – not only to model responsible self-care for students, but also to extend their own longevity and wellbeing in the teaching profession and in their personal out-of-school lives. It is also important for teachers to seek out educational opportunities so that they might learn how to better identify students’ needs and respond to them. Furthermore, establishing a habit of
inquiring after students’ wellbeing may help educators to establish a caring, respectful, stress-mediating classroom climate where students feel supported and safe.

5.3.3. School boards

Both participants were concerned that the social emotional progress students made in schools was often “undone” due to a lack of support and adequate follow-through at home with parents or guardians. For this reason, I believe that school boards must establish school-based mental health initiatives that offer in-home support and strategies to uphold and amplify the strategies students learn in schools. Additionally, a comprehensive review of school-based mental health programs should be conducted to better understand how these programs might better serve the community. Finally, placing more mental health care professionals in elementary schools will help to support the growing mental health needs of Ontario’s elementary students.

5.4 Areas for Further Research

I believe it is necessary to evaluate the efficacy of school-based mental health initiatives which are currently not subjected to any review. This study found that there were conflicting explanations for why school-based mental health resources were seldom utilized. Future research studies might seek to find what factors impede students and parents from making use of these resources or conduct a review of the school-based mental health resources in high-needs communities across Ontario. Due to some ambiguity in this study related to the usefulness of one’s own lived experience in the stress identification process, another study might evaluate how teachers’ experiences with mental health affect the process of identifying students’ stress. A longitudinal study measuring the effects of early counselling intervention with at-risk elementary students might be useful to determine the effects of having counsellors in elementary schools.
Finally, existing research related to stress and elementary-aged children draws upon the knowledge of school administrators, the Ministry of Ontario, and medical professionals. Students’ voices are entirely absent from this conversation. One qualitative study might seek to gain insight about what students deem to be most stressful for them.

5.5 Concluding Comments

In this chapter, I summarized the findings delineated in Chapter 4 and outlined the implications for the educational community, school boards, and my own professional identity and practice. I then made recommendations for various stakeholders, and identified areas for further research. This study has highlighted the importance of learning from committed teachers about their strategies, efforts, successes, and worries while identifying and mediating students’ stress. Teaching responsible self-care is an educator’s professional and ethical duty. Our mental health is indeed part of our overall physical health. It is therefore imperative that educators engage in these conversation to ensure that our students’ mental health needs are being met.
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Appendices

Appendix A: Letter of Consent for Interview

Date:

Dear ______________________________,

My Name is Anne-Lise Shantz and I am a student in the Master of Teaching program at the Ontario Institute for Studies in Education at the University of Toronto (OISE/UT). A component of this degree program involves conducting a small-scale qualitative research study. My research will focus on how elementary teachers mediate student stress as a result of adversity. I am interested in interviewing teachers who have a demonstrated commitment to student mental health and have experience teaching for at least five years. I think that your knowledge and experience will provide insights into this topic.

Your participation in this research will involve one 45-60 minute interview, which will be transcribed and audio-recorded. I would be grateful if you would allow me to interview you at a place and time convenient for you, outside of school time. The contents of this interview will be used for my research project, which will include a final paper, as well as informal presentations to my classmates. I may also present my research findings via conference presentations and/or through publication. You will be assigned a pseudonym to maintain your anonymity and I will not use your name or any other content that might identify you in my written work, oral presentations, or publications. This information will remain confidential. Any information that identifies your school or students will also be excluded. The interview data will be stored on my password-protected computer and the only person who will have access to the research data will be my course instructor Dr. Angela MacDonald. You are free to change your mind about your participation at any time, and to withdraw even after you have consented to participate. You may also choose to decline to answer any specific question during the interview. I will destroy the audio recording after the paper has been presented and/or published, which may take up to a maximum of five years after the data has been collected. There are no known risks to participation, and I will share a copy of the transcript with you shortly after the interview to ensure accuracy.

Please sign this consent form, if you agree to be interviewed. The second copy is for your records. I am very grateful for your participation.
Sincerely,
Anne-Lise Shantz
Phone Number:
E-Mail:
Course Instructor’s Name: Dr. Angela MacDonald
Contact Info: Angela.Macdonald@utoronto.ca

Consent Form
I acknowledge that the topic of this interview has been explained to me and that any questions that I have asked have been answered to my satisfaction. I understand that I can withdraw from this research study at any time without penalty.

I have read the letter provided to me by Anne-Lise Shantz and agree to participate in an interview for the purposes described. I agree to have the interview audio-recorded.

Signature: ________________________________________

Name: (printed) ____________________________________________

Date: ____________________________
Appendix B: Interview Protocol

Thank you for participating in my research study. The aim of this research is to learn how a sample of two elementary teachers are enacting stress reduction in elementary schools. This interview should take approximately 45-60 minutes and is comprised of 23 questions. The interview protocol is divided into four sections. I will ask you a series of questions about your background information, experiences with managing student stress, and beliefs related to stress and its effects in the classroom. Finally, I ask you a series of questions pertaining to supports available to you, challenges you face, and recommended next steps for teacher associates. I would like to remind you that you may choose not to answer any question, and you may opt out from participating in this study at any time. This interview will be audio-recorded, as outlined in the consent letter. Before we begin, do you have any questions?

Section A – Background Information

1. How long have you been a teacher in Ontario?
   a) Which grades and subjects do you currently teach? Which did you teach previously?
   b) Can you tell me more about your school? (e.g. size, demographics, program priorities)

2. Do you take on other roles in your school or community apart from your duties as a
teacher? If yes, what are they?

3. As you know, I am interested in learning about Ontario teachers’ experiences with stress reduction strategies in the classroom. For this reason, I have selected participants who are dedicated to stress reduction in classrooms. Can you tell me about what experiences have contributed to developing your interest in and preparation for this work?

   a. Personal Experiences
      
      i. Do you enact stress management in your life outside of the classroom? If yes, what do you do?

      ii. (if applicable) Why is stress reduction important in your life outside the classroom?

   b. Educational Experiences
      
      i. What educational experiences have contributed to your understanding of stress reduction and mental health? (e.g. University, teacher’s college, additional qualifications certifications, professional development?)

   c. Professional Experiences
      
      i. When did you begin to notice a need for stress reduction – either in the classroom or apart from it?

Section B – Experiences and Beliefs

4. How do you think your own experience with stress management affects the pedagogical decisions you make as a teacher?

5. In your view, what is the role of schools in supporting student mental health? And stress reduction more specifically?

6. From your perspective, what is the relationship between mental health and stress
reduction?

7. In your experience, what are some of the significant mental health issues facing students?

8. How do you believe stress affects your students in the classroom?

9. What are some of the primary sources of stress in your students’ lives?

10. What are the common sources of stress you frequently identify?

11. Why do you believe stress management is important in primary and junior grades specifically?

12. In your view, how well do schools do in supporting these mental health needs? What evidence have you seen of this?

13. What, if any, do you believe are the parameters of an educator’s responsibilities when responding to students’ stress and mental health needs?

**Section C – Encounters with Students’ Stress**

14. How do you know when a student is experiencing stress?

   a. What indicators do you look for and recognize from students?

   b. How did you learn to recognize these indicators?

15. How, if at all, do you integrate the topic of stress reduction into your lesson plans?

   a. Can you give me an example of one or two lessons that you have conducted on the topic of stress and stress management?

   b. How do you connect this topic to curriculum?

   c. How do your students respond to these lessons? What indicators of learning have you observed?

16. How do you integrate stress reduction strategies into your teaching?

   a. What strategies do you enact and why?
b. What particular resources do you use? (e.g. books, videos, websites, physical space, outdoor space)

c. How do students respond to these strategies? What outcomes have you observed from them?

17. Are the students in your classroom typically comfortable with disclosing their stress levels to you? How do they do this?

18. Once you have determined that an individual student is exhibiting high levels of stress, how do you respond? Can you walk me through a few examples?

**Section D – Supports, Challenges, and Next Steps**

19. To your knowledge, what factors, if any, prevent students from obtaining the mental health support they need within your school and community?

20. What institutional supports are available to you to help students in need of stress reduction? How did you learn of these supports and how to access them?

21. What challenges and barriers do you encounter in your efforts to enact stress reduction strategies in your classroom teaching? How do you respond to these challenges?

22. What challenges do you encounter in your efforts to respond to the specific stress management needs of individual students? How do you respond to these?

23. What advice, if any, would you offer a beginning teacher who is committed to stress reduction for elementary aged-students? What resources would you recommend to a new teacher to help get them started?

Thank you for your participation.