EXPLORING TEACHERS' PERSPECTIVES
ON TRAUMA-INFORMED EDUCATION

Sandra Browne-Kealey

Doctor of Philosophy
Nipissing University

2019

EXPLORING TEACHERS' PERSPECTIVES
ON TRAUMA-INFORMED EDUCATION

SANDRA BROWNE-KEALEY

SUBMITTED IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE
DEGREE OF DOCTOR OF PHILOSOPHY

NIPISSING UNIVERSITY
SCHULICH SCHOOL OF EDUCATION
NORTH BAY, ONTARIO

NIPISSING
UNIVERSITY

Certificate of Examination

Supervisor(s):

Dr. Susan Elliott-Johns

Examiner(s)

Dr. Susan Rodger

Dr. Warnie Richardson

Supervisory Committee:

Dr. Julie Corkett

Dr. Mike Parr

The _____ dissertation _____ by

Sandra Browne-Kealey

entitled

Exploring Teachers' Perspectives on Trauma-Informed Education

is accepted in partial fulfillment of the requirements for the degree of
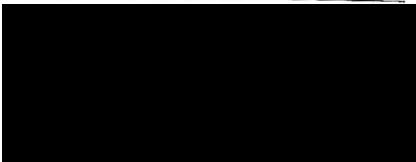
Doctor of Philosophy

March 25, 2019
Date

Dr. Michelann Parr
Chair of the Examination Committee

(original signatures on file)

Abstract

The alarming prevalence of adverse experiences and trauma in childhood and associated risks to child and youth psychological and physical well-being is considered to be a significant public health concern. In school settings, students affected by trauma may struggle with cognitive, emotional and behavioural difficulties that impact their ability to meet classroom expectations and engage meaningfully in positive learning opportunities. Educational policies and practices informed by current research on trauma have potential to address students' trauma-related difficulties, build resiliency and place students on healthier developmental paths. In this mixed methods study, teachers' (n = 8) perspectives on trauma-informed education were explored through qualitative interviews and responses on the Attitudes Related to Trauma-Informed Care (ARTIC) Scale. Findings indicated that participants expressed favourable attitudes toward trauma-informed principles and identified the value of pedagogical practices based on: (a) using a trauma-informed lens, (b) strengthening connections, and (c) changing educational perspectives. Participants highlighted the importance of positive teacher-student relationships, ongoing professional learning related to trauma for educators, and broad-based school board support for initiatives focused on student mental health and well-being. Recommendations for teachers, administrators and policy-makers include ongoing, relevant professional learning opportunities for educators specific to student trauma, and further research focused on implementation of established trauma-informed school frameworks.

Keywords: trauma-informed schools, student mental health, educational practice, teachers, mixed methods.

Acknowledgements

My sincere appreciation and admiration goes to my advisor, Dr. Susan Elliott-Johns. I am so grateful for your considerable time, encouragement, research expertise and professional guidance over the course of my studies. I am further indebted to the members of my thesis committee, Dr. Julie Corkett and Dr. Mike Parr for their insightful, constructive and kind comments at all stages of my research. This study was very much a collaborative effort and my PhD experience was made all that more rewarding working with three professors who were knowledgeable and enthusiastic supporters of the research. To my fellow cohort members, Dan (and Roberta), Erin, Michelle, and Sarah, thank you for your many contributions to this journey, especially the learning and laughter as we navigated the program together. Michelle, you are so missed but your beautiful legacy lives on in those of us who were blessed to have known you. And Sarah, thank you for the cottage retreats, the 24/7 tech and writing support, but most importantly, your friendship. I am also grateful to each and every one of the teachers who gave of their time to participate in my study and share the wisdom that guides their exceptional practice with students every day. And finally, to my husband and daughter, this would not have been possible without your unwavering support, patience and sacrifice over these many years. I dedicate this work to my daughter, Saoirse, as you embark on the next stage of your life and learning: aim high and never give up on your dreams.

Table of Contents

List of Tables

Tables

Chapter 1 Introduction

This doctoral study has its origins in my professional experiences working in education and children's mental health as a teacher and psychotherapist for the past 18 years. During this time, I have observed what I consider to be a positive shift in education towards a more holistic approach to teaching children and youth. Increasingly, educators are recognizing the significant role that teachers and school systems can play in supporting both the academic and non-academic needs of all students. This change parallels research findings that demonstrate the negative impact of psychosocial and mental health related problems not only on student learning and academic achievement, but also on their psychological and physical well-being across the lifespan (Blodgett & Lanigan, 2018; Larkin, Felitti, & Anda, 2014; Porche, Costello, & Rosen-Reynoso, 2016). Efforts to address the diverse needs of students have resulted in the implementation of a broad range of educational initiatives that hold promise for improved student outcomes, teachers' professional learning and effective education and mental health collaboration (Chafouleas, Koriakin, Roundfield, & Overstreet, 2018; Morton & Berardi, 2017; Weed Phifer & Hull, 2016).

One such area of educational initiative relates to growing awareness of the prevalence and impact of childhood trauma and adversity and the resulting effects on students' ability to successfully navigate the demands of school. An education system that is "trauma-informed" is sensitive to the lived experience of students and utilizes pedagogical approaches that can support the growth and development of students who have been affected by trauma. In the past three years, I have noted a significant increase in research on student well-being that references this emerging area of educational practice. My research interest in trauma-informed education, grounded in my work as a teacher and psychotherapist, is further

developed and refined through my doctoral work at the intersection of education and children's mental health.

Organization of the Dissertation

In this chapter, I provide an overview of the context of the current research study exploring teachers' perspectives on trauma-informed education including the statement of the problem, the purpose of the study and the research questions. Definitions of key terms that are used throughout the study are highlighted, followed by an explanation of the theoretical framework which guides this inquiry.

In Chapter 2, scholarly literature relevant to childhood trauma and education is explored to better situate the research study within its broader context. I review the research on adverse experiences including the ways that children and youth can be affected by exposure to trauma. Student difficulties specific to learning and school functioning are identified, and the role of teachers and schools in providing academic and social-emotional support is discussed. Finally, the importance of understanding teachers' perspectives on trauma-informed education is linked to the current educational focus on student mental health and well-being.

Chapter 3 provides a detailed explanation of the research design and methods employed in the current study. Participant sampling, data collection instruments and the data collection procedures are discussed, followed by an overview of the data analysis process. In Chapter 4, I share results of the quantitative and qualitative data analysis including participant responses to the research questions, emergent themes and participant quotes that further expand on issues relevant to the research. Chapter 5 offers my interpretations on the study's findings with a subsequent discussion of notable implications and recommendations

for educational research and practice. The chapter concludes with personal reflections on my own learning and experience of the research process.

Statement of the Problem

Among educators, health professionals, and parents there is increasing recognition that a great many students of all ages are facing significant levels of stress and mental health challenges in their lives. For example, research provides evidence that at least 1 in 5 children and youth in Ontario will experience some type of mental health related problem and 80% of these individuals will not receive the needed treatment (Cairney et al., 2015). Aligned with these concerning statistics are current prevalence estimates indicating that as many as 60% of students under the age of 17 years will have experienced an event or circumstance that has the potential to cause psychological trauma (Perfect, Turley, Carlson, Yohanna, & Saint Gilles, 2016). Examples of frequent or chronic adverse experiences that present a possible risk to student mental health and well-being include (but are not limited to): poverty, abuse, neglect, exposure to violence, and parental substance use or mental health issues. The very nature of these events or circumstances may have a negative impact on students' mental and physical health, as well as their learning and academic achievement (Costa, 2017; Larkin et al., 2014; Porche et al., 2016).

With greater awareness of the prevalence and effect of childhood trauma and related psychosocial challenges, educators are re-examining their roles in providing support to students (Baweja et al., 2016; Morgan, Pendergast, Brown, & Heck, 2015; Morton & Berardi, 2017). The Government of Ontario (2014) has also acknowledged that schools are uniquely positioned to lead prevention, early identification and intervention efforts that promote student well-being to ensure that all students can reach their full potential. Trauma-

informed education is a developing initiative that falls within school-based programming focused on student mental health and well-being. This more holistic approach to learning recognizes that students' engagement and success at school is closely linked to their emotional and social functioning. An understanding of the prevalence and effects of exposure to childhood trauma has the potential to foster the development of instructional and disciplinary practices that are more responsive to the needs of students who have experienced adversity (O'Neill, Guenette, & Kitchenham, 2010; Overstreet & Chafouleas, 2016; Walkley & Cox, 2013).

Purpose of the Study

With the increased focus on student mental health and well-being, teachers are being tasked with greater responsibility to address the diverse needs of all students including those who have been affected by trauma (Alisic, 2012; Franklin, Kim, Ryan, Kelly, & Montgomery, 2012; Terrasi & Crain de Galarce, 2017). In order to provide the optimal support to teachers in their important work with students, administrators and policy-makers need to make informed decisions that are reflective of the lived realities of teachers (Baker, Brown, Wilcox, Overstreet, & Arora, 2016; Baweja et al., 2016). The purpose of this study was to explore teachers' experiences working with students with trauma in order to gain an in-depth understanding of their perspectives on trauma-informed education. Given the fact that prevalence estimates suggest that most classrooms include students with trauma, the current study aimed to provide much needed insight into this emerging area of educational practice (Record-Lemon & Buchanan, 2017).

Research Questions

In this single-phase mixed methods study, the overarching research question guiding the inquiry was, "What are teachers' experiences and perspectives on working with students who have been exposed to trauma?" Sub-questions that further investigated this phenomenon were:

a. How do teachers understand trauma and its impact on students?

b. How do teachers understand their professional roles with respect to supporting students who have experienced trauma?

c. How do teachers' perspectives regarding trauma and its impact on students inform their teaching practices?

d. What supports and/or resources do teachers identify as necessary to becoming trauma-informed?

While this research study was a predominately qualitative exploration of participants' beliefs and experiences, the inclusion of quantitative data representing teachers' attitudes towards trauma-informed principles further enhances and expands the learning related to trauma-informed education.

Definition of Key Terms

The current research inquiry exploring teachers' perspectives is influenced by the interdisciplinary discourses of mental health and education. Terminology in the relevant literature is often used interchangeably depending on the researchers' orientation and can sometimes be confusing. For the purpose of this study and the benefit of readers, the following terms are explicitly defined as they are used in my research:

Adverse Childhood Experiences (ACEs)

The term ACEs is an acronym for Adverse Childhood Experiences and has its origins in a landmark retrospective study on the prevalence and effect of childhood trauma and adversity. The Adverse Childhood Experiences (ACEs) Study was the first large-scale research investigation of the link between exposure to childhood trauma and risk of poor physical and mental health in adulthood (Felitti et al., 1998). In this study, adverse childhood experiences were separated into the broad categories of child maltreatment (psychological abuse, physical abuse, sexual abuse, and neglect), and household dysfunction (domestic violence, parental mental health and substance abuse problems, parental incarceration, and parental separation/divorce). Findings of the research indicated high prevalence rates for childhood trauma as well as a strong graded relationship between exposure to ACEs and an increased risk of poor mental health and social/physical health outcomes in adulthood including school disengagement, mental health disorders, alcoholism and drug abuse, certain types of cancers, cardiovascular disease, liver disease, and unemployment (Felitti et al., 1998).

Attitudes Related to Trauma-Informed Care (ARTIC) Scale

The ARTIC Scale (Baker et al., 2016) is a psychometric instrument that measures attitudes toward trauma-informed principles and practices. The educational version used in this study, the ARTIC-35-ED, is comprised of 35 items scored in a 7-point bipolar Likert response format. The scale contains five subscales: (a) underlying causes of problem behavior and symptoms, (b) responses to problem behavior and symptoms, (c) on-the-job behavior, (d) self-efficacy at work, and (e) reactions to the work. Higher subscale and total

scores on the ARTIC are indicative of attitudes more favourable to principles of trauma-informed care (Baker et al., 2016).

Compassion Fatigue

In this study, participants used the expressions compassion fatigue, vicarious trauma, and burnout interchangeably. However, for the purpose of this research, it is important to make clear the distinctions between these three terms: 1) Compassion fatigue can be defined as a lowered capacity for empathy that can occur in some individuals as a consequence of caring and supporting others who are experiencing emotional pain or adversity (Bride, Radey, & Figley, 2007). 2) Vicarious trauma refers to the indirect traumatization that may result from an individual's exposure to difficult stories or images of another's trauma (McCann & Pearlman, 1990). Sometimes called secondary traumatic stress, vicarious traumatization can lead to an individual experiencing similar stress symptoms as those of the trauma survivor (Adams, Boscarino, & Figley, 2006). 3) Burnout typically involves physical and emotional exhaustion in response to prolonged exposure to stressful situations. While burnout is not necessarily associated with trauma, highly empathic individuals who lack social support and adaptive coping strategies may be at increased risk of experiencing professional burnout regardless of the nature of the stressor (Maslach, Schaufeli, & Leiter, 2001). While the three conditions are distinct, as described, there is some inevitable overlap and, it is important to note, an individual can experience more than one condition at a time.

Mental Health

Broadly defined, mental health is the state of an individual's psychological and emotional well-being. Good mental health promotes healthy functioning (thinking, feeling and behaviour) and has a significant influence on overall health as poor mental health can

contribute to both mental and physical illness. Mental health can be positively or negatively impacted by life experiences, e.g., trauma and adversity, relationships, school environment, and physical health (Public Health Agency of Canada, 2015).

Trauma

Trauma is the experience of an event, series of events or circumstances that an individual perceives as physically or emotionally threatening and that have lasting harmful effects on the individual's functioning in one or more domains including mental, physical, social and emotional (Substance Abuse and Mental Health Service Administration, SAMHSA, 2014). It is important to note that the trauma is not the actual event, but rather the individual's experience of and subsequent response to the stressor. Trauma is a highly individualized phenomenon that is dependent on a number of contextual variables unique to each person and their particular situation (Shonkoff & Garner, 2012; van der Kolk, 2014).

Traumatic Stress

Also known as "toxic stress", traumatic stress refers to the extreme or prolonged activation of the body's stress response systems that may occur as the result of exposure to trauma or adverse experiences. Research provides evidence that the physiological impact of the sustained stress responses can cause structural and functional damage to a child's developing brain leading to cognitive, social and emotional impairment (Harvard Center on the Developing Child, 2014; Perry, 2006).

Trauma-Informed Education

Trauma-informed education involves school policies and practices grounded in (a) the realization of the prevalence and impact of trauma, (b) the recognition of the signs and symptoms of trauma exposure in children and youth, (c) an appropriate response to students'

needs guided by evidence-based practice, and (d) an avoidance of re-traumatization of the students (SAMHSA, 2014). Note: The term trauma-informed is often used interchangeably with trauma-sensitive as both refer to an understanding of the prevalence and potential impact of trauma as well as the need to respond in safe and supportive ways. Trauma-informed is the expression used throughout the current study.

Theoretical Framework

As the researcher, I view the study through the dual lenses of mental health and education which led me to consider a flexible and multifaceted approach to theory selection. Kincheloe (2001) referred to educational research as a form of "boundary work" (p. 689), where knowledge is created in those transitional borders between disciplines. In their examination of the status of contemporary educational research, Lingard and Gale (2010) proposed a broad definition of research that reflects the interdisciplinary nature of educational inquiry and the need for an eclectic approach to both theory and methodology. Similarly, theoretical eclecticism, as applied to my research, offers the best opportunity to capture the multiple, sometimes conflicting perspectives within both education and mental health. According to Denzin and Lincoln (2005), this type of eclecticism considers the varying theoretical contexts through which a phenomenon can be interpreted, allowing for greater insight into the complexities that exist within the topic under study.

Rather than considering different theories to be incompatible, Sfard (2003) proposed that educational theories "be viewed as either *complementary*-that is, concerned with different aspects of the same phenomenon-or *incommensurable*-that is, speaking different languages rather than really conflicting with each other" (p. 355). From this perspective, I considered a number of theories that not only crossed disciplines (e.g., education,

psychology, sociology) but also reflected my personal beliefs and assumptions related to learning and the role of teachers and schools in promoting the well-being of all students. The theoretical framework selected for my research study was therefore comprised of constructivism, critical pedagogy and resiliency theory. While each theory contributes a specific lens through which to examine the research questions, the methodology, and ultimately the study findings, a shared foundation in humanism which affirms the dignity of all individuals and their natural drive toward self-actualization is interwoven throughout my research (Maslow, 1968; Rogers, 1980).

Constructivism

My worldview most closely aligns with a constructivist epistemological stance that views learning as an active process of knowledge creation. While constructivism is a broad philosophy that includes a variety of theoretical perspectives, each shares the following common assumptions:

> Learning is an active process, (2) knowledge is constructed, rather than innate, or passively absorbed, (3) knowledge is invented not discovered, (4) all knowledge is personal and idiosyncratic, (4b) all knowledge is socially constructed, (5) learning is essentially a process of making sense of the world, (6) effective learning requires meaningful, open-ended, challenging problems for the learner to solve. (Fox, 2001, p. 26).

Three theorists whose ideas are considered foundational to constructivism are Jean Piaget, Lev Vygotsky and John Dewey. In their writing, each researcher focused on a different aspect of constructivism (psychological, socio-cultural, and experiential) but all have contributed to my understanding of the nature of knowing. In his theory of genetic

epistemology, Piaget (1971, 1972) emphasized the role of individual cognition in knowledge construction and the manner in which meaning was derived from personal experiences. Piaget asserted that cognitive development occurs in sequential stages through an adaptive process of assimilation, accommodation and equilibration. According to Piaget, each person creates mental representations in their mind called schemas which enable them to make sense of thoughts, objects and experiences. As individuals interact with their environment, cognitive processes in the brain either assimilate the incoming information into the existing schemas or changed the schemas to make sense of their experiences. Piaget (1971, 1972) theorized that knowledge is created through this ongoing mental activity of adaptation and reorganization of information.

In contrast to Piaget's emphasis on individual, internalized cognitive processes, Vygotsky (1978) proposed a socio-cultural framework for knowledge construction. According to Vygotsky's theory, it is through shared activity with others that individuals co-create knowledge of their world. Vygotsky viewed learning and development as occurring twice on two separate levels, the first involving social interactions with others (interpsychological) and the second, on an individual, internalized level (intrapsychological). Central to Vygotsky's socio-cultural theory is the role that semiotics play in knowledge construction. Vygotsky stressed the importance of cultural signs and symbols, such as language, art and traditions, in learning and personal growth and introduced the concept of the Zone of Proximal Development (ZPD) which explains how individuals are able to expand on their current level of understanding (1978). Furthermore, this proximal level of development is made possible by the assistance of more knowledgeable peers and reflects Vygotsky's premise that social interaction precedes learning. While both Piaget's cognitive

constructivism and Vygotsky's socio-cultural theory fall within the broader category of constructivism, some researchers consider the two perspectives to be in conflict with one another because of their differing emphasis (Lourenco, 2012; Packer & Goicoechea, 2009). However, my view is that they are not mutually exclusive. Rather, each theory has validity and contributes to a more holistic understanding of the nature of knowing. As Cobb (1994) affirmed, learning "should be viewed as both a process of active individual construction and a process of enculturation…" as either activity on its own cannot fully capture the complex nature of knowledge creation (p. 13).

As a constructivist, Dewey (1938, 1944) viewed knowledge as subjective, resulting from an individual's unique personal and social experiences within their environment. Dewey focused on the experiential nature of knowledge construction and asserted that action and reflection are fundamental to the learning process. Similar to Piaget, Dewey (1944) argued that by solving problems and reflecting on their individual experiences, people construct their own unique understanding of reality. Dewey also shared Vygotsky's view that this process of knowledge creation inherently includes social, cultural and historical influences. According to Dewey, "things gain meaning by being used in a shared experience or joint action" (1944, p. 16). It is within this shared experience that meaning is developed and generalized and that each individual participant is changed in the process. Dewey (1938, 1944) also emphasized the importance of the quality of the experience, positing that only those activities which an individual finds meaningful will promote intellectual growth.

Informed by the contributions of these constructivist theorists, I consider learning to be an active, reflective construction of knowledge that is influenced not only by internal processes and lived experience, but also by the social and cultural factors that are unique to

each individual and their environment. In this study, I was particularly interested in increased understandings of teachers' perspectives and experiences working with students who have been exposed to trauma. My aim was to engage teachers in a collaborative process of knowledge creation that could have practical application for the reader as well as the added benefit of promoting personal growth and professional development for the participants.

Critical Pedagogy

Associated with my constructivist perspective on knowledge creation is a consideration of the role of education in the lives of individuals and in the larger society as a whole. Giroux (1983) stated that the social construction of knowledge was deeply rooted within the power structure of a dominant culture that legitimizes only those representations of reality that protect and reinforce the status quo. Critical pedagogy was selected as another theoretical lens through which to view my research because the theory questions and challenges dominant ideology and practices within education and stresses the moral imperative of considering the experiences and needs of all students, not just those "who come from the mythical center of the social order" (Kincheloe, 2004, p. 23).

Critical pedagogy is most often associated with the work of Paolo Freire (1970, 2000) and his banking theory of education in which schools serve as systems of oppression which seek to dominate and marginalize students. From this perspective, Freire envisioned the transfer of knowledge as a top-down, one-directional "act of depositing, in which the students are the depositories and the teacher is the depositor" (1970, p. 72). The more receptive and passive the student, the more successful they appeared to an educational system that values and rewards behavioural compliance, effort and academic achievement. Unfortunately, students who struggle in the school setting due to chronic stress and other

adverse experiences are among the most disadvantaged due to their difficulties meeting the

learning and behavioural expectations in the classroom (Chafouleas et al., 2018; Morton &

Berardi, 2017).

McLaren (2003) referred to the *deficit model of student failure* in which a student's

difficulty meeting expectations either behaviourally or academically was considered to be an

internal, psychological trait of that student rather than the result of a complex interaction

between environmental and societal factors (p. 236). The psychologizing of school failure is

part of the "hidden curriculum", whereby teachers are inadvertently complicit in furthering

values and beliefs that perpetuate the existing norms and unjust standards in education

(McLaren, 2003; Giroux, 1983). It is this hidden curriculum that reinforces educational

policies and classroom practices that may negatively impact vulnerable students. According

to Kohn (2010), school districts that use standardized testing to label and categorize students

can further disadvantage students who are already at risk of academic underachievement and

school disengagement. In their discussion of First Nations students in Saskatchewan,

Crandall and Kutz (2011) similarly argued that "assessment practices that sort and label

students [without consideration of students' lived experience] result in a disconnection from

education" and ultimately serve to drive students out of schools (p. 64). The marginalization

of some students, including those with trauma, is a consequence of a deficit-focused

approach to teaching students who struggle to meet expectations within the school setting

(McLaren, 2003; Sharma, 2018).

Despite his assertion that schooling could be oppressive, Freire did see the potential

for education to be a force for progressive social change and transformation. In response to

the banking concept of education, Freire regarded problem-posing education as a potential

solution. Problem-posing education rejects the traditional authoritarian and social control objectives of school and instead emphasizes the importance of students' experiences and the collaborative and reciprocal nature of the teacher-student relationship (Freire, 1970, 2000). Problem-posing education also repositions the teacher as a learner, attempting to understand themselves, their students and the complex socio-economic and political environment within which they live and work.

In his more recent writings on critical pedagogy, Giroux (2016) stresses the need for teachers to be critically aware of the social-cultural and ideological "baggage" that they bring to every educational interaction and the ways in which these influences impacted themselves and their students (para. 25). McLaren (2003) proposed a critical pedagogy that begins with consideration of the problems and needs of students and how these issues are labelled and marginalized within the school system. From McLaren's perspective, understandings of the multiple discourses that inform student experience are necessary if teachers are to have success with making learning more meaningful and relevant to students' lives. In other words, a classroom that includes children who have been impacted by trauma needs teachers who have some level of awareness related to the complex experiences of their students including their "lived realities beyond the classroom" (hooks, 1994, p. 65).

This conscious awareness or *conscientization* as coined by Freire, is a necessary element of a pedagogy that is empathic and empowering for both teachers and students (1970, 2000). However, conscientization as a process of ongoing critical reflection, is insufficient on its own. The concept of "praxis" which refers to both "reflection and action upon the world in order to transform it", is integral to Freire's problem-posing education (1970, p. 26). It is praxis that bridges the divide between theory and transformative action

whereby education becomes a practice of freedom for both teachers and students (Freire, 1970; Giroux, 1983). Freire's theory of praxis parallels hooks' (1994) *engaged pedagogy* in which teaching can be viewed as an act of resistance that leads to education as a practice of freedom.

Resiliency Theory

According to hooks (1994), there is a need for teachers to be both critical educators and healers through pedagogies that are holistic and transformative. The idea that teachers and schools can play a therapeutic role in the lives of students has considerable support in the research on child and youth resilience (Brooks, 2006; Masten, 2015; Rutter, 2012, 2013). While there are varying operational definitions of resilience according to different researchers, Luthar, Cichetti and Becker (2000) describe resilience as a dynamic process in which individuals demonstrate positive adaptation in the face of adversity. As a personal construct, resilience is two-dimensional, comprised of an interaction of risk and protective factors that are both specific to the individual and to the environment. Risk factors such as poverty, family instability and exposure to traumatic events have the potential to negatively impact child development and increase vulnerability to psychopathology (Garmezy, 1991; Rutter, 2012; Ungar, 2013).

In contrast, protective factors such as responsive parenting, social competence and positive school experiences can help buffer the effects of adversity and promote healthy adaptive processes (Garmezy, 1993; Masten, Best, & Garmezy, 1990). According to Masten (2015), the practices within a school can be a source of either risk or protective factors depending on a number of contextual variables. Masten argued that schools characterized by poor leadership, ineffective teaching, punitive disciplinary practices and an inability to meet

the needs of at-risk learners could have a damaging impact on students' development. This

"educational neglect" has the potential to pose additional risks to the well-being of students

who are already at a disadvantage (Masten, 2015, p. 221). However, school environments

with a supportive climate and caring, engaged teachers who possess effective instructional

and behaviour management skills may promote positive adaptation for these very vulnerable

students. For many students who are experiencing chronic levels of stress in their daily lives,

familiar faces at school and predictable routines in the classroom provide much needed

stability and consistency that reinforce feelings of safety and security (Costa, 2017;

Henderson, 2013). Of particular importance to these students is the quality of their

relationships with teachers and other caring professionals in the school setting (Bergin &

Bergin, 2009; O'Neill et al., 2010).

According to Ungar (2013) and Ludy-Dobson and Perry (2010), the single most

common factor for promoting the development of resilience in children and youth is the

presence of at least one stable, nurturing relationship with a supportive adult who can fulfill a

caregiving role. Richardson, Richardson and McCabe (2004) argue that "educators…are very

well placed to be that significant, caring adult" (p. 13). The influence of positive teacher-

student relationships on the development of resilience also has considerable support in the

research literature,

> These relationships provide the personalized responsiveness, scaffolding, and
>
> protection that buffer children from developmental disruption. They also build key
>
> capacities-such as the ability to plan, monitor and regulate behaviour-that enable
>
> children to respond to adversity and thrive. This combination of supportive

relationships, adaptive skill-building, and positive experiences is the foundation of

resilience. (Harvard Center on the Developing Child, 2015, para. 3).

Consistent with the quotation above, both critical pedagogy and resiliency theory are

underpinned by the shared belief that school environments can be a space of unlimited

possibility for the growth of both students and teachers. It is therefore important for

educators to recognize the potential for their practice to be transformative and healing in

order to maximize opportunities to promote student mental health and well-being. Informed

primarily by a constructivist approach to research, complemented by understandings of

critical pedagogy and resiliency theory, this study places teachers' voices at the center of

discussions on the value of trauma-informed approaches for schools.

Chapter Summary

Research on the prevalence and impact of childhood trauma and the increasing

awareness of student mental health concerns have led to a call for school districts to do more

to broadly support student well-being. The current study aims to contribute to the emergent

research on trauma-informed education through the exploration of teachers' perspectives and

experiences as they relate to working with this vulnerable student population. Critical

pedagogy and resiliency theory were selected for the study's theoretical framework as both

reflect the conflicting realities and transformative potential of education. On the one hand,

school systems sometimes appear to lack the knowledge and resources necessary to meet the

complex needs of students who have experienced adversity. On the other hand, school

policies and practices that are informed by the latest research in neuroscience, education, and

childhood trauma hold tremendous possibility to positively impact students' learning and

social-emotional functioning (Cole et al., 2005; Downey, 2007; Mercado, 2018; Taylor,

Oberle, Durlak, & Weissberg, 2017). This research will explore the practical complexities inherent in the teaching of students with trauma from the perspective of educators who work most closely with this vulnerable population.

Chapter 2 Literature Review

The increased awareness of mental health concerns in children and youth and the recognition that school environments can play an integral part in supporting the mental and emotional health of students highlight the need for schools to become more holistic in their approach to educating children. Research overwhelmingly indicates that students' experience of trauma and adversity are closely linked to difficulties across a broad range of domains that impact their daily functioning (Blodgett & Lanigan, 2018; De Bellis & Zisk, 2014; Porche et al., 2016). Given that children spend a considerable amount of their day at school and that teachers have a significant influence on the school experiences of students, teachers' voices are critical to the educational discourse pertaining to students with trauma. The purpose of this study is to gain an increased understanding of teachers' perspectives on trauma-informed education. This emic exploration of issues specific to teaching students with trauma will contribute to the limited knowledge base in this emerging area of research. Guided by the research questions, this chapter will review the relevant literature with a focus on the impact of trauma on students' cognitive, emotional and social well-being and the key role that teachers can play in the psychosocial development of students who been exposed to adverse experiences. While childhood trauma is a sobering topic, it is hoped that readers come away with a sense of hopefulness and greater understanding of the significant potential for schools to make a profound difference in the social and emotional lives of their students beyond curricular learning and the cognitive domain.

Trauma and Adverse Childhood Experiences

In a review of the existing research on trauma in childhood, Perfect et al. (2016) estimated that two in three students below the age of 17 years have been exposed to a wide range of adverse experiences that have the potential to cause psychological trauma and related mental health difficulties. Studies specific to Canada found that 56% of adults in Alberta reported the experience of a traumatic event during childhood (McDonald, Kingston, Bayrampour, & Tough, 2015) and in a larger national sample, 32% of adults identified themselves as victims of some form of child abuse (Afifi, et al., 2014). While these rates are slightly lower than were reported elsewhere (Felitti et al., 1998), the evidence supports the concerning prevalence of trauma in the lived realities of Canadian students. As defined by the Substance Abuse and Mental Health Service Administration (SAMHSA, 2014), trauma results "from an event, series of events, or set of circumstances that is experienced by an individual as physically or emotionally harmful or life threatening and that has lasting adverse effects on the individual's functioning and mental, physical, social, emotional, or spiritual well-being" (p.7).

Adverse childhood experiences (ACEs) which could be considered potentially traumatic include stressors such as neglect, abuse, bullying, witnessing violence, accidents, parental mental health and substance abuse problems, poverty and separation/divorce. However, it is important to recognize that not every child who is exposed to a significant life stressor will experience that event or situation as traumatic. From a neurodevelopmental perspective, trauma is not the actual event or circumstance, but rather the individual child's response to that event and the ongoing effect on that child's autonomic and central nervous systems (Ungar & Perry, 2012). Research on trauma indicates that individual responses to

adverse experiences are dependent upon a complex interplay of variables unique to each

child. A child's age, personal experience of the event and social context including family,

school and community are all key considerations. For example, a child or youth with

protective factors such as a caring, responsive adult and ongoing community support may be

more likely to exhibit resiliency and adaptability in the face of a traumatic stressor (Masten,

2015; Sciaraffa, Zeanah, & Zeanah, 2018; Ungar, 2013).

In the landmark study of the impact of ACEs on adult health and wellbeing, Felitti et

al. (1998) linked early adversity to a broad range of significant mental and physical health

problems across the lifespan. Subsequent research on the ACEs categories of child

maltreatment (psychological abuse, physical abuse, sexual abuse, and neglect), and

household dysfunction (domestic violence, parental mental health and substance abuse

problems, parental incarceration, and parental separation/divorce) continues to support

evidence of the harmful effects of ACEs including increased risk of certain types of mental

health disorders, substance abuse, certain types of cancer, heart disease, and early death

(Chapman, Dube, & Anda, 2007; Edwards, Holden, Felitti, & Anda, 2003; Enoch, 2011;

Gilbert et al., 2015). Due to the evident prevalence of trauma and the resulting risk to mental

and physical well-being across the lifespan, adverse childhood experiences are now

considered by many medical and mental health professionals to be a significant public health

concern (De Bellis & Zisk, 2014; Felitti et al., 1998; Larkin et al., 2014).

The Impact of Trauma on Children

While much of the literature on ACEs has explored retrospective adult accounts of

adverse experiences, researchers are increasingly focused on the impact of trauma during

childhood and adolescence. Children are particularly vulnerable to the effects of trauma due

to the fact that their brains are growing during sensitive developmental periods. As children

mature, these developing structures of their brain and their body's stress systems are

continually adapting to stimuli and stressors in their environment. When a child experiences

an event or situation as threatening, the amygdala area of the brain triggers the "fight, flight

or freeze" response which results in release of the stress hormones cortisol, epinephrine and

norepinephrine (Harvard Center on the Developing Child, 2014; Perry, 2006; van der Kolk,

2003, 2014). Persistent and prolonged release of these hormones can be toxic to the body and

initiate changes which can cause structural and functional damage to areas of the brain

including the "cortex (e.g., cognition), the limbic system (e.g., affect regulation), the

diencephalon (e.g., fine motor regulation, startle response), and the brain stem (e.g. heart

rate, blood pressure regulation)" (Perry, 2006, p. 38). This traumatic or toxic stress that

occurs as a result of the experience of trauma and adversity can cause impairment in a child's

ability to regulate their stress response. For these children, even mild stressors may cause a

heightened sense of anxiety and difficulties with accurate cognitive appraisal of threat in

their environment (Ungar & Perry, 2012). A stress response system which is affected early in

life can have long term consequences for the child's physical and mental well-being as

evidenced by the research on ACEs and poor health outcomes in adulthood (Crouch,

Strompolis, Radcliff, & Srivastav, 2018; Dye, 2018; Hughes et al., 2017).

Types of Trauma

Within the broad category of adverse experiences that could be considered traumatic,

trauma can be further divided into two broad categories. Type one, or acute trauma, involves

a single experience that is perceived as threatening to a child's sense of physical or emotional

safety (Terr, 1991). Typically, acute trauma is a sudden or unexpected trauma that is a

distinct event of a limited nature. Examples of acute trauma include a motor vehicle accident or a natural disaster. Distress after the experience of a traumatic event is common but with time and appropriate social support most children will return to normal functioning (O'Neill et al, 2010; Terr, 1991). Type two trauma, also called complex trauma, involves chronic, repeated exposure to one or more adverse experiences. Complex traumatic events are often severe and may be of an interpersonal nature, such as neglect or child abuse (Terr, 1991; van der Kolk, 2014). Children who live in extreme poverty or in dysfunctional and chaotic home environments frequently exhibit symptoms of complex trauma (Perry, 2006). Studies on ACEs suggest that children are at greater risk for poor physical and mental health outcomes with increased and repeated exposure to adverse experiences such as those experienced with complex trauma (Afifi et al., 2014; Afifi et al., 2016; Felitti et al., 1998; Mock & Arai, 2011). Due to the impact of trauma on brain development, children exposed to adversity may experience difficulties in a number of areas related to their emotional, social and cognitive functioning as well as their physical health.

Trauma and Emotions

The experience of childhood trauma can significantly impair a child's ability to effectively regulate their emotions. According to Shields and Cicchetti (1998), deficits in emotion regulation capacities are a significant concern because "the ability to modulate behavior, attention, and emotion underlie children's adaptive functioning in a number of key domains, including self-development, academic achievement, and interpersonal relationships" (p. 391). Difficulties with regulation beyond that which is age-appropriate are often the first symptoms of trauma exposure noticed by both parents and educators (Perkins & Graham-Bermann, 2012). Van der Kolk (2003) theorized that the hypervigilance often

observed in children with trauma impedes the healthy development of self-regulation

abilities. As a result, children may have difficulty moderating their affect and controlling

impulses particularly in unpredictable or demanding situations (Perry, 2006; Shonkoff &

Garner, 2012; van der Kolk, 2003). When faced with a stressor, children might experience a

number of emotional responses including fear, anxiety, helplessness, irritability or anger.

However, their ability to label their feelings and then express their emotional state using

words is often underdeveloped and poorly regulated (Cole et al., 2005; van der Kolk, 2003).

Children who have difficulty identifying and expressing feelings in an adaptive manner may

adopt problematic coping strategies such as withdrawal, dissociation or aggression. These

maladaptive coping responses may create further challenges for the child including increased

toxic stress and the development of somatic symptoms such as headaches, body pains,

gastrointestinal distress, eating issues and difficulty sleeping (van der Kolk, 2003, 2014).

According to Shonkoff and Garner (2012), children with high levels of emotional reactivity

and somatic complaints are at greater risk for chronic stress-related physical health disorders

(e.g., ulcers, high blood pressure) and mental health disorders (e.g., depression, anxiety). For

children and youth, the negative impact of trauma on their ability to adaptively regulate their

emotions is fundamental to broader difficulties with social, cognitive and behavioural

functioning as well as overall health and well-being.

Trauma and Social Relationships

Exposure to trauma and the resulting effects on a child's brain can lead to deficits in

social reasoning, judgement and a broad range of interpersonal competencies (Costa, 2017;

van der Kolk, 2014). As a result, children with trauma may have problems accurately reading

facial and body cues, engaging in pro-social behaviours and problem-solving when faced

with challenging social situations (Cole et al., 2005). They may also struggle to understand others' perspectives, lack empathy and view peers and adults as unreliable and not trustworthy. Depending on the type and experience of trauma, children may have insecure attachments to caregivers and other important adults in their lives which puts them at further disadvantage. Perry (2006) refers to a "relational poverty" that occurs when children lack opportunities for the positive, social experiences needed for the development of adequate social skills and a healthy self-concept. These interpersonal difficulties may result in an increased vulnerability to social isolation, rejection and loneliness that causes further traumatization for children. Without the important protective factor of caring adults and social support, children may be at risk for a life-long cycle of disrupted attachments and unhealthy relationships.

Trauma and Health

Research demonstrates that the experience of trauma and adversity in childhood can have significant consequences for mental and physical health across the lifespan (Afifi et al., 2014; Crouch et al., 2018; Felitti et al., 1998; Mock & Arai, 2011). The potential pathways that influence the development of illness are theorized to be related to the effects of stress hormones on body systems (Dye, 2018; Perry, 2006; van der Kolk, 2014). For example, prolonged exposure to high levels of cortisol is associated with increased inflammation and impaired immune function (De Bellis & Zisk, 2014; Perry, 2006). In addition, sustained stress is considered a contributory factor to premature cellular aging due to its damaging effect on telomeres which are responsible for protecting chromosomes (Price, Kao, Burgers, Carpenter, & Tyrka, 2013; Shalev et al., 2013). Individuals with trauma are also at increased risk of developing psychological disorders including anxiety, post-traumatic stress disorder,

mood disorders, and substance use disorders (Afifi et al., 2014; Chapman et al., 2004; Dube et al., 2001; McLaughlin et al., 2013; Strine et al., 2012) and may engage in maladaptive coping strategies such as overeating and drug use to manage emotional stress (De Bellis & Zisk, 2014; Moustafa et al., 2018). Research suggests that it is this combination of the neurobiological effects of stress hormones and health risk behaviours that contribute to higher rates of illness and chronic disease including obesity, lung cancer, cardiopulmonary and respiratory disease, liver disease and autoimmune disorders (Brown et al., 2010; Brown, Thacker, & Cohen, 2014; Crouch et al., 2018; Dube et al., 2009; Gilbert et al., 2015; Roy, Janal, & Roy, 2010). Studies across a variety of disciplines continue to provide evidence that the experience of early adversity and trauma poses significant risk to the mental and physical well-being of children, youth and adults (Chapman et al., 2007; De Bellis & Zisk, 2014; Kavanaugh, Dupont-Frechette, Jerskey, & Holler, 2017; Mock & Arai, 2011).

Trauma and Cognitive Functioning

In a comprehensive review of 23 studies exploring the impact of trauma on the cognitive functioning of children and adolescents, deficits were noted in a number of critical neurocognitive domains (Kavanaugh et al., 2017). Research indicates that the areas of the brain associated with executive functioning, the prefrontal cortex and frontal lobes, are particularly sensitive to the effects of traumatic stress during certain developmental periods (Perry, 2006; van der Kolk, 2003). Weaknesses related to attentional control, working memory, planning/problem solving, cognitive flexibility and abstraction were identified across a range of types of child maltreatment including neglect and abuse (De Bellis & Zisk, 2014; Kavanaugh et al., 2017). With respect to visual-spatial performance, deficits in visual perception and visual-motor integration were associated with severity and duration of post-

traumatic stress disorder as well as concurrent impairments in executive functioning (Kavanaugh et al., 2017). Studies on the impact of trauma with respect to language competencies found delays in verbal comprehension and expressive and receptive vocabulary (De Bellis, Woolley, & Hooper, 2013; Noll et al., 2010). Findings from the research on memory function following the experience of trauma were inconsistent. While some studies found no effect (Barrera, Calderon, & Bell, 2013; Kavanaugh & Holler, 2014), others identified weaknesses in immediate and delayed recall and overall memory and learning retention (De Bellis et al., 2013; Vasilevski & Tucker, 2015). Most of the literature on measures of global intelligence indicated lower overall cognitive functioning in children and adolescents with trauma with mean IQ scores typically ranging from low average (Kirke-Smith, Henry, & Messer, 2014; Perna & Kiefner, 2013) to average (De Bellis et al., 2013; Porter, Lawson, & Bigler, 2005). While these scores are within normal developmental ranges, children exposed to more severe and prolonged trauma have an increased risk of learning disorders and academic underachievement (Blodgett & Lanigan, 2018; Burke, Hellman, Scott, Weems, & Carrion, 2011; Cole et al., 2005). Despite research that demonstrates the potential negative effects of trauma, not all children who experience trauma will exhibit cognitive difficulties. However, it is important to consider the interconnectedness of intellectual processes including language, visual-spatial, memory and executive functioning and their influence on children's learning and social and emotional competencies. Due to the prevalence of childhood trauma exposure, Kavanaugh et al. (2017) advocate for traumatic stress to be considered a risk factor for neurodevelopmental disruption and subsequent harmful effects on children's growth and development.

Trauma and Learning

In order to function successfully in a structured learning environment, students require a number of requisite skills and competencies. Executive functioning capabilities, self-regulation of emotions and behaviours and age-appropriate language and communication skills are all needed to perform academically (Cole et al., 2005; Porche et al., 2016). For students with trauma, difficulties with cognitive, emotional and behavioural functioning may impede their ability to effectively navigate the social demands of the classroom and demonstrate the competencies necessary to keep up with teacher expectations (Darney, Reinke, Herman, Stormont, & Ialongo, 2013; Porche et al., 2016). Exposure to trauma and the toxic level of stress it creates can hardwire the brain to become hypervigilant to any threat, real or perceived, in their immediate environment and this may result in students being in a constant state of alert to ensure their physical and emotional safety. Students with trauma may find it difficult to manage their highly reactive stress response and remain calm enough to engage meaningfully in classroom learning activities. In the context of the student's experience of trauma, these stress responses are actually adaptive strategies that help them cope and gain a sense of control (Costa, 2017; Terrasi & Crain de Galarce, 2017). Depending on the student and the nature of the perceived threat they might, for example, become confrontational, defiant or aggressive, run out of the classroom or school yard, or appear unmotivated or disengaged. Even normal experiences in the classroom such as completing challenging academic tasks, loud noises or minor changes in routine can be triggers for students with trauma (Crosby, 2015; Perry, 2006). Their responses can also cause additional problems for themselves, for peers and/or for teachers as behaviours may be disruptive to the learning environment. Sullivan and Knutson (2000) estimated that almost one third of

students in special education programs and 50% of students who have been identified with a behavioural exceptionality have a documented history of trauma exposure.

Educational staff who have not received training specific to the prevalence and impact of trauma may not recognize that learning problems and disruptive or dissociative behaviours in the classroom are often the result of a dysregulated stress response that occurs when a traumatized child feels overwhelmed and emotionally or physically unsafe. Conventional approaches for students struggling with learning and behavioural expectations in the classroom tend to focus on disciplinary strategies that are punitive including loss of privileges, detentions and suspensions (Cole et al., 2005; Costa, 2017; Crosby, 2015). The use of punishment as a means of controlling behavioural problems without any understanding of the underlying issues may re-traumatize the child and also has the potential to damage key teacher-student relationships. As stated by Costa (2017), "when we attempt to evaluate the behaviour without ever trying to understand the behaviour, we give up opportunities to know the child, connect with the child and be that one person that mattered for the child" (p. 115). For students with trauma, a lack of connection to teachers and their school can further increase the risk of school disengagement, lower academic achievement and result in poor educational outcomes (Bergin & Bergin, 2009; Dorado, Martinez, McArthur, & Leibovitz, 2016; Overstreet & Chafouleas, 2016). Research on resiliency and school protective factors highlights the significance of students experiencing a sense of belonging and connection with their peers, teachers and school. Students who feel valued, supported and actively engaged within their school community are more likely to meet classroom academic and behavioural expectations and view their school experiences as positive (Henderson, 2013; O'Neill et al., 2010; Theron & Engelbrecht, 2013).

Trauma-Informed Education

With the growing awareness of the prevalence and impact of trauma, social service systems have become more sensitive to the manner in which they provide support. Coined in the 1990s, the term trauma-informed care broadly refers to a flexible model of working with children, youth and families that acknowledges the impact of trauma in their lives, and employs practices that are evidence-based while avoiding actions which have the potential to cause further psychological harm (Boles, 2017). Trauma-informed principles are increasingly being adopted by school boards as they recognize the ways that trauma interferes with student learning and places stress on educators and the broader school system. As influential environments for children with trauma, schools that employ instructional and disciplinary practices based on the latest research on trauma can have a buffering effect on adverse experiences in early childhood (Cavanaugh, 2016; Chafouleas, Johnson, Overstreet, & Santos, 2016; Costa, 2017). The structure, routine, and predictability that exist within a typical classroom make the school environment a natural setting within which to provide support for both the academic and social-emotional needs of students exposed to trauma. As stated by Perry (2006), the classroom has the potential to serve as a therapeutic milieu for vulnerable students. Furthermore, emerging research is clearly demonstrating the promise of trauma-informed policies and practices for improving academic performance, promoting student mental health and wellness and increasing teacher job satisfaction (Crosby, 2015; Record-Lemon & Buchanan, 2017).

By definition, a trauma-informed school is one in which all staff (1) understand how trauma and adverse experiences impact children and youth, (2) recognize student behaviours as attempts to cope with stressful situations, (3) respond in appropriate ways that promote

and support student well-being, and (4) avoid actions which may re-traumatize the student and cause further psychological harm (Cavanaugh, 2016; SAMHSA, 2014). Broadly speaking, trauma-informed education recognizes the effect of trauma on students' cognitive, emotional and behavioural functioning and utilizes instructional and disciplinary practices that place students on healthy developmental trajectories while improving educational outcomes (Brunzell, Stokes, & Waters, 2016; Walkley & Cox). This pedagogical model fits with Noddings' (2012) ethics of care in which teachers' competent practice requires an understanding of students' lived realities in order to best address students' holistic needs.

Trauma-informed School Practices

Research suggests that teachers are increasingly involved with the provision of mental health support in schools. For example, in a systematic review of school mental health studies, Franklin et al. (2012) indicated that teachers were directly involved with 40% of mental health interventions offered in schools. Teachers were not only primarily responsible for universal classroom-based programs focusing on psychosocial support but were frequently also partnered with other professionals as a member of a collaborative team. As a component of broader school-based mental health initiatives, trauma-informed practices are as diverse as the school systems in which they are being implemented. However, a review of the literature reveals that most school districts adopted trauma-informed policies and practices within a multi-tiered framework of service delivery (Reinbergs & Fefer, 2017; Weed Phifer & Hull, 2016).

A multi-tiered system of support (MTSS) is one in which school-based services for students' academic and non-academic needs are organized into tiers according to level of intensity of support (Cavanaugh, 2016; Chafouleas et al., 2016). At the primary or tier one

level of service provision, educational staff engage in trauma-informed professional learning in order to create a school-wide positive culture that fosters a sense of safety and of belonging for all students. In the classroom, teachers can establish a structured, predictable learning environment with clear behavioural expectations and guided opportunities to engage in meaningful learning. The adoption of school wide positive behavioural interventions and restorative practices that align with trauma-informed principles can also help build supportive school cultures and reduce the use of punitive disciplinary measures (Ogulmus & Vuran, 2016; Waasdorp, Bradshaw, & Leaf, 2012). Embedding social-emotional learning (SEL) and skills development (e.g., mindfulness training and social skills) into classroom lessons and activities throughout the school day is another key component of trauma-informed programming. Teachers may also be involved in a multi-disciplinary team approach to screening and assessment to identify students at risk and in need of those additional services.

At the first tier level, all students benefit from teacher provided universal supports that focus on promotion and prevention related to mental health and wellness. Secondary supports offered at the second tier level typically involve more individualized services for students considered at risk including access to special education resources and small-group activities that address specific difficulties (Cavanaugh, 2016; Reinbergs & Fefer, 2017). Examples of interventions at this level include psychoeducation on trauma and other mental health concerns, targeted emotion regulation programs and the promotion of social support systems within and outside of school (Chafouleas et al., 2016; Weed Phifer & Hull, 2016). Depending on resources specific to each school district, third level interventions usually involved the most intensive therapeutic supports offered by mental health professionals, child

welfare and other social service organizations working in the community. Trauma therapy, family therapy, psychiatric or psychological consultation, and wrap-around supports which target all areas of student and family need would be interventions that may be offered at this level of service.

While teachers have primary responsibility for the universal supports at the first tier, they may also be involved with service provision at the second tier and as collaborative partners at the tertiary level liaising with families, school-based mental health professionals and/or community service providers. There is growing evidence for the value of these initiatives as both school-wide universal prevention and targeted interventions that build resiliency with at-risk students including those impacted by trauma (Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011; Sciaraffa et al., 2018; Weed Phifer & Hull, 2016). Research-based frameworks including Calmer Classrooms (Downey, 2007), Helping Traumatized Children Learn (Cole et al., 2005) and the Heart of Learning and Teaching: Compassion, Resiliency and Academic Success (Wolpow, Johnson, Hertel, & Kincaid, 2011) have been developed to guide schools and school districts in the implementation of trauma-informed practices throughout all levels of service.

The Role of Teachers

As caring adults who spend much of the school day interacting with their students, teachers are uniquely positioned to support students with trauma. For these vulnerable students, familiar faces at school and predictable routines in the classroom provide much needed stability and consistency that reinforces a sense of security and safety. Of particular importance to these children is the quality of their relationship with their teachers and other adults in the school setting (Bergin & Bergin, 2009; Costa, 2017; Dods, 2013, 2015). The

mechanism by which positive relationships can be therapeutic is theorized to be related to the

quality of the relational connection between teacher and student and may be influenced by

the attachment style of both the teacher and student (Bergin & Bergin, 2009).

As originally conceptualized by Ainsworth (1979) and Bowlby (1982), attachment

refers to the affectional bond between a child and a primary caregiver that provides the

foundation for the child's future social and emotional well-being. Adult behaviours that

promote secure attachment are those that are sensitive and appropriately responsive to the

child's needs when the child is experiencing physical or emotional discomfort. In contrast, a

child with an insecure attachment to their parent has experienced their caregiver as

inconsistently available or unable to adequately meet their needs. An insecure attachment

may result in the child not receiving the physical security, emotional safety and nurturance

required for optimal growth and development (Ainsworth, 1979; Bowlby, 1982).

A child's attachment has considerable impact on many aspects of their functioning in

the school setting including the "ability to take on academically challenging tasks, work

independently, pay attention, tolerate frustration, be happy, contain aggression, be liked by

peers, and have high-quality friendships" (Bergin & Bergin, 2009, p. 150). Students who

have been exposed to trauma may be more likely to have an insecure attachment with their

primary caregivers and seek out adults in the school setting to provide the needed sense of

security and support (Dods, 2013; Theron & Engelbrecht, 2013). Conversely, students with

trauma of an interpersonal nature (e.g., abuse, neglect) may associate adults with negative

experiences and therefore be more distrustful of teachers, making the process of engagement

that much more difficult (Costa 2017; O'Neill et al., 2010). However, it is important to note

that not all adult-child relationships are attachment relationships. An "attachment-like"

relationship in the school setting would be one in which the teacher was consistently supportive and empathic in their student interactions and appropriately sensitive to students' emotional needs when encountering stressors in the classroom (Bergin & Bergin, 2009, p. 141). Teachers working with students who have been exposed to trauma need to pay particular attention to interpersonal dynamics and respond in calm, supportive ways that promote positive connection and acceptance in the face of students' emotional dysregulation or disruptive behaviours.

Despite the deleterious effects of trauma on the developing brain, research on neuroplasticity indicates tremendous potential for the brain to "lay down neural pathways and form knowledge schemes that are functional and productive" for traumatized learners (Willis & Nagel, 2015, p. 49). Teachers can play a key role in helping students repair their dysregulated stress response and build the self-regulation capacities necessary for healthy functioning. The introduction of co-regulatory experiences, including opportunities to learn to cope with difficult emotions and successfully manage their behaviours, are critical developmental tasks that teachers can facilitate in the classroom (Brunzell et al., 2016; Terrasi & Crain de Galarce, 2017). This may take the form of individual student or small group support in those teachable moments that are encountered multiple times in school settings every day. Benard (2007) uses the term *turn around teachers* to refer to the significant role that educators can play in the promotion of student resiliency and adaptability. According to Benard (2007) and Henderson (2013), turn around teachers are those who exhibit empathy, unconditional positive regard and caring while focusing on student strengths and conveying high yet realistic expectations for achievement and classroom behaviour.

Trauma-informed education has the potential to be rehabilitative, building capacity for resiliency and adaptability for students exposed to trauma (Brunzell et al, 2016; Walkley & Cox, 2013; Willis & Nagel, 2015). In recognition of the profound impact of teachers and safe, supportive school environments as protective factors for vulnerable students, Terrasi and Crain de Galarce (2017) argue that all educators can benefit from the understanding that "learning can undo trauma" (p. 37).

The Importance of Teachers' Perspectives

As an emerging initiative, trauma-informed education challenges conventional and widely held pedagogical beliefs and practices. The adoption of trauma-informed approaches across school systems requires a significant shift in individual teaching philosophies as well as in educational policies and practices. Ongoing research on school initiatives targeting student mental health and well-being suggests that implementation and long-term sustainability can be difficult due to factors that exist at the personal, organisational and systems levels within education. For example, limited staffing and financial resources, competing priorities (academic achievement versus supporting student social-emotional health), absence of relevant professional training opportunities, and lack of staff support are all identified as significant obstacles (Langley, Nadeem, Kataoka, Stein, & Jaycox, 2010; Reinke, Stormont, Herman, Puri, & Goel, 2011). According to Baweja et al. (2016), educator buy-in and active engagement are also critical factors for system reform in school mental health.

In school settings, teachers are key stakeholders unique from other individuals who have an interest in student wellness, such as administrators and parents. Teachers, who have the advantage of spending most of the school day in the classroom, often best understand the

learning-related needs of their students. Thus, teachers are uniquely well positioned to identify learning and emotional-behavioural problems early, provide more individualized support to help students meet both academic and behavioural expectations, and advocate for more intensive services for students when necessary. While school mental health professionals have an important role in helping students, teacher implemented trauma-informed practices in classrooms are the first line of support for students with trauma. Teachers' attitudes, beliefs and behaviours directly influence the adoption and sustainability of educational initiatives that support student mental health (Baker et al., 2016; Baweja et al., 2016). Given that teachers can play such an influential role in their schools, a comprehensive understanding of teachers' perspectives and experiences is necessary to inform and guide the implementation of trauma-informed policies and practices (Baker et al., 2016; Perry & Daniels, 2016).

A qualitative study conducted with teachers in Prince Edward Island explored their experiences working with students who had recently immigrated to the province as refugees. MacNevin (2012) interviewed seven teachers who taught English as a Second Language to intermediate and high school age youth. Teachers reported a number of challenges including understanding trauma and how best to support students emotionally, differentiating instruction for students academically below grade level (particularly in reading), and creating an inclusive classroom environment sensitive to the unique learning needs of all students. The teachers advocated for professional development, both pre-service and in-service, that addressed these problems as well as the development of educational policies to guide the provision of supports and resources for refugee students across the province (MacNevin, 2012).

In a narrative review of research published from 2000-2016, Record-Lemon and Buchanan (2017) examined the nascent literature on trauma-informed practices in school settings. The predominantly American data included both quantitative and qualitative studies that sampled educators, researchers, students and parents and ranged from small case studies to broader investigations of interventions and programs based on trauma-informed principles. In a study that explored issues relevant to the implementation of trauma interventions in schools, a small number of teachers included in focus groups identified factors that could improve teacher engagement and support of school mental health initiatives (Langley, DeCarlo Santiago, Rodriguez, & Zelaya, 2013). The teachers cited the need for ongoing professional learning related to trauma and trauma-informed educational practices, communication and consultation with school-based mental health professionals and evidence of positive outcomes for students receiving mental health support. Perry and Daniels (2016) conducted a study of trauma-informed practices within one public school in Connecticut that included a two-day professional learning workshop. The mixed sample of teachers and administrators participating in the study reported an increased understanding of trauma and its impact on students, as well as greater confidence in implementing trauma-informed practices within their school as a direct result of participating in the training.

While the review was comprehensive, Record-Lemon and Buchanan identified only three studies that specifically addressed the experiences of educators teaching students with trauma. Findings from the first study exploring Dutch elementary teachers' perspectives (n = 21) indicated a lack of clarity with respect to professional roles, the need for additional training on trauma and trauma-informed practices and educators' struggles to cope with the personal and professional challenges of working with students exposed to trauma (Alisic,

2012). Similar results from a larger quantitative study of teachers' experiences (n = 765), suggested that teachers lacked confidence in their knowledge and skills with respect to teaching students with trauma, found the work emotionally taxing and stressed the importance of a supportive work environment (Alisic, Bus, Dulack, Pennings, & Splinter, 2012). Morgan et al. (2015) explored Australian educators' professional identities working in alternative school settings with marginalized youth. This multi-phase qualitative study with diverse mixed samples of school staff (n = 16-80) identified key aspects of relational pedagogy critical to engaging and supporting youth with trauma: authentic, supportive relationships, flexibility and changing teacher perspectives were considered fundamental to appropriately meeting the needs of students at risk.

The narrative review provided evidence of the potential for trauma-informed education to support students who have experienced trauma using practices in schools that can address their complex psychosocial and academic needs. However, Record-Lemon and Buchanan (2017) did emphasize the fact that trauma-informed education was an emerging area of research with considerable opportunities for growth and development across a number of domains related to school practice. Included in their recommendations for further investigation was the need for more qualitative studies focused on teachers' perspectives and experiences, particularly those with a Canadian context as empirical research on trauma-informed education in Canada is currently limited (Record-Lemon & Buchanan, 2017).

Chapter Summary

Research has provided evidence of the prevalence of trauma and adversity in childhood and its potential to cause long-lasting negative impacts on children's cognitive, social and emotional wellbeing (Davis et al., 2015; Little & Akin-Little, 2013). As a result,

teachers are being tasked with increased responsibilities and a more active role in supporting students' mental health and wellbeing. However, many teachers do not feel adequately prepared to support the complex psychosocial and learning needs of students impacted by adverse experiences (Alisic, 2012; Crosby, 2015; MacNevin, 2012). Trauma-informed education holds the potential to promote strong teacher-student relationships that can provide students with a sense of safety and security while increasing opportunities for students to build resiliency and regulatory capacities that help them effectively cope with stress (Alisic, 2012; Dorado et al., 2016; Overstreet & Chafouleas, 2016; Weed Phifer & Hull, 2016). The extent to which schools are able to implement and sustain trauma-informed policies and practices can significantly influence both the educational and life experiences of students with trauma (Baker et al., 2016; Mercado, 2018; Morton & Berardi, 2017).

The current study aimed to give voice to teachers' perspectives and experiences working with students with trauma in order to inform the limited empirical research on trauma-informed education in Ontario. An increased understanding of teachers' perspectives is regarded as an important first step in the planning of professional learning opportunities and processes for the implementation of trauma-informed policies and practices in schools across the province of Ontario and beyond.

Chapter 3 Methodology and Methods

My role as researcher in this study was firmly grounded in constructivism with its relativist ontology and subjective co-constructed epistemology. Foundational to the constructivist paradigm is the idea that multiple realities exist and are dependent on an individual's lived experiences, most notably, their interactions with others and the environment (Lincoln, Lynham, & Guba, 2011). I was particularly interested in understanding the phenomenon of trauma-informed education from the perspective of the teachers involved and exploring how they construct meaning within their own social, cultural and historical contexts. Constructivism posits that meaning and knowledge develop through the researcher and participant's "interactive dialogue and interpretation" (Ponterotto, 2005, p. 129). My role in this study was therefore, one of a "passionate participant" who actively co-constructed knowledge with the teacher participants to ensure that this knowledge was reflective of their realities and lived experiences (Lincoln et al., 2011, p. 101). It was this collaborative aspect of qualitative research that was especially appealing as it resonated with my personal values of honouring voice and promoting empowerment. As such, my inquiry was inductive and interpretive, and utilized a primarily qualitative approach that brought teachers' voices to the forefront of trauma-informed educational discourse.

Mixed Methods Case Study

According to Merriam (1998), case study research involves a holistic, descriptive and heuristic exploration of a specific event, program, situation or process. A case study design is particularly useful when the boundaries between the phenomenon of interest and its context cannot be clearly delineated (Yin, 2014). The definition of the unit of analysis that comprised the case in this study was accomplished by bounding the case or connected system of interest

by drawing temporal and spatial boundaries around the phenomenon being studied (Stake, 1998; Yin, 2014). While bounding of the case in this study will be discussed later in this chapter, my research employed an instrumental case study design that focused broadly on teachers' perspectives to gain understanding and insight into issues relevant to teaching students exposed to trauma and adversity (Stake, 1998).

According to Flyvbjerg (2001), one advantage of case study research is that it produces the context-dependent knowledge necessary for the progression from lower to higher levels in the learning process. With respect to trauma-informed education in general, it would be beneficial to begin with an understanding of teacher perspectives regarding trauma prior to engaging in further research examining the process of change within school-based practices. Another advantage of a case study design was that it offered a flexible research framework that was responsive to emergent inquiry and could employ both qualitative and quantitative methods (Christ, 2013; Yin, 2014). While this case study was predominantly qualitative in nature, there was value in exploring the phenomenon through different lenses and perspectives. It is this dialectical stance in mixed methods that "affords a meaningful engagement intended to be fundamentally generative of insight and understanding that are of conceptual and practical consequence" (Greene & Hall, 2010, p. 124). For the purposes of this study, a broad definition of mixed methods research was used, one that viewed the integration of qualitative and quantitative approaches as both methodology and method,

> As a methodology, [mixed methods research] involves philosophical assumptions that guide the direction of the collection and analysis of data and the mixture of qualitative and quantitative approaches in many phases of the research process. As a method, it focuses on collecting, analyzing, and mixing both quantitative and qualitative data in

a single study or series of studies. Its central premise is that the use of quantitative

and qualitative approaches in combination provides a better understanding of research

problems than either approach alone. (Creswell & Plano Clark, 2007, p. 5)

The use of an instrumental case study design, one that employed both qualitative and

quantitative methods, allowed for greater exploration and elaboration of the topic under study

(Flyvbjerg, 2011; Yin, 2014). With this instrumental case study, the focus was on increased

understanding and insight into trauma-informed education for the possibility of contributing

to the improvement of practice in education (White, Drew, & Hay, 2009).

Concurrent Embedded Design

According to Creswell (2014) and Schooenboom and Johnson (2017), the specific

type of mixed methods design chosen for a study should be the one that best addresses the

research question(s). In this study, a concurrent embedded mixed method design was used

with both types of data simultaneously collected and then analyzed with one of the data sets

providing a complementary, supportive role to the primary data (Creswell & Plano Clark,

2007). This type of mixed methods model was represented by the notation QUAL(quan)

whereby the quantitative component was embedded within the dominant qualitative research

framework. Embedding quantitative survey data that measured trauma-informed attitudes

within a larger qualitative interview framework reflected my view that teacher attitudes were

an important facet of the broader perspectives and experiences which were the focus of the

study.

The concurrent embedded mixed methods design was selected for the twofold

purpose of (1) triangulation-comparing quantitative findings with the qualitative results, and

(2) complementarity-analyzing data from both sets to enhance and expand the understanding

of teachers' perspectives (Greene, Caracelli, & Graham, 1989). As stated by Johnson, Onwuegbuzie and Turner (2007), a qualitative-dominant mixed design reflects a constructivist-critical research stance where the inclusion of quantitative data and analysis is likely to provide richer and deeper interpretations of teachers' perspectives on trauma-informed education.

Participants and Sampling

A purposeful sampling strategy intentionally selects individuals who have experience with the phenomenon under study. According to Patton (1990), the "logic and power of purposeful sampling lies in selecting information-rich cases for study in depth" that offer greater insight and key perspectives (p. 169). Mixed methods offered the opportunity, as researcher, to combine sampling techniques to enhance the breadth of the data collected (Collins, 2010). In this particular study, a combination of purposeful and snowball sampling was utilized to identify teachers familiar with the concept of trauma-informed education and who also have lived experience working with students exposed to trauma and adversity. The estimation of sample size needed for qualitative interviews required careful consideration of a number of factors including "the quality of data, the scope of the study, the nature of the topic, the amount of useful information obtained from each participant, the use of shadowed data, and the qualitative method and study design used" (Morse, 2000, p. 1). In a comprehensive review of sample sizes in qualitative research, Onwuegbuzie and Collins (2007), proposed guidelines of 3-5 participants for in-depth case studies and acceptable sample sizes of 6-12 participants for primarily interview-based studies. However, Clarke and Braun (2017) argued for flexibility in determining qualitative sample sizes as "the bigger the sample, the greater the risk of failing to do justice to the complexity and nuance contained

within the data" (p. 743). Similarly, Malterud, Siersma and Guassora (2016) recommended that sample size be evaluated as the study progresses to ensure responsiveness to data saturation and the practical realities inherent in the research.

Bounding of the instrumental case in this study was guided by a number of considerations, most notably the research questions. Eastern Ontario was chosen as the context for my study based on time constraints, proximity, and my familiarity with teachers and special education resources in the region. Eastern Ontario is a large geographic area that includes Ottawa, the capital of Canada, and a number of smaller urban centres and surrounding rural counties. There are seven English-language school districts located within Eastern Ontario. Participant recruitment for the case began with the identification of teachers in this region who worked in special education classrooms, or in schools in communities known to have a high proportion of at risk students. Based on my previous professional experience working in education and children's mental health, nine teachers were purposefully selected and contacted by email. Three teachers provided additional contact information for a colleague who met the inclusionary criteria (snowball sampling). In total, 12 teachers were contacted with eight consenting to participate in the study once they had reviewed the Participant Information Letter and Consent (Appendix A). Following the interview, all eight teachers were given the Research Debriefing Letter (Appendix B) and offered a $25 gift card in appreciation for their participation in the research study.

The single sample of teachers for both the qualitative and quantitative data collection ranged in age from 33-53 years ($M = 44$, $SD = 7.80$) with six participants identifying themselves as female and two participants identifying as male. Full-time teaching experience averaged 17 years ($SD = 8.69$, range: 6-31 years); seven of the participants were Bachelor of

Education graduates and one teacher had completed both an undergraduate and graduate

education degree. The eight teachers, who represented both Catholic and Public school

boards, indicated they worked in urban communities at the high school level (n = 2),

elementary level (n = 5), and with both high school and elementary aged students (n = 1).

Five teachers reported working in specialized programs and three teachers identified their

work location as high-needs community schools (two in a regular classroom, the other in a

special education teaching role supporting a number of classrooms). A summary of

demographic data is presented in Chapter 4 (see Table 4.2).

Qualitative Instrument

As the predominant research method in this study, qualitative interviewing was

described as a social practice designed to construct knowledge that is both historically and

culturally-situated (Brinkmann, 2016). Qualitative interviews offered the opportunity to hear

the perspectives of teachers in their own voices and to understand how they make meaning of

their role and experiences working with students exposed to trauma. According to Denzin

(2001), the act of interviewing has the potential to be transformative and to create social

change due to the reflexive and interactive nature of the interview process. Interviews are

congruent with case study research design as both are interpretivist, heuristic, and reflexive

(White et al., 2009).

Semi-structured interviews, which are the most frequent qualitative method used in

mixed-methods studies, are most useful when objective knowledge of the research is

sufficient but subjective knowledge of the phenomenon of interest is limited (McIntosh &

Morse, 2015). My use of a semi-structured protocol (Appendix C) to guide the interviews

ensured that specific areas of interest were explored in-depth while also offering the

flexibility to focus on issues that were of importance to the individual participants. The semi-structured interview format was also appropriate for discussion of topics that had the potential to cause distress as I was able to tailor questioning to be sensitive to individual needs of each participant (Fylan, 2005). Jacob and Furgerson (2012) suggested a protocol containing six to 10 open-ended questions that facilitated a rich exploration of issues while keeping the interviews to a reasonable length for participants. The interview protocol for this study was thus comprised of ten questions that addressed the research questions both directly and indirectly and allowed for an interview lasting approximately one hour. Interview questions were designed and developed to explore teachers' perspectives on the topic under study, and were also informed by my professional knowledge and experience of working in special education classrooms and therapeutic programs.

Data collection. After initial contact to introduce myself and the purpose of the study, teachers who expressed further interest in learning more about the research were provided with the Participant Information Letter for review. I then followed up with the teachers who agreed to participate, answered questions and discussed their preferences for completing the survey and interview. Two teachers chose to be interviewed by telephone while the remaining six participants requested face-to-face interviews which were held in a variety of locations with steps taken to ensure comfort, confidentiality and privacy. All interviews were audio-taped for transcribing. Prior to the interviews, the Participant Information Letter was reviewed again to ensure that consent was informed and all participants signed the consent before the interview began.

Data analysis. Each interview was transcribed verbatim from the audio-tapes and participants were given copies of the text of their interview for member-checking purposes.

Teacher participants were all asked to review the transcript for content and accuracy and to add any further details or comments that might further understanding of their perspectives on trauma-informed education. Once the reviewed transcripts were received, I began the process of thematic analysis using Microsoft Word 2013 to organize and highlight the text. As stated by Braun and Clarke (2006), thematic analysis is a flexible qualitative research method that can be used to identify, analyze and report important patterns (themes) that exist within data, as well as being a useful approach to "reflect reality, and to unpick or unravel the surface of reality" (p. 9). My thematic approach was inductive and data-driven with the identified themes strongly connected to the interview data.

Following the six steps outlined by Braun and Clarke (2006), the process of familiarizing myself with the data (step one) began as I transcribed each interview. I read the transcripts several times, making notes every few lines and reflecting on the content of the interviews. Similarities and differences in participant responses were noted and recurring words, phrases and concepts were identified. For example, the concept of relationships figured prominently in the interview data and was linked to participants' comments in a number of areas. I was then able to code the data into separate categories that reflected various aspects of participants' perspectives (step two). According to Boyatzis (1998), a "good code" (p.1), is one that offers a rich, qualitative description of the phenomena of interest. Through my rereading of the data and reflection on identified categories, I began to generate preliminary themes that reflected significant or interesting patterns of participant responses in relation to the research questions (step three). I then pasted quotes that supported these early themes into a Word document that tracked commonalities and facilitated a recursive process of cross-checking themes with both the original codes and the

larger data set (step four). The final stage of analysis (step five) involved review, refinement and naming of the themes as a process of "identifying the 'essence' of what each theme is about (as well as the themes overall), and determining what aspect of the data each theme captures" (Braun & Clarke, 2006, p. 92). Prior to writing up the report (step six), participant data from the quantitative instrument was integrated with the qualitative analysis to compare and contrast findings.

Quantitative Instrument

Advances in research on trauma-informed care in human services have been limited in part by the lack of psychometric measurements developed to explore issues relevant to trauma-informed care (Overstreet & Chafouleas, 2016). In response to this need, Baker et al. (2016) developed the first theoretically-derived quantitative instrument that measures service providers' attitudes towards trauma-informed principles and practices. The Attitudes Related to Trauma-Informed Care (ARTIC) Scale was developed for the purposes of identifying and synthesizing the current theoretical and empirical knowledge related to trauma-informed care (TIC) and assessing service providers' attitudes directly and specifically relevant to TIC. One of the advantages of the ARTIC is that it can be easily and economically administered by a broad range of institutions, it includes three versions of different item length (ARTIC-45, ARTIC-35, ARTIC-10), each with modifications specific to either educational settings or human service organizations (Baker et al., 2016). The ARTIC-35 for education measures attitudes toward trauma-informed beliefs and approaches in school settings and consists of five subscales and a total score containing 35 items presented in a 7-point bipolar Likert response format. The subscales measure attitudes related to "(a) underlying causes of problem behavior and symptoms, (b) responses to problem behavior and symptoms, (c) on-

the-job behavior, (d) self-efficacy at work, and (e) reactions to the work" with higher

subscale and total scores indicating attitudes more favourable to TIC (Baker et al., 2016, p.

64). Each subscale score has a possible range from 0-49 with total ARTIC scores ranging

from 0-245. A description of each subscale is presented below (Table 3.1).

Table 3.1

Attitudes Related to Trauma-Informed Care (ARTIC) Scale: Description of Subscales

Subscale Title	Description
Underlying causes of problem behavior and symptoms	This subscale assesses respondents' views regarding the root cause of students' difficulties. Attitudes more favourable to trauma-informed care in education would endorse statements that suggest emotional, behavioural and learning problems are reflective of the particular student's current environment and lived experience rather than innate traits or characteristics of that student (e.g., mental health issues). In addition, this subscale has respondents consider whether students' behaviours and symptoms are fixed and unchangeable or whether their difficulties are amenable to positive interventions and supportive experiences.
Responses to problem behavior and symptoms	In this subscale, respondents endorse statements which represent their beliefs related to appropriate classroom responses to students experiencing emotional, behavioural and learning challenges. Items that emphasize strict rules and consequences are less aligned with trauma-informed principles. In contrast, flexible responses that consider how best to meet the unique needs of each individual student are more aligned with a trauma-informed educational approach.
On-the-job behaviors	This subscale measures the extent to which respondents focus on classroom management by means of controlling student behaviours (e.g., reward charts, consequences) or prefer to use empathy and relational engagement to manage difficult situations with students that are struggling to meet expectations.
Self-efficacy at work	The self-efficacy subscale assesses whether respondents believe they have the knowledge and skills necessary to address the complex needs of students who have been exposed to trauma.

| Reactions to the work | In this subscale, respondents endorse statements that either reflect an understanding of the effects of vicarious trauma on educational staff and the importance of seeking help or alternatively, endorse statements that suggest little knowledge of the potential negative impact of working with students with trauma. |

(ARTIC, Baker et al., 2016)

The ARTIC-35 differs from the ARTIC-45 in that the former does not include two supplementary subscales that measure attitudes toward the organization's process of implementation of TIC approaches. Given the research questions and the lack of available information on the adoption of TIC within most school boards in Ontario, the ARTIC-35 was the most appropriate version to explore teachers' attitudes for this study. An example of an item on the ARTIC was the respondent choices: *students could act better if they want to* (scored as a one), as opposed to an endorsement of *students are doing the best they can with the skills they have* (scored as a seven), with the remaining scores falling between those two anchors on the scale (Baker et. al., 2016). Development of the ARTIC was based on a sixth-grade reading level and completion of the ARTIC-35 was estimated to take fifteen minutes. Psychometric testing for reliability and validity of the measure was conducted with a sample of 760 human service professionals including a subset of 165 educators. Initial testing results demonstrated excellent internal consistency reliability for the ARTIC-45 ($\alpha = .93$) and the ARTIC-35 ($\alpha = .91$) and very good internal consistency for the abbreviated ARTIC-10 ($\alpha = .82$). Test-retest reliability was strong for the three instruments, ranging from .84 to .65 for the composite score over six months as well as preliminary support for construct and criterion-related validity (Baker et al., 2016).

While there are no current norms established for the ARTIC scale, a recent study of community homeless shelter workers in Alaska employed the ARTIC as one of the measures

used to assess attitudes toward trauma-informed care and readiness for agency change (Marvin & Volino Robinson, 2018). Results of the study indicated that the mean total score on the ARTIC for this sample was 180 (out of a possible 245) with mean subscale scores ranging from 33.82 (underlying cause of behavior) to 38.02 (self-efficacy). Positive staff attitudes toward trauma-informed care were also associated with increased staff readiness to change (Marvin & Volino Robinson, 2018). Psychometric testing of the ARTIC including use with different populations is ongoing with additional research expected later in 2019. License for use of the ARTIC Scale in the current study was granted by the Traumatic Stress Institute (see Appendix D).

Data collection. For the purposes of this single-phase concurrent embedded study, a sample of eight teachers consented to participation in both the survey and the interview. Five of the participants completed the survey during the face-to-face meeting for the interview with three teachers preferring to have the survey emailed for completion and return. During debriefing, participants indicated that the survey was perceived as straightforward and that there were no items that were unclear or misleading. None of the thirty-five items on the completed ARTIC surveys were left blank.

Data analysis. Item scores for each participant were initially entered into a Microsoft Excel spreadsheet and then into the IBM Statistical Package for the Social Sciences (SPSS) Version 24 statistical software program. Once specific items were recoded for reverse scoring, subscale and total scores were computed for descriptive analyses that included measures of central tendency and variability. In addition, demographic information collected during the interviews (i.e., participant age, years of teaching experience, level of education and student population) were also analyzed and a correlational analysis completed to

determine whether there was any relationship between the demographic characteristics of the participants and the ARTIC results.

Ethical Considerations

As a doctoral researcher, I am bound not only by the Research Code of Ethics of the Tri-Council but also by the ethical standards to which I adhere as both a certified teacher and registered psychotherapist. Given that my study involved human participants, research ethics approval was required and was granted by the Nipissing University Research Ethics Board (Appendix E). Ethical considerations guiding my research fall within the broad tenets of respect for persons and concern for welfare.

Respect For Persons

While my researcher stance was that of passionate participant and my study honoured the voices and experiences of the teacher participants, additional considerations beyond that of standard research ethics were appropriate. Brydon-Miller (2009) advocated for "covenantal ethics", an alternative model that acknowledges "human interdependency, the co-generation of knowledge, and the development of fairer power relations" (p. 247). Respecting the dignity and autonomy of the participants was critical to conducting ethical research. From my perspective, key to building a trusting and collaborative relationship with participants was honesty and transparency including the timely sharing of all information needed to make informed decisions at every stage of the research. To ensure that consent was informed, information was shared with participants regarding the purpose of the study, how the study would be conducted, the anticipated duration of the study, what would be expected of the teachers, the anticipated risks and benefits of participating, and how and with whom the findings would be disseminated. Prior to the interview, the Participant Information Letter

and Consent was reviewed with each teacher including mention of the contact information for the Faculty Supervisor and the Nipissing Ethics Administrator should participants have any further questions or concerns. At every contact with the participants, I ensured that consent was ongoing and that the teacher participants were aware their participation was voluntary with the option of withdrawing from the study at any time, including withdrawal of consent for the use of their data.

Concern For Welfare

As researcher, I owe a duty of care to the teachers participating in this study. Specifically, this required that I design and conduct the research in a manner that "does good and does not cause harm" (Orb, Eisenhauer, & Wynaden, 2001, p. 93). While every possible action was taken to safeguard the anonymity of the participants including the presentation of data in aggregate form and the use of pseudonyms, there was still the possibility that information could reveal participant identities and teachers were informed of this risk. I also shared the protocols for safeguarding of their data, including storing electronic data on a password-protected computer with paper copies (e.g., consents, interview protocols) and audiotapes being stored in a locked filing cabinet in my home office. As required by the Tri-Council, all securely stored materials pertaining to the study will be destroyed after five years.

Given that the research topic focused on psychological trauma and childhood adversity, participants were informed of the possibility that they may find the topic upsetting and could experience some distress over the course of the study. The teacher participants were given contact information for community counselling supports and their respective school board employee assistance programs. I also followed up with each participant when

they were provided their transcripts for review and all indicated that participation in the study had been a positive experience.

Trustworthiness

Throughout the research study, a number of steps were taken to ensure the trustworthiness and validity of the findings. Teddlie and Tashakkori (2009) identified triangulation as a key strategy for establishing trustworthiness in a qualitative or mixed methods study. In this study, three types of triangulation were employed: data triangulation, methodological triangulation and theoretical triangulation. Data triangulation involved sampling multiple teachers working in different settings to better understand and validate the findings (Merriam, 1998; Yin, 2014). A mixed methods design incorporating both quantitative and qualitative data provided the methodological triangulation that utilized the strengths of each method to explore teacher participants' perspectives. Framing the study's research questions, literature review and analysis of the findings through the lenses of critical pedagogy and resiliency theory also provided different theoretical perspectives through which to interpret the data. As the sole researcher, using multiple triangulation including data sources, methods and theories contributed to the validity and credibility of the study findings (Stake, 1995; Yin, 2014). Member-checks, thick descriptions and my use of a reflective journal further enhanced trustworthiness of the research (Teddlie & Tashakkori, 2009).

Limitations

While the focus of this research study was exploring and understanding teacher participants' perspectives as expressed in their own voices, the primary methodological limitation was related to the subjective nature of the data. Both the ARTIC survey and interview data relied on participant self-report which may have been influenced by a number of factors. Social-desirability bias may have motivated some participants to respond out of concern for judgement of their professional practice. In addition, retrospective accounts of past experiences including thoughts and behaviours may have been subject to memory or other recall issues.

In order to mitigate these limitations, the use of a semi-structured interview protocol offered the opportunity to clarify participant responses, ask follow-up questions and probe for greater detail. Participants were also assured that the study was non-evaluative and non-judgemental and that all perspectives were valued. After interviews were completed and transcribed, participants were given a copy of their transcripts to review for accuracy and to make changes as necessary. This may have aided in the recall of experiences and encouraged further reflection on their responses. It is understood that specific findings from this study cannot be generalized to other groups of teachers or educational settings. The results of the current study are specific to the teacher participants, their social and contextual environment, and the period of time in which data was collected. However, it is possible some of the themes that emerged in the data may be applicable to other settings and that the teacher participants' insights and perspectives might also contribute to greater understanding of current issues relevant to trauma-informed education and professional learning.

Chapter Summary

In this chapter, I presented an overview of the research methodology and methods for this study. The rationale for a concurrent embedded case study research design was introduced with a discussion of bounding the case and participant sampling. The study used a quantitative survey, the ARTIC scale, and qualitative semi-structured interviews as data sources. Analyses of the data included descriptive statistics and thematic analysis to generate themes in the data and to capture the depth and complexity of issues relevant to teachers working with students with trauma. Methodological limitations related to self-reported data were discussed and strategies used to enhance the validity and trustworthiness of the research findings were identified. In the next chapter, findings are presented from the ARTIC survey and prominent themes that emerged from the interview data.

Chapter 4 Results

In this chapter, participants' demographic information is presented followed by a summary of the quantitative results including descriptive statistics. Next, findings from the data collected through teacher participant interviews are discussed with respect to the themes that emerged from the qualitative analysis.

Quantitative Results

Participant Introduction and Demographics

Eight teachers comprised the single sample of participants for both quantitative and qualitative data collection (see Table 4.1). A pseudonym was assigned to each participant and information specific to the school setting was removed to safeguard teachers' anonymity.

Table 4.1

Summary of Participant Characteristics

Participant * Pseudonym	Age	Years of Teaching Experience	Current School Population and Setting
Anna	42	18	Regular-Elementary
Jeremy	53	31	Regular-Elementary
Kyla	33	10	Special Education-High School
Lori	51	12	Special Education-Elementary
Michelle	39	12	Special Education-High School
Robyn	48	24	Special Education-Elementary
Ryan	51	25	Special Education-Elementary/High School
Tara	35	10	Special Education-Elementary

The teachers represented four different school districts in urban and suburban centres of Eastern Ontario with populations that ranged from approximately 101,000-935,000 (Statistics Canada, 2017). All participants reported they had experience teaching in both regular classrooms and special education settings over the course of their teaching careers. Two participants, Tara (age 35) and Kyla (age 33) each reported 10 years teaching experience; Tara currently works in a specialized elementary classroom and Kyla works with high school aged students in an alternative classroom. Lori (age 51) and Michelle (age 39) have both taught for 12 years, Lori in elementary and Michelle in a high school special education program. Anna, who is 42 years old, has 18 years of teaching experience and works in a regular elementary classroom. Robyn (age 48) works in a specialized elementary program and has taught for 24 years. Ryan (age 51) has 25 years of experience and works with both elementary and high school students in an alternative program. Jeremy, who is 53 years old and has taught for 31 years, works in an elementary school in a specialized teaching role.

Summary of Demographic Variables

As presented in Table 4.2, the demographic data revealed that the sample of six women and two men had a mean age of 44 years ($SD = 7.80$, age range: 33-53). Participants reported an average of seventeen years of full-time teaching experience ($SD = 8.69$, range: 10-31 years) with seven indicating their highest education level was a bachelor of education degree and one teacher reporting the completion of a masters of education degree. With respect to the type of educational settings in which they worked, participants identified special education programs ($n = 6$) and regular classrooms in community schools (regular

classroom n = 1, and special education role supporting students in a number of regular

classrooms n = 1).

Table 4.2

Summary of Demographic Data

Variable	n	M	SD	%
Age	8	44	7.80	
Years of Teaching Experience	8	17	8.69	
Gender				
Female	6			75%
Male	2			25%
Student Population				
Elementary	5			62.5%
High School	2			25%
Mixed	1			12.5%
Education Level				
Bachelors	7			87.5%
Masters	1			12.5%

Descriptive Statistics

The ARTIC scale (Baker et al., 2016) provided survey data of teacher participants'

attitudes toward principles of trauma-informed care in educational settings. Descriptive

analysis of the subscales and total scores are presented in Table 4.3. Each of the five

subscales was comprised of seven items scored in a 7-point Likert format with higher scores

representing responses more favourable to the overall philosophy of trauma-informed care

and related principles. Each subscale total score had a possible range from 0-49 with total

ARTIC scores ranging from 0-245. Given that the ARTIC scale was recently developed with

ongoing psychometric evaluation, there were no established norms available for purposes of comparison. While the absence of comparative norms may lessen validity somewhat, participants' scores representing favourable attitudes toward trauma-informed care in education were supported in their responses during the interviews. Analysis of the findings revealed a non-normal distribution and no significant correlations between demographic variables and scores on the ARTIC scale.

Table 4.3

ARTIC Subscale Scores and Overall Score

Subscales Total Score	M	SD	Range
Underlying causes of symptoms and behaviors	44.37	1.21	43-45
Responses to symptoms and behaviors	45.12	1.36	43-47
On the job behavior	46	1.58	44-48
Self-efficacy	43.62	3.19	38-47
Reactions to the work	43.37	3.63	36-47
Overall ARTIC score	222.5	7.53	205-230

On the first subscale, underlying causes of problem behaviours and symptoms, items related to respondents' views of student behaviours as fixed and intentional versus adaptive and amenable to change. The mean score on this subscale for study participants was 44.37 with a standard deviation of 1.21 (range: 43-45). Items on the responses to problem behaviours and symptoms subscale emphasized relationship, empathy and promoting a sense of safety to change student behaviours as opposed to consequences, rules and punitive actions. Scores on this subscale ranged from 43-47 (*M* =45.12, *SD* =1.36). The third

subscale, on-the-job behavior, measured endorsement of teachers' empathy-related behaviours versus actions that were more focused on control and management of students' behaviours. The mean score was 46 with a standard deviation of 1.58 and range of 44 to 48. The subscale, self-efficacy at work, included items that represented participants' sense of personal competency in working with students with trauma. On this scale, teacher participant scores ranged from 38 to 47 (M=43.62, SD=3.19). The final subscale, reactions to the work, assessed the extent to which participants were aware of the potential impact of secondary trauma and vicarious traumatization on teachers and how this related to personal coping with work stressors. On this subscale, participants' scores ranged from 36 to 47 (M =43.37, SD =3.63). The overall ARTIC mean score was 222.5 with a standard deviation of 7.53 (range: 205-230).

The mean scores on the first three subscales suggested that the teacher participants understood the importance of trauma awareness and positive relationships in order to promote a sense of safety and acceptance for students. While the scores on the remaining subscales, self-efficacy at work and reaction to the work, were generally favourable toward trauma-informed care, they were lower relative to the scores on the previous three subscales. The fourth scale, self-efficacy, measured participants' judgement of their competency in supporting students with trauma which is considered to be a key factor in the successful implementation of trauma-informed practices within school settings (Baweja et al., 2016). The fifth subscale reflected general awareness of vicarious traumatization and the manner in which participants coped with the stressors of their job (Baker et al., 2016).

Summary

Analysis of the quantitative data revealed that overall the participants held attitudes favourable to trauma-informed care in school settings. Mean scores on the five subscales ranged from 43.37 to 46 on the 7-point Likert scale with the total mean ARTIC scores ranging from 205-230. Interpretations of these findings will be discussed further in the following chapter.

Qualitative Results: Interview Findings

The study participants indicated that they work in a variety of educational settings including special education programs and regular classrooms in community schools. All of the participants reported that they taught students who had been exposed to trauma and they identified a number of events or circumstances that their students might experience that had the potential to be traumatic including bullying, poverty, abuse (physical, emotional, sexual), witnessing domestic violence, loss of a parent (death or separation), separation/divorce, and neglect. The involvement of child welfare with a family, lower socio-economic status, parental mental health and substance abuse, incarceration of a family member and general family dysfunction were also cited as possible traumatic stressors in the student population.

When asked about professional development specific to trauma-informed education, all participants indicated they had not undertaken any formal learning specific to mental health or childhood trauma (e.g., pre-service undergraduate or Additional Qualification courses). However, two participants in special education programs said they had professional learning opportunities with some focus on student mental health including trauma, integrated within their multi-disciplinary consultations and case management meetings specific to each student. One participant reported her knowledge of trauma-informed practice was the result

of her training as a yoga teacher and the remaining participants identified informal

discussions with educational specialists and mental health professionals as the source of their

trauma-related knowledge. Four participants also stated that professional development

opportunities specific to social-emotional programming were offered within broader mental

health literacy initiatives in their respective school boards. Participants reported that the

information most frequently shared in the school setting related to student self-regulation and

social skills as well as strategies for working with students with Attention Deficit

Hyperactivity Disorder (ADHD) and anxiety. Even within the more specialized settings,

participants indicated that the professional support or guidance available to students and

educators were inconsistent across the schools in their respective school districts. For

example, one classroom was able to enlist the services of social workers, speech-language

pathologists, occupational therapists and a psychologist. A similar classroom within the same

program, but in a different location, was only able to access social work resources for student

support and professional guidance for the teaching staff.

Emerging Themes

The analysis of the qualitative interview data generated three overarching themes

relevant to the participants' perspectives on trauma-informed education: (1) using a trauma-

informed lens, (2) strengthening connections and, (3) changing educational perspectives.

These broad themes will be presented, including quotes from participants' interview data that

illustrate the significance of each theme and its related concepts to further our understanding

of trauma-informed educational practice.

Using a Trauma-Informed Lens

During interviews, participants acknowledged that students' school experiences were significantly influenced by teachers' assumptions and beliefs about the nature of their students' emotional, behavioural and learning difficulties. The participants indicated that the lenses through which they viewed students and their lived realities had the potential to impact the trajectory of their students' lives in both positive and negative ways. Central to this theme was not only the importance of recognizing the effect of trauma on students' functioning in a number of domains, but also of recognizing the direct and indirect impact of student trauma on teachers and their ability to meet the individual needs of each student. The three subthemes within this broader theme were as follows:

Defining trauma-informed. Integral to this exploration of participants' perspectives on trauma-informed education was an understanding of the meaning participants ascribed to the term trauma-informed. Given the current gaps in research and limited information on the adoption of trauma-informed principles and practices in school districts in Eastern Ontario, it was necessary to first establish participants' insight into what it meant to be trauma-informed. When asked for their definition, all eight participants highlighted their understanding of the impact of trauma on students and indicated that learning and behavioural difficulties were directly linked to their students' experiences of adversity. Kyla stated,

> The first part is defining what it means to go through trauma…understanding how
> that [experience] affects the brain and how it affects development which is going to
> carry over into the classroom. So, realizing when a kid is impulsive or quick to react,

quick to anger, it's not just because they don't care or they are bad or want to get

away with something. It's the result of the trauma they have experienced in their life.

In another description of what it meant to be trauma-informed, Michelle indicated that it is

"just taking the perspective that students' brains are functioning differently because of their

histories, because of what they have experienced. So that is where their behaviours are

coming from and not looking at behaviour as a choice". Similarly, Lori and Anna shared the

understanding that student behaviours were symptoms of something deeper that the student

had experienced or was currently experiencing. For Michelle, being trauma-informed

involved a shift in teachers' thinking, from, "this thought that kids are giving us a hard time,

that they are choosing this" instead to, "this kid isn't giving us a hard time they are having a

hard time". Jeremy expressed a broader perspective of what the term trauma-informed meant

to him and applied the concept to students, staff and others in the community,

> Being able to understand the role of all the traumatic events that go on in a person's
>
> life. It could be a student, it could be a teacher, or anyone, even a parent in the
>
> community. They bring all those things that happen at home or within community. So
>
> it's understanding and accepting that those are sort of a realistic part of everyone's
>
> makeup. We have to understand and accommodate those and work the best we can to
>
> create success. Based on the idea that everyone comes to work or to school with a
>
> different level [of experience]. I talk to other teachers about how it's like a glass
>
> being filled right to the top and the first thing in the morning you ask them [the
>
> students] to do something and they are not ready to learn. It spills over and it's not
>
> just kids, it's also teachers who come the same way. And parents too, and we are
>
> dealing with all of that and the school naturally catches a lot of those issues. I think

being understanding, knowing that this is part of what we need to deal with on a daily

basis is really important.

In addition to their awareness that the experience of adversity created a broad range of

difficulties for students, participants identified the implicit need for teachers and schools to

respond to students with trauma in a supportive and empathic rather than punitive manner.

Several of the participants reported that the use of exclusionary discipline practices such as

detention and suspension further isolated students with trauma and damaged key teacher-

student relationships. Instead, the participants supported strategies that were focused on

problem-solving and strengthening connections with peers and adults in the school

community.

Understanding the impact of trauma on students. For the teachers in this study,

the subtheme of understanding the impact of trauma on students was directly connected to

the importance of using a trauma-informed lens. Participants indicated that without some

knowledge of the effect of trauma and adversity on students, teachers' ability to respond

appropriately and to advocate for the needs of their students was compromised. Overall, the

participants demonstrated an acute awareness of both the different types of experiences that

could be traumatic for children and youth and the potential impact of these experiences as

they related to student functioning at school. Furthermore, all participants shared the

perception that students exposed to trauma have significant difficulties with emotion

regulation. Lori indicated that students with trauma can be quick to dysregulate as they are

"easily triggered and almost go into panic mode". Robyn commented that students with

trauma often exhibit low tolerance frustration and an inability to identify and verbalize

feelings. The participants also discussed different ways that students attempted to cope with stressors in the school environment and Michelle shared the following observation,

> There are internalizers and externalizers. I've seen the kids who are suicidal and self-harm, and I've seen really aggressive students. They could be really meek, quiet, head down and they don't want to connect with you. Or they can be really explosive students who are really reactive.

Similarly, Jeremy noted that the behavioural presentation of students with trauma can be quite different from one another depending on variables unique to each individual,

> For most kids we associate it [emotion regulation difficulties] with negative behaviour, acting out. But for a lot of kids it's withdrawal and taking themselves away from anything we would associate as good. You know sometimes it's hard for us to understand, as educators, that a student withdrawing is really a protective thing.

Other effects associated with trauma exposure that were observed in the classroom included attention and memory problems, and an unwillingness to take academic risks including the avoidance of tasks that required concerted effort. Some participants observed a general fearfulness in their students, even when the students were in what teachers deemed to be non-threatening situations. Ryan reported that he sees a lot of fear in his students, "it's a fear of change and transition and the fear is connected to them [the students] feeling unsafe". All of the participants reported that students with trauma often had learning difficulties that required remediation for basic math and reading skills.

Another common difficulty shared by students exposed to trauma related to social interactions. The participants stated that their students appeared to struggle with interpersonal skills as they often lacked trust, misread social cues and tried to control social situations

which could lead to peer rejection. Lori noticed that many students with trauma needed adult support to interact appropriately with peers both in the classroom and in the school yard. A number of participants shared their subjective opinion that there was a concerning increase in the prevalence of symptoms of mental health issues in their students including anxiety, low mood (depression), hyperactivity and impulsivity (ADHD). Lori shared her view that "students are dealing with more pressures: school, social media, family issues and I don't know if it is related but I'm seeing more complex emotional and behavioural issues, [possible] psychological and psychiatric problems". Anna shared a similar perspective when she stated, "Kids these days have a lot more stress in their lives. They seem to have more mental health problems and we aren't equipped to deal with the enormity of the problem".

Associated with their understanding of the broad impact of trauma, participants acknowledged the extent to which the emotional and behavioural difficulties interfered with student learning. According to Kyla, teachers required a "conscious awareness of the effect [student] lived experience has on their ability to be successful learners". Jeremy stated that "in a lot of cases, the learning can't happen until the other social emotional needs are met...their brains can't process and be able to learn until the other issues are addressed". Anna commented that "teaching the curriculum is so far down my list of priorities", as her students required "basic social needs like support, love and consistency" before being able to fully engage in learning. Some participants also commented on barriers to learning including the triggers inherent in classrooms which can sometimes be noisy and busy. For example, Michelle observed that her students had struggled "to regulate, like a too loud environment, a busy environment, transitions are difficult. I can even see how they struggle to regulate in response to people that are working with them and the tones that staff use". Lori reported that

dysregulated students can create a domino effect in a classroom where other students witnessing the difficulties also become anxious and unsettled. Ryan identified academic tasks as potential triggers for students with trauma,

> If they don't feel confident in their academics, if they don't feel they are learning the way that others are learning and the way they want to learn, they sort of fall behind and get dysregulated as a result. A lot of that could be LD [learning disability] and a lot of it could be just because they are missing things in their education. A lot of the students I work with have been out of school a long time or maybe they've been suspended.

In general, the participants' understanding of the root cause of student difficulties was considered key to being able to respond in supportive ways including accessing necessary resources. As Kyla highlighted,

> How we understand and interpret the behaviour affects how we respond. And that in turn affects how the students respond in kind. We risk making the situation worse and harming our relationship with the student if we react in ways that raise their stress levels and escalate the situation. We need to be patient and empathic, rather than reactive and punitive.

With respect to teacher responses, Jeremy indicated that "learning not to react to all those little things is pretty key…but for a lot of teachers that is a very difficult thing because they view being in control as very important". Other participants stressed the importance of responding appropriately to students' difficulties and of having academic and behavioural expectations that were realistic for the student. The teacher participants indicated that an understanding of students' lived realities better informed participants' efforts to align

expectations with students' abilities to ensure opportunities for success in the classroom. Anna shared her experience working with a student who had missed a considerable amount of school due to ongoing family stress and instability. According to Anna, it was this knowledge of the student's stressors at home that enabled her to be more patient and understanding of internalizing behaviours that helped the student cope in the classroom. Jeremy spoke of a student who would often cry in frustration when faced with academic tasks he found challenging. With this awareness of the student's trigger, Jeremy was able to take proactive steps to support the student and avoid potential disruptive episodes in the classroom.

 Understanding the impact of student trauma on teachers. While the participants spoke of their jobs in education as personally rewarding, they acknowledged the increased work stress associated with teaching students with trauma. Ryan stated that his job was "wonderful, but at the same time, terrible and difficult" due to the emotional nature of his work with these vulnerable students. According to Lori, "Staff are just overwhelmed, they are trying to deal with complex student needs and putting things into place but nothing is working and then they blame the student". A number of the participants talked about the importance of reflective practice to avoid personalizing their students' difficulties. Michelle shared that she found the work physically and emotionally exhausting due to feeling that students were always testing her. She shared her insight that it was crucial to be aware of her own stressors and triggers as she always checked herself "first to see if I was responding a certain way because I'm being triggered by the student's behaviour". Robyn said that separating the student from their problems helped her to not personalize the behaviour and instead focus on what the student needed in that moment. From Robyn's perspective, "It's

really just connecting and letting them know that you are there for them and not taking things personally when they say they hate you or say you don't care about them". Kyla's comments focused on the need for educators to have realistic expectations for the length of time it could take students to trust and feel safe,

> When you work to make a safe, learning environment… sometimes a student won't engage in that trusting environment for a long time which can create a feeling of them not being trusting. Rejecting the environment and the teacher and maybe the teacher takes that personally. I'm not sure what the name is for that behaviour that the student is exhibiting, maybe they are just mirroring back the rejection?

The reframing of students' behaviour was identified as a helpful strategy for teachers who struggled with internalizing their students' difficulties. As Tara pointed out,

> If you don't know what trauma is, if you don't have a trauma-informed approach, it could be extremely challenging because then you are just teaching students with behavioural challenges who are resistant learners. But I think once you can contextualize it, I think that it makes teaching a lot easier because now you know this isn't about me, this is about my student and what they have experienced. So how can I help them? I think that makes it not personal, I don't take those behaviours personally.

Participants highlighted the challenges they experienced trying to balance the complex needs of their students with trauma with the needs of other students in the classroom. Jeremy reported his frustration at "having to balance the needs of one child with the needs of 20 children and sometimes it's not the ideal thing you end up doing but you have to compromise". From Ryan's viewpoint, "having 25-30 students in front of you and a

curriculum and expectations that you have to meet, and you have "Joey" with all these issues related to trauma, it can be kind of easy to push it [supporting the student with trauma] aside". Michelle, in advocating for better teacher-student ratios to avoid teacher burn out, shared her observation that it was difficult to build "strong, meaningful relationships when you are one person and you have thirty students in your class". All of the participants agreed that smaller classrooms and greater staffing resources increased opportunities for teachers to develop the necessary empathic and supportive relationships with all of their students including students with trauma.

Compassion fatigue. Four of the participants specifically mentioned compassion fatigue as an occupational hazard. They acknowledged that their work as helping professionals took a personal toll especially in relation to supporting students exposed to trauma. From Tara's perspective "compassion fatigue or vicarious traumatization, whatever it is called, is really hard to avoid. These kids have such heartbreaking stories and there is only so much you can do. It wears you down". Anna expressed her feelings about working with students with trauma by stating "I'd be lying if I said it doesn't impact me, it does. But with time and experience it impacts me less. I feel numb sometimes. How sad is that?" She also commented on how sharing the emotional burden could impact others,

> Compassion fatigue is really high where I work...*w*ith compassion fatigue it's called sliming [talking about students' experiences], so I try not to get slimed. One of my colleagues that I really enjoy, we were out walking and she was venting [about work] and apologized for sliming me. I said it's ok, I don't mind being slimed by a few close people, it is reciprocal.

Tara talked about the 'shock and awe' of her first year working in an alternative school program and how having to put hands on a student or witnessing a student restraint could be traumatizing for a teacher. Two of the participants reported that they had experienced burnout which they attributed to the added stress of working with students with complex emotional and behavioural needs. As a result, one participant transferred to a less stressful classroom environment while the other chose to pursue an administrative position as a brief respite from the classroom. According to Robyn, she took her work stressors home with her in her early years of teaching. She indicated that she was patient and calm with students in her classroom but then would go home and "blow up at my own kids". According to Jeremy, some of the teachers at his school last year would cry frequently due to the stress of their jobs and concern for their students. However, despite the complex challenges associated with teaching students with trauma, all of the participants described positive, fulfilling aspects of their work. Michelle reported that she considered herself blessed to work with students who had experienced adversity. As she stated, "It makes me a better person because I come home happy from my job, I'm not stressed. Some of the [students'] stories are difficult but then it makes the kids' success all the more rewarding". According to Jeremy, his job was,

> Rewarding in a way that most people wouldn't realize. It opens your eyes to what really goes on in kids and peoples' lives. It's also hopeful in a way for schools in that it allows kids to grow and get where they need to be. Public education needs to be strong and grow, we need to be able to connect kids with resources and create a place they want to be every day and care for them.

For the participants, a positive mindset, social support and self-care strategies, including pursuing interests outside of work, were considered key to their personal wellness and job satisfaction.

Strengthening Connections

The theme of strengthening personal and professional connections for all members of the school community was compellingly woven throughout each of the qualitative interviews. All eight participants acknowledged the strong relational aspects inherent in their work and the importance of promoting a sense of belonging and acceptance for students, teachers, and other educational staff. Three subthemes were generated: (1) creating meaningful teacher-student relationships, (2) forming strong social networks with teaching colleagues, and (3) seeking support from other professionals.

Creating meaningful teacher-student relationships. All of the participants overwhelmingly identified the quality of teacher-student relationships as essential to supporting students with trauma. For the teachers in this study, positive, empathic relationships were the means through which they learned about the needs of their students and how best to support them in the learning environment. The participants explained that a relationship based on respect and understanding enabled students with trauma to trust and share their thoughts and feelings. Ryan reported that a "trusting relationship with an adult is always the key with our kids". Similarly, Anna identified relationship building as her priority with students and stated, "Number one is that I am an adult that they can count on and that they can trust…this is a safe place where they are accepted". Lori noted that teachers "are dealing with these very deep [student] issues and the way that you do that is through

relationship...the biggest thing is building relationships…learning about who they are and what they can do". As stated by Jeremy,

> The most important thing is to create that relationship so that you can understand and empathize with how they are feeling. Allow them to get to the point where they feel comfortable to talk about those things with you because otherwise it is really difficult to get to the learning.

Ryan acknowledged that many students with trauma are hypervigilant to interpersonal dynamics depending on the nature of their traumatic experience. He reported that he often had "to build up trust…with our students they always know how you feel about them before you know how you feel about them… they can sense it from you". Michelle commented, "A lot of students are guarded, but once they see that you aren't punitive and you are supporting them and building a relationship they'll slowly let their guard down". For the participants, relationships were fundamental to creating a sense of safety and security that enabled students to engage more fully in the learning process. Participants identified this critical connection between relationships and academic success. Tara asked "How can you teach [academics] if you don't really know who your students are and what their needs are?" Ryan shared his own perspective on an increased awareness of the connection between relationship and academic success this way,

> In the past, I always thought it was about relationship which I know it is, but I'm starting to notice the importance of academics in their lives as well too. It's also the success in school that sets them free in many ways. It gives them confidence, it gives them an understanding that good grades can get them further, they are able to get out

of high school. Or maybe go to college or university. It is finding and aligning that confidence, building that relationship, that's being trauma-informed [as a teacher].

The participants considered the development of strong, caring relationships to be a central priority when working with students with trauma. During the interviews, they emphasized that through meaningful connections to adults, peers and the wider school community, students had the opportunity for positive school experiences that could be transformative even within the context of significant trauma and adversity.

Forming strong social networks with teaching colleagues. While participants recognized the importance of strong teacher-student relationships, they also emphasized the need for teachers to have their own social networks at school to support their work with students with trauma. They acknowledged the value of team teaching, mentoring and coaching as well as supportive partnerships with resource teachers, administrative staff and other professionals such as social workers and psychologists. Anna commented "you find your go-to people too, you find the people on staff who support you…you have to find your crew, you can't be isolated and do it alone". Jeremy reported that "our principal is really supportive and staff wish there was more they could do but I think knowing that other people understand and support you…it is so important that you have people around you who care and understand". From Tara's perspective, teachers were naturally supportive not only of their students but also of their colleagues. She stated, "You have to rely on your staff team…I think when you work with the neediest kids you are a supportive person anyways, so you are not only supportive of your students but of your colleagues as well". Jeremy spoke enthusiastically of the opportunity to model positive, supportive relationships for his students who struggle to trust others,

One of the things that I think we can do as educators is that we can show kids that we

can have strong relationships with our peers, our coworkers and colleagues. If day in

and day out they see you arguing and fighting with people around you, then that just

reinforces that's what people do. A positive environment is huge for these kids.

The participants shared that having supportive school colleagues who understood the

demands and stressors inherent in their work was invaluable. Most of the participants also

identified emotional support as vital to their self-efficacy and overall job satisfaction when

working with students with complex needs. It was important to the participants that they

worked with colleagues who would listen, validate their challenging experiences and offer

helpful suggestions when appropriate. This supportive school community helped lessen the

isolation and frustration that participants sometimes experienced as the only adult in the

classroom. A majority of the participants also identified their principal as a key support

among the educational staff.

Seeking support from other professionals. During the interviews participants

generally shared a common perspective that meeting all of the complex needs of students

with trauma were beyond teachers' scope of practice. For example, Kyla commented that she

believed most teachers do not have the training or resources necessary to appropriately

address student mental health and social-emotional issues. Among all the participants there

was the recognition that students with trauma and their families may benefit from support

that required specialized knowledge and skills that teachers did not possess. While

identifying the need for professional guidance from social workers, psychologists,

psychotherapists, speech-language pathologists and other teachers in specialized roles,

participants noted that the support provided to students and teachers by allied health

professionals was, in their experience, inadequate even in the specialized programs. In this regard, the teachers in this study expressed openness to working collaboratively with community professionals, although some participants identified systems barriers to engaging professionals external to school settings. Issues related to differing mandates, student confidentiality, and restrictions on partnerships with non-school board staff were cited as obstacles to working with other mental health providers.

In addition to increased specialized support for students, the participants advocated for a shift in the way that school administrators and teaching staff viewed student needs. A number of the participants characterized their school district's response to students with trauma as reactive rather than proactive. From Jeremy's perspective, "the problem has to get to be very severe before the support is provided instead of recognizing that the issue is there to begin with…if we were supporting from the other end I think we would be a lot more successful". A majority of the participants stated that schools needed to screen children for trauma much earlier in order to intervene before students' difficulties worsened. Michelle also acknowledged that the manner in which trauma symptoms presented could have a direct impact on how the school boards responded to the students' difficulties,

> There are so many kids with a trauma background that are internalizers…they drop out of school, so [we] might not see them at all. Then they overdose and we see them [in a specialized program]. We need to pay attention to those kids when they are eight or nine years old and sitting in the back of the class afraid to raise their hand because they are too anxious about being wrong. Or maybe getting picked on or getting rejected by the teacher. That can all be from trauma. There is a lot of anxiety right

now, a lot of debilitating anxiety and staying home when you are anxious is so counter-productive.

According to the participants, a helpful and understanding professional community was essential to sustaining their ability to meet the needs of their students. Strong, supportive relationships with both their students and their educational colleagues were considered key factors for teachers' successful engagement with students exposed to trauma. In addition, participants indicated that connecting students to more intensive supports including special education and mental health professionals was a very necessary component of a trauma-informed approach in any school system.

Changing Educational Perspectives

All of the teachers who participated in this research study overwhelmingly endorsed the value of trauma-informed practice for students, teachers and the broader school community. According to Lori, "being trauma-informed means we try our best to understand these kids, we intervene with some positivity and safety and it really can change the trajectory of how their lives will go". Robyn suggested that a trauma-informed school is one that "values everyone's experience, it's a caring school community that is inclusive of everybody, students, staff and families". Tara shared her perspective on schools that do not align their school culture with trauma-informed approaches,

> [Those schools] try to make students fit into this square peg but then we miss out on so much of what makes them [the students] great and what makes our whole society great. We are lessening their abilities because they don't fall in line with everyone else. For the longest time schools have been trying to find out [trying to understand

these students], throwing other labels at them and have missed the boat because it is not the core of what is going on.

Due to the greater emphasis on child and youth mental health in schools today, a majority of the participants projected that trauma-informed policies and practices would become more widely accepted in the future. Underscoring this third theme, changing educational perspectives, were the three subthemes: (1) rethinking educational priorities, (2) reflecting on teachers' roles, and (3) embracing flexibility.

Rethinking educational priorities. The participants shared the opinion that any movement toward the adoption of trauma-informed principles and practices first required changes in educational priorities and mindsets. Anna commented that "we are in a bit of a shift right now, we've got the old school saying here is the curriculum, here is what you have to teach but we aren't dealing with kids from twenty years ago". Participants advocated for a more holistic approach to teaching students, one that acknowledged that the social-emotional needs of students have to be addressed as well as academic needs. Anna observed that "schools have become about so much more than education", a change which she and other participants enthusiastically endorsed. According to Jeremy,

> If I could change the system, a blue sky dream, just getting to change the curriculum, what kids are expected to learn. I think that creates a lot of anxiety for both students and teachers. There is such a broad amount of information that people feel an obligation to teach but, when students are ready to learn, we need to think about what needs to be addressed before that can happen. What is ultimately the most important learning that needs to take place?

Similarly, Kyla identified the need for educators to shift their priorities when working with traumatized students,

> [As an example], letting go of what your expectations as a teacher are. So in terms of letting go of the curriculum, you need to look at the student's life, to kind of step back from that and think what could I do here to really support them. It might not be the content, it might not be remediation on the content, but I think, in those instances, it's really about starting to determine what are the student's triggers are and why?

Jeremy echoed this notion and stated that in his experience, students affected by trauma were often in survival mode and could not learn until they felt safe and supported in the classroom. Participants also stressed the importance of ongoing professional learning opportunities for all staff in the school who interact with students. Participants pointed out that most of their training on trauma-informed practice had been informal and even within the broader school systems, many teachers were still lacking in basic mental health literacy. As Kyla stated,

> I think we need to recognize that the teachers don't have mental health training. Our teacher training programs teach us to be instructional teachers and they are really focused on the academic development of students in their class. So there is very little to support teachers in the holistic, social development of the students in their classrooms. I think it is one thing to write it into your strategic plan but another thing to build the capacity of your teachers to understand what trauma is, that trauma can be anything, and then [to understand] the impact and effect that it has.

Michelle also connected this needed shift in educational philosophy and practice to the indigenization of the education curriculum in Ontario,

I think that a lot of that work is being done in the Indigenous curriculum, [looking] at the effects on Indigenous children and the trauma that their families have experienced historically and are continuing to experience. I think that we have recognized that [the multi-generational effects of colonization on Indigenous peoples] as trauma…Not to take away or minimize the legacy of the impact of the residential schools but I think that is where we are starting the conversation [on the impact of trauma on our students and their families].

Anna made a similar connection between perceived changes in teaching approaches and the emerging focus on supporting Aboriginal students, "There is a lot of focus on First Nations, Indigenous ways of teaching and ways of healing. This is new and opens up a broader discussion about different ways of learning and different ways of approaching students with lived realities that include trauma".

While participants indicated that changes in education could be agonizingly slow, they also expressed optimism that with ongoing professional learning and the growing emphasis on student mental health, giving equal priority to non-academic needs would increasingly become more acceptable across school districts.

Reflecting on teachers' roles. When asked how they viewed their professional roles with respect to supporting students with trauma, participants shared a range of diverse perspectives. Michelle regarded her role as one of "relationship builder, an adult they can count on and trust" who was responsible for academics only after she had identified her students' strengths and needs. Similarly, Robyn indicated that she was a reliable, trustworthy adult that created a sense of stability and consistency for the students in her classroom. Kyla characterized her role as a creator of a "healing space",

> I see it as creating an environment that understands where [the students] are at, that
> meets them where they are at, and then creates a healing space for kids to begin to
> develop trust. Also being able to develop patience to take risks in a safe place. I think
> our classrooms are much more of a social space than they are for academic
> development and I believe that we can't contribute to the world academically until we
> are able to take care of ourselves.

Two participants described their role in terms of similar characteristics they deemed essential to working with students with trauma. For Lori, "my role is to be consistent, to be open and non-judgemental. To be calm, to listen…listening to kids is the best thing you can do and we don't do it often enough". Tara expressed that it was important "to be kind, be supportive, be empathic and just listen". Other descriptors provided by participants relating to their professional roles as teachers supporting students with trauma included coach, emotional co-regulator, surrogate parent and advocate. To elaborate, as an advocate, Anna described how, when her students were not able to articulate their needs, she helped them navigate the school system. With Anna's guidance, students identified steps they could take to reach their objectives including connecting with key staff and locating resources in the school and in the community. Ryan shared his understanding of the way in which his role had evolved over time,

> In the past I always used the term 'advocate' but I am less likely to use that term now
> because I like the model where they learn not so much to advocate for themselves, but
> to understand what their own triggers are and understand who they are. Because we
> aren't going to be their frontal lobe all the time. I think they need a voice, as a voice
> is not always there for them. Where I see myself, is looking at what works for that

student, planning less for the student and more for the school. So, they [the student]

can take that role and it enables them to (better) understand this is who I am, this is

what I am about, and where I can move forward. It's not always easy but I think that

is the goal.

Throughout the interviews the participants' broad view of their roles in the classroom was

apparent. They endorsed professional roles that went beyond strictly academic instruction to

include other multi-faceted responsibilities that provided the emotional and social support

their students needed.

Embracing flexibility. In addition to participants' views of their roles in the

classroom, every participant cited the importance of flexibility in their efforts to meet the

needs of students with trauma. Tara stated that her teaching practice had evolved over the

years to incorporate greater flexibility in lesson planning and student engagement. She went

on to say, "It basically comes down to reading the room, meeting students where they are".

Michelle advocated for a "flexible environment, even where their desks are situated in the

classroom or letting them listen to music while doing independent work". When asked how

their practice supports students with trauma, including instructional approaches and

strategies, participants repeatedly emphasized the usefulness of differentiation to create an

inclusive classroom environment. Hands-on activities and project-based learning were cited

over and again as beneficial, which included exploring students' interests and varying lessons

as much as possible to increase engagement in learning. For example, participants frequently

spoke of the value of chunking instructional time, encouraging body breaks, giving students

additional processing time, offering choices and creating a supportive, cohesive learning

community to reduce stress for their students. When asked about specific strategies that

benefitted students with trauma, Kyla reported,

> The specific strategies are being flexible and an ability to see that fairness doesn't
>
> mean sameness. Really what each student needs is not the same, in order to be fair it
>
> doesn't mean we need to give each student the same thing. I think the other big
>
> strategy for supporting these students is to have a conscious awareness of the effect
>
> their lived experience has on their ability to be learners. So how can you really teach
>
> if you don't know who your students are? I think what is really challenging [in a high
>
> school] is the quantity of students you have in a classroom and the limited time you
>
> have with them. How can we really teach if we don't know who we are teaching?

While all participants indicated that flexibility was essential to working with students with

trauma, Ryan cautioned against teachers taking it to an extreme. According to Ryan,

"flexibility is key but I can see some teachers take that flexibility and just use it as a reason to

not do very much". The participants stressed that flexible teaching approaches implemented

within a structured, consistent school environment were necessary for promoting the needed

sense of safety and predictability for students. Lori used an analogy to describe how she

viewed her work with students with trauma: "It's kind of like a dance. You know how to

groove with them and I think that is what helps them the most, educationally".

Generally speaking, the participants viewed flexibility from a broader systems

perspective too. They argued that traditional school practices were not always sensitive to

students' lived realities and, although not intentional, ignoring students' individual needs

could potentially cause further harm. In contrast, teaching that is trauma-informed involves a

flexible approach that is responsive to the social, emotional and academic needs of students

with trauma. Several of the participants identified the adoption of trauma-informed principles as an important step towards a more holistic and inclusive learning environment for both students and teachers.

Summary

The analysis of the interview data generated three overarching themes that offered greater insight into participants' perspectives and experiences: using a trauma-informed lens, strengthening connections, and changing educational perspectives. Underscoring the theme of using a trauma-informed lens were the related subthemes of defining trauma-informed, understanding the impact of trauma on students, and understanding the impact of student trauma on teachers. Within the second theme, strengthening connections, were three subthemes: creating meaningful teacher-student relationships, forming strong social networks with teaching colleagues, and seeking support from other professionals. Finally, the third theme of changing educational perspectives, encompassed the subthemes of rethinking educational priorities, reflecting on teachers' roles and embracing flexibility. Each subtheme expanded the breadth and depth of its broader theme and gave voice to teachers' experiences.

Chapter Summary

Eight teachers currently working in classrooms in Eastern Ontario participated in the study. The quantitative data collection involved completion of the ARTIC scale measuring participants' attitudes related to trauma-informed care in educational settings. Results of the descriptive analysis revealed, overall, that the participants had favourable attitudes toward trauma-informed principles and approaches. In turn, this finding complemented interview data that explored the participants' perspectives on trauma-informed education. Thematic analysis of the interviews generated three broad themes that captured participants'

experiences and enhanced understandings of their perspectives related to working with students with trauma. In the following chapter, the qualitative and quantitative findings are further discussed and expanded in relation to the current research on trauma-informed education and teaching practices.

Chapter 5 Discussion

In this chapter, I summarize the three main themes that emerged from my analysis and synthesis of the quantitative and qualitative data. Then I provide my interpretation of the findings in relation to the research questions and current research on trauma-informed education. Finally, I discuss implications of the study and make recommendations for teaching practice and further research in this critical area of education in terms of the implications for students and teachers.

Summary of the Themes

This concurrent mixed method study explored teachers' perspectives on working with students who have been affected by trauma. While the ARTIC survey provided a measure of teacher participant attitudes toward trauma-informed care in education, it was the semi-structured interviews that facilitated an in-depth investigation of participants' experiences and insight. Analysis of the data from the eight participant interviews revealed three overarching themes: using a trauma-informed lens, strengthening connections and, changing educational perspectives. Each of these main themes encompassed three sub-themes that deepened understanding of the participants' lived realities of teaching students exposed to trauma.

Using a Trauma-Informed Lens

The first main theme, using a trauma-informed lens, highlighted the importance of educators having a general understanding of the prevalence and impact of trauma. As discussed in Chapter 4, participants shared the viewpoint that students' school experiences were heavily influenced by teachers' assumptions and beliefs regarding the nature of their students' emotional, behavioural and learning difficulties. While conventional perspectives

on students' difficulties in the classroom often focus on modifying or stopping disruptive student behaviours, participants indicated that having some level of trauma awareness shifted their thinking and ultimately, their reactions to the behaviours. It was because of this knowledge that participants were mindful of the need to respond to students' difficulties in calm, supportive ways that did not escalate the situation and risk re-traumatizing the student.

Tara extended the discussion of the impact of trauma on students to include a consideration of a teacher's own trauma history. She stated she had never experienced trauma herself and wondered whether having a personal understanding of that phenomenon would influence teachers' abilities to support students. Similarly, Jeremy and Anna indicated that they found a trauma-informed lens useful beyond the classroom. They both reported that their interactions with colleagues, parents and other community members were guided by their compassionate awareness that trauma is a common reality for many individuals of all ages.

Also connected to this theme was an understanding of the impact of student trauma on the teachers who work closely with students who have been affected by trauma. Participants spoke of the emotional stressors they experienced trying to manage student behaviours, provide the appropriate levels of support to each student and balance the competing needs of all students in the classroom. For example, three participants in the present study said they had experienced burnout and referenced the risk of compassion fatigue and vicarious trauma as unavoidable realities inherent in their jobs. From Kyla's perspective,

> It's really easy to burn out. The behaviours are challenging, the [students] stories are
>
> heartbreaking and you never feel like you've done enough for them…or that anyone

has done enough for them. When they leave your classroom you still think about them

and wonder how they are doing.

Alternatively, Michelle reported that she did not find the work stressful and attributed this

perspective to her prior role as a Child and Youth Worker (CYW) in school settings. She

reported no previous professional learning specific to trauma in her CYW career but

identified her general mental health knowledge and behavioural management training as

beneficial to her sense of self-efficacy teaching students affected by trauma. Even though a

majority of the participants did describe their jobs as stressful, all indicated that teaching

students with trauma was rewarding and meaningful work. It appeared that their

understanding of the effects of trauma on students and the resulting impact of student trauma

and behaviours on teachers resulted in a more reflective and student-centred teaching practice

in the classroom.

Strengthening Connections

The second main theme, strengthening connections, emerged from the relational motif

that was prominent throughout all of the interviews. For each of the participants, it was this

interpersonal aspect of their job that was key to engaging and supporting students with

trauma. The participants identified a number of ways that their focus on the creation of a

strong, meaningful relationship aided their students at school. All of the participants viewed

the teacher-student relationship as essential to understanding their students' lives both within

and outside of the school setting. Engaging students in a trusting, emotionally safe

relationship enabled participants to identify classroom triggers, student interests, and learning

needs in order to individualize support for the students. O'Neill et al. (2010) supported the

primacy of teacher-student relationships emphasizing that,

> Children with trauma live in the moment, it is too difficult to live in the past and too
> threatening to look to the future…they need a classroom to be a safe place where they
> can enjoy relationships, engage in appropriate activities that stimulate their brains and
> feel like they can succeed in the tasks presented to them. In short, teachers need to
> know the student and know what his or her triggers are, and most importantly what
> the student's needs and abilities are. (p. 194).

In addition to the promotion of strong relational connections between teachers and students, participants identified the need for collegial support within the school community. It was the sense of camaraderie, encouragement and professional guidance from other educators who understood the complex nature of the work with students exposed to trauma that enabled participants to cope with the daily stressors.

Participants also recognized the limitations of their expertise with respect to delivering more intensive support for some students with trauma and other associated mental health challenges. While participants referenced strong relationship building skills and the ability to facilitate social-emotional learning, they acknowledged that some students required additional support beyond an educator's scope of practice and what could effectively be provided in the classroom. For those students whose trauma-related difficulties required counselling or therapy, participants identified the value of connections to mental health specialists both within the school board and in the wider community. Participants voiced their perspective that mental health literacy training with a specific focus on trauma and ongoing multi-disciplinary assistance were considered necessary for a comprehensive network of student care.

Several participants recommended inviting parents into the school community to further support their children. However, they also identified that it was often difficult to engage parents, especially in the case of families experiencing a high level of stress. The participants shared their observations that, for some of the parents, their own school experiences had been negative which led them to be less trusting of staff working in educational institutions. Four of the participants elaborated on this key recommendation for parental involvement by emphasizing the importance of strengthening connections between students affected by trauma, their families and all available resources within the school and outside of the school to provide an inclusive circle of community support.

Changing Educational Perspectives

The third main theme, changing educational perspectives, emerged from participants' beliefs that the adoption of trauma-informed policies and practices required a significant paradigm shift in the manner in which school systems viewed their mandate. All of the participants acknowledged that students with trauma faced numerous challenges that interfered with their ability to engage fully in the classroom. Without consideration of the need to remove or mitigate these barriers, students' academic potential may be limited with an associated negative impact on their broader social and emotional development. As Jeremy stated, students affected by trauma cannot learn until they feel safe, calm and valued in their school community. There was a consensus among those interviewed that a more integrated approach to teaching that involved prioritizing all aspects of a student's growth and well-being was integral to student success at school. The participants' descriptions of their broad roles supporting students with trauma in the classroom aligned with this more holistic view of education.

Although participants expressed agreement that they were comfortable taking on some of the added responsibilities of meeting the social and emotional needs of students with trauma, they identified system constraints on the scope of their efforts. Both Jeremy and Michelle declared that the development of trusting, secure relationships with students often took their attention away from other important tasks in the classroom. Similarly, Ryan reported that while early and sustained engagement with students that was geared toward learning about their lives was time consuming, this ultimately paid off in the long term for both student success and teacher effectiveness. Other initiatives to support student well-being in the classroom included social-emotional learning (SEL) programs embedded within lessons and curricular activities. According to five of the participants, these programs typically required training and planning time for implementation which increased their workloads. While two participants stated that educational assistants, resource teachers or child and youth workers facilitated the SEL projects in their schools, three of the participants were directly responsible for delivering the lessons as a component of the health curriculum. The three participants who taught the SEL lessons in their classrooms identified the experience as beneficial, both for their own professional learning and for promoting students' social and emotional skill development which contributed to a more positive, inclusive learning community.

Regardless of the resources available in their respective schools, six of the participants referenced flexibility as key to balancing all of the competing demands in the classroom. A predictable, structured school environment was identified as integral to promoting a sense of safety and security for students with trauma. However, participants

indicated that they also needed to be adaptable to individual student and classroom needs as they arose in the moment.

Conclusions

The research findings that emerged from the data informed three conclusions directly related to teachers' perspectives on trauma-informed education. First, participants endorsed the value of trauma-informed approaches for the benefit of students, educators and the wider school community. According to those interviewed, even having a basic understanding of the impact of trauma on students enabled them to more appropriately respond to the needs of their students who had experienced adversity. Second, participants highlighted a number of ways that their teaching practice assisted students with trauma including building trusting relationships, facilitating social-emotional learning and individualizing academic programming. Third, all of the participants shared the view that the wide-spread adoption of trauma-informed policies and practices required school districts to prioritize student mental health and well-being and to allocate the necessary resources to ensure the sustainability of individualized and student-centred initiatives.

Interpretation of Findings

In this section, I explore and discuss the study's findings with respect to the research questions and current literature on trauma-informed education. The overarching research question central to this inquiry explored teachers' experiences and perspectives on working with students who have been exposed to trauma. The following sub-questions also guided the inquiry, focusing on increased understandings of the teachers' perspectives and experiences:

How Do Teachers Understand Trauma and its Impact on Students?

As was anticipated with teachers representing different school boards, educational settings and diverse professional knowledge, the participants expressed a variety of perspectives on issues relevant to trauma-informed education. Based on my own experiences working in education and in children's mental health, trauma knowledge exists on a continuum from little or no awareness of trauma to an in-depth understanding of the prevalence and effect of traumatic exposure on brain development and body systems.

When asked about their understanding of trauma and its impact on students, one participant focused on recognizable traumatic experiences such as sexual abuse and child neglect while most identified a broad range of events and circumstances that had the potential to negatively influence student well-being. However, all participants made the explicit connection between childhood adversity and impairment in students' functioning in the school setting. Participants shared their views that in general, students affected by trauma frequently struggled to self-regulate emotions, interact appropriately with peers, sustain attention to complete classroom tasks and consistently meet academic expectations. These observations are widely supported by current research exploring the impact of trauma on students (Cole et al., 2005; Perfect et al., 2016; Porche et al., 2016).

From a critical perspective, the participants' responses reflected a rejection of traditional educator perspectives on students' difficulties. Conventional thinking typically situates the problems within the student, as a character deficit or trait inherent to that student or their family (Kincheloe, 2004; McLaren, 2003). As coined by Valencia (1997), this type of deficit thinking "typically offers a description of behaviour in pathological ways-referring to deficits, deficiencies, limitations or shortcomings in individuals, families and cultures" (p. 7).

In my experience, the perception that there is something wrong with the student may lead to labelling or pathologizing student behaviours that are actually adaptive for the student in that particular situation. The result may be a demand for additional testing that further serves to label and diagnose the student to the extent that diagnoses and medications become preferred interventions without consideration of other explanations or less intrusive alternatives. In contrast, the participants in this study appeared to have shifted their questioning regarding students' difficulties from, "what is wrong with the student?" to "what has happened to the student and how can I help?" This more empathic frame of reference for students with trauma aligns with Freire's problem-posing education (1970, 2000). According to Freire (1970), critical educators need to honour the being and experiences of their students so as to assist them to,

> develop their power to perceive critically *the way they exist* in the world *with which* and *in which* they find themselves; [and] come to see the world not as a static reality, but as a reality in process, in transformation. (p. 83).

Freire argued that learning could not be separated from personal empowerment and social change. In fact, he theorized that it was within this dialogic engagement between teacher and student that both individuals become more authentic, reflective and critically engaged with the world (1970, 2000). For the participants in this study, it appears their efforts to understand the lives of their students fostered a deeper sense of teacher agency and relational connection that had a positive impact on the classroom as a whole.

How Do Teachers Understand Their Professional Roles with Respect to Supporting Students Who Have Experienced Trauma?

It was the finding related to this research question exploring participants' professional roles that was most surprising for me as the researcher. In my ongoing work in children's mental health, I still regularly encounter educators who characterize their roles as solely focused on teaching the curriculum. However, when the study participants were asked how they understood their roles with respect to supporting students with trauma, only one of the participants referenced academic instruction. Instead, most of the participants spoke broadly of their role in terms of emotional support and encouragement. One participant perceived their function in the classroom to be that of a coach while two others identified advocacy as their main objective for students with trauma.

The common perspective for the majority of the participants, however, was that their primary responsibility was to build a trusting, empathic relationship with students. It was through this positive, caring connection that participants learned about their students' lives outside of the classroom, situated students' difficulties within the context of trauma and adversity and responded in ways that met students' needs for emotional safety and acceptance. According to Ryan, the teacher-student relationship was important but as students grew older their needs changed. His viewpoint was that while a positive bond with his students was helpful, most high school students benefited more from a focus on academic support. Ryan stated that for the older students, course completion was the key that opened the door to graduation, thereby increasing chances for employment or other post-secondary options that had the power to change the trajectory of his students' lives.

One participant referenced attachment when describing her relationship with students. Michelle, who has a background in child and youth work, shared that some of her connections to students paralleled the development of an attachment bond. Research clearly supports the positive effect that a compassionate, caring adult can have on a child's disrupted attachment patterns (Brunzell et al., 2016; Morgan et al., 2015). As also discussed in Chapter 2, healthy attachment to their primary caregivers is linked to children's social-emotional well-being and school success (O'Neill et al., 2010). However, not all adult-child relationships are attachment relationships and specific to the school setting, most students would vary in their need for emotional support depending on their personal attachment style (Ainsworth, 1979; Bowlby, 1982). For students with trauma who may have an insecure attachment to their caregivers, a positive and supportive relationship with a teacher is more likely to be characterized as an attachment-like relationship. In these cases, teachers may take on the role of a trusted adult who is emotionally available and appropriately responsive to the needs of their students. Teachers can provide co-regulation of affect, attention and behaviour while supporting and encouraging students to grow academically and socially in a classroom that promotes safety and security (Costa, 2017; O'Neill et al., 2010). More specifically, for students who live in chaotic and dysfunctional home environments, the experience of a healthy, reciprocal relationship with a trusted and reliable teacher can be therapeutic and promote the development of resilience and greater adaptive functioning (Dods, 2013; Perry, 2006; Theron & Engelbrecht, 2013).

In discussions with participants in this study, it appeared that their professional identities as teachers had evolved with experience over time. This finding has support from Morgan et al.'s (2015) study exploring relational pedagogy with marginalized students in

Australia. Researchers reported a change in educators' identities as the teachers gained the recognition that empathy and compassion were vital for engaging students with lived experience of trauma. According to Morgan et al.,

> For educators who are teachers, this requires a shift in identity from primarily being a deliverer of curriculum and attaining measurable outcomes, to being and becoming a person in an authentic relationship with young people as a starting point. It requires high levels of emotional intelligence and self-awareness. (p. 1048).

Similar to teachers in the Australian study, the growth of the participants' professional identities included a willingness to take on responsibilities that involved non-academic support for students. In addition to the focus on the development of a safe, trusting relationship, most participants shared the belief that they had a role in helping easily dysregulated students learn strategies to improve self-regulation. This also involved participants acting as co-regulators by modelling calm affective states in the classroom as well as offering explicit instruction in social-emotional skills to build emotional intelligence and resilience. As discussed previously, most of the participants viewed these tasks as a critical extension of their role as a caring teacher responsible for creating a secure, safe classroom environment.

Lending support to the significant impact of positive teacher-student relationships were the findings of two Ontario studies that explored these key connections from the perspective of students exposed to trauma (Dods, 2013, 2015). In the first study, the students identified four key aspects of teacher-student relationships that addressed their trauma-related social-emotional needs at school. The students reported that the most supportive, attuned relationships were those that were teacher-driven, authentic, and individualized (Dods, 2013).

For these students, it was difficult to initiate and sustain healthy interpersonal connections due to issues of trust and safety. They needed caring, supportive teachers to drive and guide the relationship as well as to understand and anticipate the students' emotional needs. The students indicated that they also required validation and recognition of their uniqueness as individuals apart from their experience of trauma (Dods, 2013).

The findings of the second study by the same author (Dods, 2015), were also seen to mirror those in the first study. For example, in both studies students identified the importance of teacher-driven, caring relationships and the need for schools to prioritize social-emotional support as well as academic learning. While the samples were small with only seven students in total for the two studies, the research findings validated the perceptions of the participants that teachers' non-academic support was a critical factor for student engagement at school (Dods, 2013, 2015). The role of teachers as protective agents in the lives of their students has considerable support in the research literature on resiliency (Henderson, 2013; Masten, 2015; Richardson et al., 2004; Sciaraffa et al., 2018).

As a major influence in the learning environment, teachers play the primary role in the creation of a supportive classroom where students can feel emotionally safe and secure enough to fully engage with others in the learning process. Classrooms led by educators with a holistic approach to teaching are "radical spaces of possibility" according to hooks (1994, p. 12). In a similar vein, McLaren (2003) encouraged teachers to create agendas of possibility that would promote the optimal growth and development of their students. This view of the inherent potential of learning to be transformative and empowering for both teachers and students is a common theme shared by other critical educators including Giroux and Freire. Teaching practices that are sensitive to the needs of students with trauma closely align with

the perspective that classrooms should be sites of ongoing reflection and conscious awareness of the shared voices and unique experiences of all individuals that comprise the school community.

How Do Teachers' Perspectives Regarding Trauma and its Impact on Students Inform their Teaching Practices?

All of the participants reported that their experiences with students exposed to trauma led to transformational changes in their teaching practices over the years. For the teacher participants, their understanding of the prevalence and impact of trauma was fairly recent but helped them make sense of students' difficulties and guided their efforts to provide both academic and social-emotional support. According to Tara, learning about trauma and trauma-informed approaches provided her with the language to describe the work she had been doing with students for most of her career. Tara stated that identifying her teaching practices as sensitive to students' trauma experiences was a means of acknowledging that her actions had a significant impact on the lives of her students that expanded beyond the classroom.

Specific to instruction, participants highlighted the benefit of differentiation and individualized programming for all students in the classroom. The general consensus was that it was important to align academic and behavioural expectations with the abilities of the students, particularly for those who have been affected by trauma. One participant likened being trauma-informed to "reading the room" and understanding the unique needs of each student to prevent problems from occurring or responding more appropriately when challenges did arise. The participants recognized that students' feelings of frustration in the classroom without adequate adult support often resulted in increased stress and emotional

dysregulation leading to students exhibiting the fight, flight or freeze response. They acknowledged that these behaviours could lead to further problems for the student, their peers and the teacher depending on whether the student presented with internalizing or externalizing reactions to stressors in the classroom.

In addition to tailoring instruction to the needs of the students, some of the participants shared the view that a consideration of the disciplinary strategies used in the school setting was also necessary. In classrooms that are not aligned with trauma-informed principles, students can be penalized for behaviours that are actually stress responses to triggers in the environment over which they have limited control. Punishment can lead to students experiencing increased frustration, lowered self-esteem and can result in damage to the relationship between the teacher and the student (O'Neill et al., 2010; Terrasi & Crain de Galarce, 2017). In cases where adults put hands on a student to remove them from an escalating situation or to reduce risk of physical harm, the restraint can actually re-traumatize the student with associated psychological and physiological effects that serve to perpetuate the cycle of trauma. The school setting may then become an additional trauma trigger for some students, leading to an increase in their trauma-related symptoms and behaviours.

While much of the research literature on trauma-informed approaches to school discipline emphasized the benefits of relational and non-punitive methods, participants differed on the extent to which they subscribed to this perspective. They identified a wide variety of classroom management practices that ranged from behaviourally-based level systems and token economies to positive, relationship focused strategies that encompassed active listening, feelings validation and teacher co-regulation. Interestingly, the type of classroom setting within which the participants worked was not a determination in the

disciplinary methods they employed with their students. Several participants teaching in regular school environments endorsed restorative models that promoted relationships and preserved connection to peers and adults while some participants in the intensive, therapeutic classrooms favoured stricter behavioural strategies that could be considered harsher and more punitive.

These differences in educator approaches to discipline may have been a function of a number of factors. First, each participant had a different educational and practical training background and all indicated varied exposure to professional learning focused on classroom management strategies. While overall the participants held favourable attitudes toward trauma-informed principles as evidenced by their scores on the ARTIC scale, shifting pedagogical beliefs specific to classroom discipline may be more difficult. The slightly lower ratings on the self-efficacy and reactions to the work subscales of the ARTIC may have reflected this disconnect between participants' knowledge of trauma and their actions supporting students who are experiencing difficulty in the school setting. Some of the participants may have possessed a broad awareness of the importance of being a trauma-informed educator but lacked the necessary skill set to create a more positive disciplinary program for their classroom that addressed the needs of all students including those affected by trauma.

Even for participants who considered themselves very trauma-informed, there was an acknowledgement that discipline policies and practices were largely determined by their school administration with some allowance for teacher autonomy. In situations where the disciplinary culture in the school was not aligned with trauma-informed principles, participants may have had limited support to implement strategies that they considered to be

more appropriate for their students with trauma. However, all of the participants reported that their teaching practice had evolved as their knowledge related to childhood trauma had increased. In summarizing the ways in which her professional practice was informed by an understanding of trauma, Michelle remarked that much of what she did in the classroom for students with trauma was "just good teaching" as she identified that all of her students benefited from individualized academic programming, social-emotional guidance and a positive, inclusive learning environment. All of the participants acknowledged the potential for trauma-informed practice to foster a safe and supportive school culture that included positive discipline strategies that promoted connection and belonging.

What Supports and/or Resources Do Teachers Identify as Necessary to Becoming Trauma-Informed?

As front-line educators in the classroom, the participants in this study were well positioned to identify both micro and macro systems-level changes needed to support their daily work with students affected by trauma. Among those interviewed, three broad areas were highlighted and discussed.

First and foremost, all of the participants identified that a shift in educational priorities was fundamental to the adoption of trauma-informed policies and practices in school settings. According to the teacher participants, placing students' social-emotional learning on an equal footing with academic achievement was key to recognizing the importance of considering all aspects of students' development as factors relevant to school success. Similarly, Parr and Richardson (2005/2006) argued that schools have the responsibility to,

equip and empower students to deal with the life circumstances and stresses that they

are faced with in school, home, community, and beyond…if [schools] can better meet

and address students' needs for safety, security, acceptance, and belonging…they will

be better positioned to focus their attention and efforts on the academic demands that

school presents. (p. 96).

Participants shared their perceptions that a more holistic approach to teaching, guided and

supported their efforts to address the unique needs of students exposed to trauma. From my

perspective and that of most of the participants, the increased focus on student mental health

in Ontario over the past few years has been a significant first step towards this promising and

overdue change in education. Ministry of Education initiatives focused on mental health

literacy for both staff and students and school-based intervention programs provide evidence

that consideration of students' psychosocial growth in addition to academic performance is

becoming more widespread among educators. However, all participants stressed that there is

considerable room for growth and improvement in the manner in which school districts

respond to students' non-academic needs.

Second, all of the participants expressed their belief that school boards should

establish ongoing professional learning opportunities related to trauma awareness and the

appropriate provision of support for students affected by trauma. The general consensus was

that staff working in schools needed to understand that childhood trauma was a common

experience with the potential to negatively impact students' cognitive, social, and emotional

functioning. In addition to this knowledge, participants shared that teachers should receive

training specific to instructional and disciplinary practices that were sensitive to the needs of

students who have been exposed to trauma. Participants also referenced the importance of

teachers having the understanding that student trauma and their subsequent difficulties could have a considerable effect on teachers' personal and professional experiences working in classrooms. Research on work stress in the teaching profession indicates that the most frequently cited contributors to teacher burnout and compassion fatigue were inadequate support in the school, difficulty managing student behaviours and failing to meet the learning needs of students (Roeser et al., 2013; Santoro, 2018). Despite common challenges associated with classroom management, participants reported that their trauma-informed knowledge helped them understand and respond more sensitively to students' difficulties. It appeared that this shift in perspective and practice led to greater self-efficacy and lowered stress levels even in the face of disruptive behaviours in the classroom. While most of the participants in this study stated that their jobs could be stressful and emotionally taxing at times, they also expressed feeling very supported by work colleagues in their schools and highlighted this sense of teamwork as a crucial factor that increased job satisfaction.

The participants' responses aligned with the cited research on burnout with respect to the noted difficulties meeting all of the learning needs of their students. Teacher participants in the study viewed this problem through the lens of the broader systemic focus on academic learning at the expense of addressing students' non-cognitive needs. Several participants reported feeling optimistic that educational priorities were changing. They believed that, not only were educators and policy-makers becoming increasingly aware of the extent to which learning was compromised by students' adverse experiences and mental health related difficulties, but also the broader impact of students' difficulties on teachers' stress and job satisfaction.

Implications of the Study

The findings from this research study have a number of implications for educators across the province of Ontario. With the increased emphasis on student mental health and wellness, school districts are having to consider how best to meet the diverse needs of students including those who have experienced trauma and adversity. Trauma-informed education falls within broader initiatives focused on mental health literacy and school-based mental health programs such as those identified in Open Minds, Healthy Minds (Government of Ontario, 2014). In this strategic document, the 10-year provincial plan to improve mental health and addictions services is outlined and includes building school capacity for prevention, early intervention and service delivery of mental health programming. These changes may have a significant impact on educator roles and the ways in which school systems provide both academic and non-academic support for their students. For example, efforts to align school policies and practices with trauma-informed principles requires considerable planning, resources and training for all school staff as well as ongoing monitoring of student outcomes and teacher feedback.

In my professional experience, most projects focused on the enhancement of student well-being related to mental health literacy and social-emotional skill development training. While both are valuable tools that can increase teachers' knowledge and skill set, they often involve documents and manualized programs (e.g., SEL curricula) that teachers use in their classrooms. Mental health literacy and SEL are important components of a trauma-informed approach, however, trauma-informed education entails a much broader student-centred philosophy that guides the teaching attitudes and practices within the school. Even school districts with limited available resources including staffing and funding for SEL programs

can benefit from a sustained focus on the development of positive, supportive teacher-student relationships and the creation of safe, engaging classroom environments that underpin trauma-informed school initiatives. Small incremental shifts in teachers' responses to students' needs can have a significant impact on student well-being and academic achievement.

As Ryan highlighted in his interview, more teachers and school administrators would benefit from an understanding that learning in and of itself can be healing. This concept of the transformative potential of education also has support in the research on childhood trauma and neuroscience that highlights the significant impact of positive learning experiences on students' mental and physical health (Perry, 2006; Terrasi & Crain de Galarce, 2017; Willis & Nagle, 2015). According to van der Kolk (2014),

> The greatest hope for traumatized, abused and neglected children is to receive a good education in schools where they are seen and known, where they learn to regulate themselves and where they can develop a sense of agency. At their best schools can function as islands of safety in a chaotic world….[and] play a significant role in instilling the resilience necessary to deal with the trauma of neighbourhoods and families. (p. 351).

The final implication of this study relates to the impact of the experience on teachers who work closely with students exposed to trauma. As a helping profession, teaching draws caring individuals interested in making a difference in the lives of children and youth. Research on teacher job satisfaction suggests that highly empathic individuals lacking social support and adequate coping strategies may be at increased risk of experiencing burnout regardless of the nature of the stressor (Maslach et al., 2001; Santoro, 2018). Given estimated

teacher attrition rates in Canada of up to 30% within the first five years of employment, the additional stress of working with students with trauma should be a matter of serious concern for school administrators and educational policy-makers (Kutsyuruba, Godden, & Tregunna, 2013). While all of the participants considered themselves trauma-informed to some extent, they identified that additional learning opportunities and school resources including educational and mental health supports would be highly beneficial for ongoing professional development and job effectiveness.

The majority of the participants also acknowledged that the process of becoming trauma-informed was not without associated challenges. For example, in some school districts, trauma-informed shifts in teaching and discipline practices could require a significant change that may place additional demands on an already overwhelmed staff population. It is imperative that school administrators recognize the need for ongoing teacher support including the promotion of positive and supportive social connections within the school and a commitment to staff mental health and well-being. As participants in this study pointed out, an understanding and helpful staff culture can be a buffer against stress-related job difficulties.

Among all participants interviewed, there was consensus that a trauma-informed whole-school approach had the potential to address the needs of students affected by trauma, reduce teachers' stress and help create a positive school climate that improved job satisfaction. As important partners in education, teachers play a key role in the successful implementation and sustainability of school practices that support students' academic and social-emotional well-being. While the knowledge shared by the participants in this study reflected their own personal opinions and experiences, their informed perspectives may also

be of added value for the professional growth and learning of other educators, administrators and policy-makers.

Recommendations

Given that trauma-informed education is a rapidly growing area of interest for educators, there is a need to expand the scope of empirical literature to inform and guide system-wide change efforts in school districts across Ontario. In the following section, I outline two broad recommendations that have both practical and research application for teachers and school districts that may be interested in learning more about trauma-informed education: 1) ongoing provision of relevant professional learning and 2) further research into trauma-informed policies and practices: a) research with the ARTIC scale, and b) research involving teachers, administrators and policy-makers.

Relevant Professional Learning

While many teachers are willing to provide non-academic support to students with trauma and other related mental health challenges, many do not feel competent supporting the complex emotional and behavioural needs of this vulnerable student population (Baweja et al., 2016; Record-Lemon & Buchanan, 2017; Reinke et al., 2011). Even though the participants in this study had a broad range of teaching experience in different educational settings, all affirmed the value of a trauma-informed approach and identified the need for ongoing professional learning for educators at all points in their careers. Incorporating information on teaching students who have experienced childhood trauma into broader school mental health training initiatives (both pre-service and in-service) is recommended regardless of whether the school administration has prioritized this component of student support.

Further Research

Trauma-informed education is a relatively new initiative in Ontario that requires further study to better inform planning and implementation for interested school districts. Based on the findings of this study, two key areas of further research are recommended:

Research with the ARTIC scale. As reported by Baker et al. (2016), research on trauma-informed care in educational and other human service settings is impeded by a lack of a shared language and consensus on what it means to be trauma-informed. Their development of the ARTIC scale was in response to this need for systems-wide agreement on a common measure for assessing attitudes favourable to trauma-informed principles and practices. My experience using this instrument in the study and feedback from the teacher participants was that it was relatively easy to understand and administer and would be cost-effective for larger projects. The longer version of the scale, the ARTIC-45, also includes supplementary scales that provide a measurement of two factors relevant to personal and institutional support for the implementation of trauma-informed practices (Baker et al., 2016). Given that the ARTIC was tested on an initial sample population of 765 human service professionals including 165 educators, additional research across a wider range of teaching populations and for diverse uses in education is recommended. Potential uses of the ARTIC are numerous, including as a baseline measure from which to assess changes in trauma-informed attitudes and ongoing evaluation of trauma-informed programs and practices. Further research with the ARTIC scale will provide further validation of its psychometric properties thus making it more acceptable for interested school administrators and policy-makers responsible for data-driven decision-making.

Research involving teachers, administrators and policy-makers. Teachers spend most of their day working closely with students in the classroom. As such, it is important to understand their perspectives to ensure teacher engagement and support for new programs and services within their schools and respective school districts. Research investigating the implementation of established trauma-informed school frameworks such as Calmer Classrooms (Downey, 2007), Helping Traumatized Children Learn (Cole et al., 2005) and the Heart of Learning and Teaching: Compassion, Resiliency and Academic Success (Wolpow et al., 2011) would be beneficial. Whether administrators are in the planning stage or have begun the process of adopting trauma-informed approaches, teachers' voices are necessary to provide front-line feedback on educational policies and practices that affect their work and the school experiences of their students. It is therefore recommended that research studies exploring trauma-informed education broaden the sample of educators to include participants working in different classroom settings and with diverse student populations. Inquiry that expands the sample of teachers will ensure that varying perspectives on issues related to trauma-informed education are included in the empirical literature that informs and guides school planning. Finally, there would also be added value in studying the influence of teachers' own demographic and personal variables (including trauma history) on those teachers' experiences working with students with trauma.

In addition to an understanding of teachers' lived realities, it is important to consider the perspectives of administrators and policy-makers as they relate to trauma-informed planning and implementation processes. Participants in this study highlighted the need for system-wide collaboration and support that includes ongoing training and the allocation of resources needed to sustain trauma-informed initiatives. It is therefore recommended that the

scope of trauma-informed educational research include explorations of the perspectives of other key stakeholders who play a role in school reform focused on improving student mental health and well-being.

Summary

As discussed throughout the current study, the research on trauma-informed education is somewhat limited, particularly in locations across Canada, including Ontario. Further investigation of professional learning and implementation processes, psychometric instruments such as the ARTIC scale, and teacher, administrator and policy-makers' perspectives are warranted to ensure that current and future initiatives are informed by the latest research on best practices. In addition, the inclusion of both quantitative and qualitative research is recommended to ensure that policy and planning decisions are guided by a thorough and comprehensive understanding of relevant issues related to trauma-informed education.

Concluding Thoughts

The increased attention on student mental health is timely and appropriate given the considerable research evidence of the prevalence of child and youth mental health issues and the resultant risk to health and well-being across the lifespan. As a researcher with a background in education and mental health, much of my professional work has focused on childhood trauma and the impact of adverse experiences on children's functioning across a number of domains. My interest in trauma-informed education aligns with my professional and personal perspectives on the potential for learning to be transformative and healing as well as my orientation towards critical discourse and social justice.

Given that trauma-informed care is a relatively new undertaking as applied to education, more specifically in Ontario, I wanted to ensure that teachers' perspectives were acknowledged and included in discussions regarding trauma-informed policies and practices. My choice of a qualitative dominant mixed methodology for the research was based on the desire to hear teachers' voices and witness the compelling stories of their work with students exposed to trauma. Each time I engaged with the stories of the participants through revisiting the readings, analysis and interpretation of the data, I gained a deeper understanding and appreciation for their lived realities. My experience connecting with the research paralleled the importance of participants' connections with their students as a means of acknowledging the complexities of their students' lives. This process of reflecting on the participants' stories made me realize the full value of qualitative research and the importance of exploring their experiences as a means of co-constructing knowledge.

As caring adults, teachers benefit from understanding (as best they can) the complicated and multi-layered stories of their students. Not necessarily the details, which can be both heartbreaking and inspiring, but the influence of students' lived realities and how that informs the way in which teachers can provide support and promote resilience. The teachers who joined me on this research journey clearly understood the potential for learning to be transformative and therapeutic and they work to create spaces of possibility for their students every day. I want to express my sincere gratitude to Jeremy, Anna, Kyla, Lori, Ryan, Michelle, Robyn and Tara for sharing the wisdom of practice in their own personal stories. It is my hope that this study is a small step towards further trauma-informed educational research that promotes greater understanding and appreciation for the importance of connection and the power of learning to positively influence lives.

References

Adams, R. E., Boscarino, J. A., & Figley, C. R. (2006). Compassion fatigue and

    psychological distress among social workers: A validation study. *American Journal*

    of Orthopsychiatry, 76(1), 103-108. doi:10.1037/0002-9432.76.1.103

Afifi, T. O., MacMillan, H. L., Boyle, M., Cheung, K., Taillieu, T., Turner, S., & Sareen, J.

    (2016). Child abuse and physical health in adulthood. *Health Reports, 27*(3), 10-18.

    Retrieved from https://www150.statcan.gc.ca/n1/pub/82-003-

    x/2016003/article/14339-eng.pdf

Afifi, T. O., MacMillan, H. L., Boyle, M., Taillieu, T., Cheung, K., & Sareen, J. (2014).

    Child abuse and mental health disorders in Canada. *Canadian Medical Association*

    Journal, 186(9), e324-e332. doi:10.1503/cmaj/131792

Ainsworth, M. D. (1979). Infant-mother attachment. *The American Psychologist, 34*(10),

    932-937. doi:10.1037/0003-066X.34.10.932

Alisic, E. (2012). Teachers' perspectives on providing support to children after trauma: A

    qualitative study. *School Psychology Quarterly, 27*(1), 51-59. doi:10.1037/a0028590

Alisic, E., Bus, M., Dulack, W., Pennings, L., & Splinter, J. (2012). Teachers' experiences

    supporting children after traumatic exposure. *Journal of Traumatic Stress, 25*(1), 98-

    101. doi:10.1002/jts.20709

Baker, C. N., Brown, S. M., Wilcox, P. D., Overstreet, S., & Arora, P. (2016). Development

    and psychometric evaluation of the Attitudes Related to Trauma-Informed Care

    (ARTIC) Scale. *School Mental Health, 8*(1), 61-76. doi:10.1007/s123110-015-9161-0

Barrera, M., Calderon, L., & Bell, V. (2013). The cognitive impact of sexual abuse and

PTSD in children: A neuropsychological study. *Journal of Child Sexual Abuse, 22*(6),

625-638. doi:10.1080/10538712.2013.811141

Baweja, S., DeCarlo Santiago, C., Vona, P., Pears, G., Langley, A., & Kataoka, S. (2016).

Improving implementation of a school-based program for traumatized students:

Identifying factors that promote teacher support and collaboration. *School Mental

Health, 8*(1), 120-131. doi:10.1007/s12310-015-9170-z

Benard, B. (2007). The foundations of the resiliency paradigm. In N. Henderson (Ed.),

*Resiliency in action: Practical ideas for overcoming risks and building strengths in

youth, families and communities* (pp. 3-7). Ojai, CA: Resiliency In Action.

Bergin, C., & Bergin, D. (2009). Attachment in the classroom. *Educational Psychology

Review, 21*(2), 141-170. doi:10.1007/s10648-009-9104-0

Blodgett, C., & Lanigan, J. D. (2018). The association between adverse childhood experience

(ACE) and school success in elementary school children. *School Psychology

Quarterly, 33*(1), 137-146. doi:10.1037/spq/0000256

Boles, J. (2017). Trauma-informed care: An intentional approach. *Pediatric Nursing, 43*(5),

250-255.

Bowlby, J. (1982). *Attachment: Attachment and loss* (2nd ed.). New York, NY: Basic Books.

Boyatzis, R. E. (1998). *Transforming qualitative information: Thematic analysis and code

development.* Thousand Oaks, CA: SAGE Publications.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research

in Psychology, 3*(2), 77-101. doi:10.1191/1478088706qp063oa

Bride, B. E., Radey, M., & Figley, C. R. (2007). Measuring compassion fatigue. *Clinical Social Work Journal, 35*(3), 155-163. doi:10.1007/s10615-007-0091-7

Brinkmann, S. (2016). Methodological breaching experiments: Steps toward theorizing the qualitative interview. *Culture & Psychology, 22*(4), 520-533. doi:10.1177/1354067X16650816

Brooks, J. E. (2006). Strengthening resilience in children and youths: Maximizing opportunities through the schools. *Children & Schools, 28*(2), 69-76. doi:10.1093/cs/28.2.69

Brown, D. W., Anda, R. F., Felitti, V. J., Edwards, V. J., Malarcher, A., Croft, J. B., & Giles, W. H. (2010). Adverse childhood experiences are associated with the risk of lung cancer: A prospective cohort study. *BMC Public Health, 10*, 20-27. doi:10.1186/1471-2458-10-20

Brown, M. J., Thacker, L. R., & Cohen, S. A. (2014). Association between adverse childhood experiences and diagnosis of cancer. *PLoS One, 8*(6), e6554. doi: 10.1371/journal.pone.0065524

Brunzell, T., Stokes, H., & Waters, L. (2016). Trauma-informed flexible learning: Classrooms that strengthen regulatory capacities. *International Journal of Child, Youth and Family Studies, 7*(2), 218-239. doi:10.18357/ijcyfs72201615719

Brydon-Miller, M. (2009). Covenantal ethics and action research: Exploring a common foundation for social research. In D. Mertens & P. Ginsberg (Eds.), *Handbook of social research ethics* (pp. 243-258). Thousand Oaks, CA: SAGE Publications.

Burke, N. J., Hellman, J. L., Scott, B. G., Weems, C. F., & Carrion, V. G. (2011). The impact

of adverse childhood experiences on an urban pediatric population. *Child Abuse &*

Neglect, 35(6), 408-413. doi:10.1016/j.chiabu.2011.02.006

Cairney, J., Gandhi, S., Guttman, A., Iron, K., Khan, S., Kurdyak, P.,…Yang, J. (2015). *The*

mental health of children and youth in Ontario: A baseline scorecard. Retrieved from

Institute for Clinical Evaluative Sciences website:

https://www.ices.on.ca/Publications/Atlases-and-Reports/2015/Mental-Health-of-

Children-and-Youth

Cavanaugh, B. (2016). Trauma-informed classrooms and schools. *Beyond Behavior, 25*(2),

41-46. doi:10.1177/10742956160250026

Chafouleas, S. M., Johnson, A. H., Overstreet, S., & Santos, N. M. (2016). Toward a

blueprint for trauma-informed service delivery in schools. *School Mental Health,*

8(1), 144-162. doi:10.1007/s12310-015-9166-8

Chafouleas, S. M., Koriakin, T. A., Roundfield, K. D., & Overstreet, S. (2018). Addressing

childhood trauma in school settings: A framework for evidence-based practice.

School Mental Health. doi:10.1007/s12310-018-9256-5

Chapman, D. P., Dube, S. R., & Anda, R. F. (2007). Adverse childhood events as risk factors

for negative mental health outcomes. *Psychiatric Annals, 37*(5), 359-364.

Chapman, D. P., Whitfield, C. L., Felitti, V. J., Dube, S. R., Edwards, V. J., & Anda, R. F.

(2004). Adverse childhood experiences and the risk of depressive disorders in

adulthood. *Journal of Affective Disorders, 82*(2), 217-225.

doi:10.1016/j.jad.2003.12.013

Christ, T. W. (2013). The worldview matrix as a strategy when designing mixed methods

research. *International Journal of Multiple Research Approaches, 7*(1), 110-118.

doi:10.5172/mra.2013.7.1.110

Clarke, V., & Braun, V. (2017). Thematic analysis. *Journal of Positive Psychology, 12*(3),

297-298. doi:10.1080.17439760.2016.1262613

Cobb, P. (1994). Where is the mind? Constructivist and sociocultural perspectives on

mathematical development. *Educational Researcher, 23*(7), 13-20.

doi:10.3102/0013189X023007013

Cole, S. F., Greenwald O'Brien, J., Geron Gadd, M., Ristuccia, J., Luray Wallace, D., &

Gregory, M. (2005). *Helping traumatized children learn: Supportive school*

environments for children traumatized by family violence. Retrieved from

Massachusetts Advocates for Children: Trauma and Learning Policy Initiative

website: https://www.traumasensitiveschools.org

Collins, K. M. T. (2010). Advanced sampling designs in mixed research: Current practices

and emerging trends in the social and behavioural sciences. In A. Tashakkori & C.

Teddlie (Eds.), *The SAGE handbook of mixed methods in social & behavioural*

research (2nd ed., pp. 353-378). Thousand Oaks, CA: SAGE Publications.

Costa, D. A. (2017). Transforming traumatised children within NSW Department of

Education schools: One school counsellor's model for practise-REWIRE. *Children*

Australia, 42(2), 113-126. doi:10.1017/cha.2017.14

Crandall, J., & Kutz, S. (2011). Ranking and sorting and labelling: Driving Aboriginal

students out of schools. *Our Schools/Our Selves, 21*(1), 57-65.

Creswell, J. W. (2014). *Research design: Qualitative, quantitative and mixed methods approaches* (4th ed.). Thousand Oaks, CA: SAGE Publications.

Creswell, J. W., & Plano Clark, V. L. (2007). *Designing and conducting mixed methods research*. Thousand Oaks, CA: SAGE Publications.

Crosby, S. D. (2015). An ecological perspective on emerging trauma-informed teaching practices. *Children & Schools, 37*(4), 223-230. doi:10.1093/cs/cdv027

Crouch, E., Strompolis, M., Radcliff, E., & Srivastav, A. (2018). Examining exposure to adverse childhood experiences and later outcomes of poor physical and mental health among South Carolina adults. *Children and Youth Services Review, 84*, 193-197. doi:10.1016/j.childyouth.2017.11.031

Darney, D., Reinke, W. M., Herman, K. C., Stormont, M., & Ialongo, N. S. (2013). Children with co-occurring academic and behavior problems in first grade: Distal outcomes in twelfth grade. *Journal of School Psychology, 51*(1), 117-128. doi:10.1016/j.jsp.2012.09.005

Davis, A. S., Moss, L. E., Nogin, M. M., & Webb, N. E. (2015). Neuropsychology of child mistreatment and implications for school psychologists. *Psychology in the Schools, 52*(1), 77-91. doi:10.1002/pits.21806

De Bellis, M. D., Woolley, D. P., & Hooper, S. R. (2013). Neuropsychological findings in pediatric maltreatment: Relationship of PTSD, dissociative symptoms, and abuse/neglect indices to neurocognitive outcomes. *Child Maltreatment, 18*(3), 171-183. doi:10.1177/1077559513497420

De Bellis, M. D., & Zisk, A. (2014). The biological effects of childhood trauma. *Child and Adolescent Psychiatric Clinics of North America, 23*(2), 185-222. doi:10.1016/j.chc.2014.01.002

Denzin, N. K. (2001). The reflexive interview and a performative social science. *Qualitative Research, 1*(1), 23-46. doi:10.1077/146879410100100102

Denzin, N. K., & Lincoln, Y. S. (Eds.). (2005). *The SAGE handbook of qualitative research* (3rd ed.). Thousand Oaks, CA: SAGE Publications.

Dewey, J. (1938). *Experience and education*. New York, NY: Simon & Schuster.

Dewey, J. (1944). *Democracy in education: An introduction to the philosophy of education*. New York, NY: The Free Press.

Dods, J. (2013). Enhancing understanding of the nature of supportive school-based relationships for youth who have experienced trauma. *Canadian Journal of Education, 36*(1), 71-95. Retrieved from https://eric.ed.gov/?id=EJ1002308

Dods, J. (2015). Bringing trauma to school: Sharing the educational experiences of three youths. *Exceptionality Education International, 25*(1), 112-135. Retrieved from http//ir.lib.uwo.a/eei/vol25/iss1/6

Dorado, J. S., Martinez, M., McArthur, L. E., & Leibovitz, T. (2016). Healthy environments and response to trauma in schools (HEARTS): A whole-school, multi-level, prevention and intervention program for creating trauma-informed, safe and supportive schools. *School Mental Health, 8*(1), 163-176. doi:10.1007/s12310-016-9177-0

Downey, L. (2007). *Calmer classrooms: A guide to working with traumatised children*. Melbourne, QLD: Child Safety Commission. Retrieved from http://www.education.qld/gov/au/schools/healthy/pdfs/calmer-classrooms-guide.pdf

Dube, S. R., Anda, R. F., Felitti, V. J., Chapman, D., Williamson, D. F., & Giles, W. H. (2001). Childhood abuse, household dysfunction and the risk of attempted suicide throughout the life span: Findings from the Childhood Adverse experiences Study. *JAMA, 286*(24), 3089-3096. Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/11754674

Dube, S. R., Fairweather, D., Pearson, W. S., Felitti, V. J., Anda, R. F., & Croft, J. B. (2009). Cumulative childhood stress and autoimmune diseases in adults. *Psychosomatic Medicine, 71*(2), 243-250. doi:10.1097/PSY.0b013e3181907888

Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D., & Schellinger, K. B. (2011). The impact of enhancing students' social and emotional development: A meta-analysis of school-based universal interventions. *Child Development, 82*(1), 405-432. doi:10.1111/j.1467-8624.2010.01564.x

Dye, H. (2018). The impact and long-term effects of childhood trauma. *Journal of Human Behavior in the Social Environment, 28*(3), 381-392. doi:10.1080/10911359.2018.1435328

Edwards, V. J., Holden, G. W., Felitti, V. J., & Anda, R. F. (2003). Relationship between multiple forms of childhood maltreatment and adult mental health in community respondents: Results from the Adverse Childhood Experiences Study. *American Journal of Psychiatry, 160*(8), 1453-1460. doi:10.1176/appi.ajp.160.8.1453

Enoch, M. A. (2011). The role of early life stress as a predictor for alcohol and drug

dependence. *Psychopharmacology, 214*(1), 17-31. doi:10.1007/s00213-010-1916-6

Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V.

J.,…Marks, J. S. (1998). Relationship of childhood abuse and household dysfunction

to many of the leading causes of death in adults: The Adverse Childhood Experiences

(ACE) Study. *American Journal of Preventative Medicine, 14*(4), 245-258.

doi:10.1016/S0749-3797(98)00017-8

Flyvbjerg, B. (2001). *Making social science matter: Why social inquiry fails and how it can

succeed again*. New York, NY: Cambridge University Press.

Flyvbjerg, B. (2011). Case study. In N. K. Denzin & Y. S. Lincoln (Eds.), *The SAGE

handbook of qualitative research* (4th ed., pp. 301-316). Thousand Oaks, CA: SAGE

Publications.

Fox, R. (2001). Constructivism examined. *Oxford Review of Education, 27*(1), 23-35.

doi:10.1080/03054980125310

Franklin, C. G., Kim, J. S., Ryan, T. N., Kelly, M. S., & Montgomery, K. L. (2012). Teacher

involvement in school mental health interventions: A systematic review. *Children

and Youth Services Review, 34*(5), 973-982. doi:10.1016/j.childyouth.2012.01.027

Freire, P. (1970). *Pedagogy of the oppressed*. New York, NY: Continuum.

Freire, P. (2000). *Pedagogy of freedom: Ethics, democracy and civic courage*. Lanham, MD:

Rowman & Littlefield.

Fylan, F. (2005). Semi-structured interviewing. In J. Miles & P. Gilbert (Eds.), *A handbook

of research methods for clinical and health psychology* (pp. 65-78). New York, NY:

Oxford University Press.

Garmezy, N. (1991). Resiliency and vulnerability to adverse developmental outcomes associated with poverty. *American Behavioral Scientist, 34*(4), 416-430. doi:10.1177/0002764291034004003

Garmezy, N. (1993). Children in poverty: Resilience despite risk. *Psychiatry, 56*(1), 127-136. doi:10.1080/00332747.1993.11024627

Gilbert, L. K., Brieding, M. J., Merrick, M. T., Thompson, W. W., Ford, D. C., Dhingra, S. S., & Parks, S. E. (2015). Childhood adversity and adult chronic disease: An update from ten states and the District of Columbia, 2010. *American Journal of Preventative Medicine, 48*(3), 345-349. doi:10.1016/j.amepre.2014.09.006

Giroux, H. A. (1983). *Theory and resistance in education: A pedagogy for the opposition*. New York, NY: Bergin & Garvey.

Giroux, H. A. (2016, March 01). Beyond pedagogies of oppression. *Monthly Review* [online magazine]. Retrieved from https://monthlyreview.org/2016/03/01/beyond-pedagogies-of-repression

Government of Ontario. (2014). *Open minds, healthy minds: Ontario comprehensive mental health and addictions strategy*. Retrieved from http://health.gov.on.ca/public/programs/mentalhealth/expanded_strategy.aspxi

Greene, J. C., Caracelli, V. J., & Graham, W. F. (1989). Toward a conceptual framework for mixed-method evaluation designs. *Educational Evaluation and Policy Analysis, 11*(3), 255-274. doi:10.2307/1163620

Greene, J. C., & Hall, J. N. (2010). Dialectics and pragmatism: Being of consequence. In A. Tashakkori & C. Teddlie (Eds.), *The SAGE handbook of mixed methods in social and behavioral research* (2nd ed., pp. 119-143). Thousand Oaks, CA: SAGE Publications.

Harvard Center on the Developing Child, National Scientific Council on the Developing Child Working Paper 3. (2014). *Excessive stress disrupts the architecture of the developing brain*. Retrieved from https://developingchild.harvard.edu/wp-content/uploads/2005/05/Stress_Disrupts_Architecture_Developing_Brain-1.pdf

Harvard Center on the Developing Child. (2015). *Resilience*. Retrieved from https://developingchild.harvard.edu/wp-content/uploads/2015/05/The-Science-of-Resilience.pdf

Henderson, N. (2013). Resilience in schools and curriculum design. In M. Ungar (Ed.), *The social ecology of resilience: A handbook of theory and practice* (pp. 297-306). New York, NY: Springer.

Hooks, b. (1994). *Teaching to transgress: Education as the practice of freedom*. New York, NY: Routledge.

Hughes, K., Bellis, M. A., Hardcastle, K. A., Sethi, D., Butchart, A., Mikton, C.,…Dunne, M. P. (2017). The effect of multiple adverse childhood experiences on health: A systematic review and meta-analysis. *The Lancet Public Health, 2*(8), e356-e366. doi:10.1016/S2468-2667(17)30118-4

Jacob, S. A., & Furgerson, S. P. (2012). Writing interview protocols and conducting interviews: Tips for students new to the field of qualitative research. *The Qualitative Report, 17*(42), 1-10. T & L Article 6. Retrieved from http://nsuworks.nova.edu/tqr/vol17/iss42/3

Johnson, R. B., Onwuegbuzie, A. J., & Turner, L. A. (2007). Toward a definition of mixed methods research. *Journal of Mixed Methods Research, 1*(2), 112-133. doi:10.1177.1558689806298224

Kavanaugh, B. C., Dupont-Frechette, J. A., Jerskey, B. A., & Holler, K. A. (2017).

Neurocognitive deficits in children and adolescents following maltreatment:

Neurodevelopmental consequences and neuropsychological implications of traumatic

stress. *Applied Neuropsychology: Child, 6*(1), 64-78.

doi:10.1080/21622965.2015.1079712

Kavanaugh, B., & Holler, K. (2014). Brief report: Neurocognitive functioning in adolescents

following childhood maltreatment and evidence for underlying planning and

organizational deficits. *Child Neuropsychology, 21*(6), 840-848.

doi:10.1080/09297049.2014.929101

Kincheloe, J. L. (2001). Describing the bricolage: Conceptualizing a new rigour in qualitative

research. *Qualitative Inquiry, 7*(6), 679-692. doi:10.1177/107780040100700601

Kincheloe, J. L. (2004). *Critical pedagogy primer*. New York, NY: Peter Lang Publishing.

Kirke-Smith, M., Henry, L., & Messer, D. (2014). Executive functioning: Developmental

consequences on adolescents with histories of maltreatment. *British Journal of

Developmental Psychology, 32*(3), 305-319. doi:10.1111/bjdp.12041

Kohn, A. (2010). Debunking the case for national standards: One-size-fits-all mandate and

their dangers. *Education Week, 29*(17), 28-30.

Kutsyuruba, B., Godden, L., & Tregunna, L. (2013). *Early-career teacher attrition and

retention: A pan-Canadian document and analysis of teacher induction and

mentorship programs* (Final Report). Kingston, ON: Queens University. Retrieved

from

https://educ.queensu.ca/sites/webpublish.queensu.ca.educwww/files/files/People/Facu

lty/Kutsyuruba%20-%20Pan-Canadian%20Document%20Analysis.pdf

Langley, A., DeCarlo Santiago, C., Rodriguez, A., & Zelaya, J. (2013). Improving

implementation of mental health services for trauma in multicultural elementary

schools: Stakeholder perspectives on parent and educator engagement. *Journal of

Behavioral Health Services & Research, 40*(3), 247-262. doi:10.1007/s11414-013-

9330-6

Langley, A. K., Nadeem, E., Kataoka, S. H., Stein, B. D., & Jaycox, L. H. (2010). Evidence-

based mental health programs in schools: Barriers and facilitators of successful

implementation. *School Mental Health, 2*(3), 105-113. doi:10.1007/s12310-010-

9038-1

Larkin, H., Felitti, V. J., & Anda, R. F. (2014). Social work and adverse childhood

experiences research: Implications for practice and health policy. *Social Work in

Public Health, 29*(1), 1-16. doi:10.1080/19371918.2011.619433

Lincoln, Y. S., Lynham, S. A., & Guba, E. G. (2011). Paradigmatic controversies,

contradictions, and emerging confluences, revisited. In N. K. Denzin & Y. S. Lincoln

(Eds.), *The SAGE handbook of qualitative research* (4th ed., pp. 97-128). Thousand

Oaks, CA: SAGE Publications.

Lingard, B., & Gale, T. (2010). Defining educational research: A perspective of/on

presidential addresses and the Australian Association for Research in Education. *The

Australian Educational Researcher, 37*(1), 21-49. doi:10.1007/BF03216912

Little, S. G., & Akin-Little, A. (2013). Trauma in children: A call to action in school

psychology. *Journal of Applied School Psychology, 29*(4), 375-388.

doi:10.1080/15377903.2012.695769

Lourenco, O. (2012). Piaget and Vygotsky: Many resemblances, and a crucial difference. *New Ideas in Psychology, 30*(3), 281-195. doi:10.1016/j.newideaspsych.2011.12.006

Ludy-Dobson, C.R., & Perry, B. D. (2010). The role of healthy relational interactions in buffering the impact of childhood trauma. In E. Gil (Ed.), *Working with children to heal interpersonal trauma: The power of play* (pp. 26-43). New York, NY: Guildford Press.

Luthar, S. S., Cicchetti, D., & Becker, B. (2000). The construct of resilience: A critical evaluation and guidelines for future work. *Child Development, 71*(3), 543-562. doi:10.1111/1467-8624.00164

MacNevin, J. (2012). Learning the way: Teaching and learning with and for youth from refugee backgrounds on Prince Edward Island. *Canadian Journal of Education, 35*(3), 48-63.

Malterud, K., Siersma, V. D., & Guassora, A. D. (2016). Sample size in qualitative interview studies: Guided by information power. *Qualitative Health Research, 26*(13), 1753-1760. doi:10.1177/1049732315617444

Marvin, A. F., & Volino Robinson, A. (2018). Implementing trauma-informed care at a non-profit human service agency in Alaska: Assessing knowledge, attitudes, and readiness for change. *Journal of Evidence-Informed Social Work, 15*(5), 550-563. doi:10.1080/23761407.2018.1489324

Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. *Annual Review of Psychology, 52*(1), 397-422. doi: 10.1146/annurev.psych.52.1.397

Maslow, A. H. (1968). *Toward a psychology of being* (2nd ed.). New York, NY: Litton Educational Publishing.

Masten, A. S. (2015). *Ordinary magic: Resilience in development*. New York, NY: Guildford Press.

Masten, A. S., Best, K. M., & Garmezy, N. (1990). Resilience and development: Contributions from the study of children who overcome adversity. *Development and Psychopathology, 2*(4), 425-444. doi:10.1017/S0954579400005812

McCann, I. L., & Pearlman, L. A. (1990). Vicarious traumatization: A framework for understanding the psychological effects of working with victims. *Journal of Traumatic Stress, 3*(1), 131-149. doi:10.1002/jts.2490030110

McDonald, S., Kingston, D., Bayrampour, H., & Tough, S. (2015). Adverse childhood experiences in Alberta, Canada: A population-based study. *Medical Research Archives, 3*. Retrieved from https//journals.ke-i.org/index.php/mra/article/view/142

McIntosh, M. J., & Morse, J. M. (2015). Situating and constructing diversity in semi-structured interviews. *Global Qualitative Nursing Research, 2*, 1-12. doi:10.1172/2333393615597674

McLaren, P. (2003). *Life in schools: An introduction to critical pedagogy in the foundations of education* (4th ed.). New York, NY: Pearson Education.

McLaughlin, K. A., Koenen, K. C., Hill, E. D., Petukhova, M., Sampson, N. A., Zaslavsky, A. M., & Kessler, R. C. (2013). Traumatic event exposure and post-traumatic stress disorder in a national sample of adolescents. *Journal of the American Academy of Child and Adolescent Psychiatry, 52*(8), 815-830.e14. doi:10.1016/j/jaac.2013.05.011

Mercado, F. (2018). Infusing neuroscience and education to create equity. *CLEARvoz Journal, 4*(1), 1-10. Retrieved from https://www.journals.sfu.ca/cvj/index.php/cvj/article/download/36/38

Merriam, S. B. (1998). *Qualitative research and case study applications in education*. San

Francisco, CA: Jossey-Bass.

Mock, S. E., & Arai, S. M. (2011). Childhood trauma and chronic illness in adulthood:

Mental health and socioeconomic status as explanatory factors and buffers. *Frontiers

in Psychology, 1*(246), 1-6. doi:10.3389/fpsyg.2010.00246

Morgan, A., Pendergast, D., Brown, R., & Heck, D. (2015). Relational ways of being an

educator: Trauma informed practice supporting disenfranchised young people.

International Journal of Inclusive Education, 19(10), 1037-1051.

doi:10.1080.13603116.2015.1035344

Morse, J. M. (2000). Determining sample size. *Qualitative Health Research, 10*(1), 3-5.

doi:10.1177/104973200129118183

Morton, B. M., & Berardi, A. A. (2017). Trauma-informed school programming:

Applications for mental health professionals and educator partnerships. *Journal of

Child and Adolescent Trauma*. doi:10.1007/s40653-017-0160-1

Moustafa, A. A., Parkes, D., Fitzgerald, L., Underhill, D., Garami, J., Levy-Gigi,

E.,…Misiak, B. (2018). The relationship between childhood trauma, early-life stress,

and alcohol and drug use, abuse and addiction: An integrative review. *Current

Psychology*. doi:10.1007/s12144-018-9973-9

Noddings, N. (2012). The caring relation in teaching. *Oxford Review of Education, 38*(6),

771-781. doi:10.1080/03054985.2012.745047

Noll, J. G., Shenk, C. E., Yeh, M. T., Ji, J., Putnam, F. W., & Trickett, P. K. (2010).

Receptive language and educational attainment for sexually abused females.

Pediatrics, 126(3), e615-e622. doi:10.1542/peds.2010-0496

Ogulmus, K., & Vuran, S. (2016). Schoolwide positive behavioral interventions and support practices: Review of studies in the Journal of Positive Behavior Interventions. *Educational Sciences: Theory and Practice, 16*(5), 1693-1710. doi:10.12738/estp.2016.5.0264

O'Neill, L., Guenette, F., & Kitchenham, A. (2010). Am I safe here and do you like me? Understanding complex trauma and attachment disruption in the classroom. *British Journal of Special Education, 37*(4), 190-197. doi:10.1111/j.1467-8578.2010.00477.x

Onwuegbuzie, A. J., & Collins, K. M. (2007). A typology of mixed methods sampling designs in social science research. *The Qualitative Report, 12*(2), 281-316. Retrieved from http://nsuworks.nova.edu/tqr/vol12/iss2/9

Orb, A., Eisenhauer, L., & Wynaden, D. (2001). Ethics in qualitative research. *Journal of Nursing Scholarship, 33*(1), 93-96. doi:10.1111/j.1547-5069.2001.00093.x

Overstreet, S., & Chafouleas, S. M. (2016). Trauma-informed schools: Introduction to the special issue. *School Mental Health, 8*(1), 1-6. doi:10.1007./s12310-016-9184-1

Packer, M. J., & Goicoechea, J. (2009). Sociocultural and constructivist theories of learning: Ontology, not just epistemology. *Educational Psychologist, 35*(4), 227-241. doi:10.1207/S15326985EP3504_02

Parr, M., & Richardson, W. J. (2005/2006). Meeting the needs of students at risk: A preliminary case study of the role of child development counsellors in an urban elementary & high school setting. *International Journal of Learning, 12*(10), 93-102. doi:10.18848/1447-9494/CGP/v12i10/48203

Patton, M. Q. (1990). *Qualitative evaluation and research methods* (2nd ed.). Newbury Park, CA: SAGE Publications.

Perfect, M. M., Turley, M. R., Carlson, J. S., Yohanna, J., & Saint Gilles, M. P. (2016).
School-related outcomes of traumatic event exposure and traumatic stress symptoms
in students: A systematic review of research from 1990 to 2015. *School Mental
Health, 8*(1), 7-43. doi:10.1007/s12310-016-9175-2

Perkins, S., & Graham-Bermann, S. (2012). Violence exposure and the development of
school-related functioning: Mental health, neurocognition, and learning. *Aggression
and Violent Behavior, 17*(1), 89-98. doi:10.1016/j.avb.2011.10.001

Perna, R. B., & Kiefner, M. (2013). Long-term cognitive sequelae: Abused children without
PTSD. *Applied Neuropsychology: Child, 2*(1), 1-5.
doi:10.1080/09084282.2011.595460

Perry, B. D. (2006). *Applying principles of neuroscience to clinical work with traumatized
and maltreated children: The neurosequential model of therapeutics*. Retrieved from
https://childtrauma.org/wp-content/uploads/2013/08/Perry-Bruce-
neurosequentialmodel_06.pdf

Perry, D. L., & Daniels, M. L. (2016). Implementing trauma-informed practices in the school
setting: A pilot study. *School Mental Health, 8*(1), 177-18. doi:10.1007/s12310-016-
9182-3

Piaget, J. (1971). *Psychology and epistemology: Towards a theory of knowledge*. New York:
NY: Viking Press.

Piaget, J. (1972). *The principles of genetic epistemology*. New York, NY: Routledge and
Kegan Paul.

Ponterotto, J. G. (2005). Qualitative research in counseling psychology: A primer on research

    paradigms and philosophy of science. *Journal of Counseling Psychology, 52*(2), 126-

    136. doi:10.1037/0022-0167.52.2.126

Porche, M. V., Costello, D. M., & Rosen-Reynoso, M. (2016). Adverse family experiences,

    child mental health, and educational outcomes for a national sample of students.

    School Mental Health, 8(1), 44-60. doi:10.1007/s12310-016-9174-3

Porter, C., Lawson, J. S., & Bigler, E. D. (2005). Neurobehavioral sequelae of child sexual

    abuse. *Child Neuropsychology, 11*(2), 203-220. doi:10.1080/092970490911379

Price, L. H., Kao, H., Burgers, D. E., Carpenter, L. L., & Tyrka, A. R. (2013). Telomeres and

    early-life stress: An overview. *Biological Psychiatry, 73*(1), 15-23.

    doi:10.1016/j.biopsych.2012.06.025

Public Health Agency of Canada. (2015). *About mental health*. Retrieved from

    https//www.canada.ca/en/public-health/services/about-mental-health.html#a1

Record-Lemon, R. M., & Buchanan, M. J. (2017). Trauma-informed practices in schools: A

    narrative literature review. *Canadian Journal of Counselling and Psychotherapy,*

    51(4), 286-305.

Reinbergs, E. J., & Fefer, S. A. (2018). Addressing trauma in schools: Multitiered service

    delivery options for practitioners. *Psychology in the Schools, 55*(3), 250-263.

    doi:10.1002/pits.22105

Reinke, W. M., Stormont, M., Herman, K.C., Puri, R., & Goel, N. (2011). Supporting

    children's mental health in schools: Teacher perceptions of needs, roles, and barriers.

    School Psychology Quarterly, 26(1), 1-13. doi:10.1037/a0022714

Richardson, W., Richardson, C., & McCabe, M. (2004). The resilience of the human condition and the educational experience. *The CAP Journal: Resources for School-based Leadership, 12*(3), 12-13.

Roeser, R. W., Schonert-Reichl, K. A., Jha, A., Cullen, M., Wallace, L, Wilensky, R.,…Harrison, J. (2013). Mindfulness training and reductions in teacher stress and burnout: Results from two randomized, wait-list control field trials. *Journal of Educational Psychology, 105*(3), 787-804. doi:10.1037/a0032093

Rogers, C. R. (1980). *A way of being*. Boston, MA: Houghton Mifflin.

Roy, A., Janal, M. N., & Roy, M. (2010). Childhood trauma and prevalence of cardiovascular disease in patients with type 1 diabetes. *Psychosomatic Medicine, 72*(8), 833-838. doi:10.1097/PSY.0b013e3181eafc2d

Rutter, M. (2012). Resilience: Causal pathways and social ecology. In M. Ungar (Ed.), *The social ecology of resilience: A handbook of theory and practice* (pp. 33-42). New York, NY: Springer.

Rutter, M. (2013). Annual research review: Resilience-clinical implications. *Journal of Child Psychology and Psychiatry, 54*(4), 474-487. doi:10.1111/j.1469-7610.2012.02615.x

Santoro, D. A. (2018). Fighting educator burnout. *Educational Leadership, 75*(9), 10-15. Retrieved from http://www.ascd.org/publications/educational-leadership/summer18/vol75/num09/Is-It-Burnout¢-Or-Demoralization¢.aspx

Schooenboom, J., & Johnson, R. B. (2017). How to construct a mixed methods research design. *Koln Z Soziol, 69*(2), 107-131. doi:10.1007/s11577-017-0454-1

Sciaraffa, M. A., Zeanah, P. D., & Zeanah, C. H. (2018). Understanding and promoting resilience in the context of adverse childhood experiences. *Early Childhood Education Journal, 46*(3), 343-353. doi:10.1007/s10643-017-0869-3

Sfard, A. (2003). Balancing the unbalanceable: The NCTM standards in light of theories of learning mathematics. In J. Kilpartrick, W. G. Martin, & D. Schifter (Eds.), *A research companion to Principles and Standards for School Mathematics* (pp. 353-392). Reston, VA: National Council of Teachers of Mathematics. Retrieved from http://www.academia.edu/19960246/Balancing_the_Unbalanceable_The_NCTM_Sta ndards_in_the_Light_of_Theories_of_Learning_Mathematics

Shalev, I., Entringer, S., Wadhwa, P. D., Wolkowitz, O. M., Puterman, E., Lin, J., & Epel, E. (2013). Stress and telomere biology: A lifespan perspective. *Psychoneuroendocrinology, 38*(9), 1835-1842. doi:10.1016/j.psyneuen.2013.03.010

Sharma, M. (2018). Seeping deficit-thinking assumptions maintain the neoliberal education agenda: Exploring three conceptual frameworks of deficit-thinking in inner-city schools. *Education and Urban Society, 50*(2), 136-154. doi:10.1177/0013124516682301

Shields, A., & Cicchetti, D. (1998). Reactive aggression among maltreated children: The contributions of attention and emotion regulation. *Journal of Clinical Child Psychology, 27*(4), 381-395. doi:10.1207/s15374424jccp2704_2

Shonkoff, J. P., & Garner, A. S. (2012). The lifelong effects of early childhood adversity and toxic stress. *Pediatrics, 129*(1), e232-e246. doi:10.1542/peds.2011.2663

Stake, R. E. (1995). *The art of case study research*. Thousand Oaks, CA: SAGE Publications.

Statistics Canada, Government of Canada. (2017). *Census profile, 2016 census*. Retrieved

    from https://www12.statscan.gc/census-recensement/2016/dp-

    pd/prof/index.cfm?Lang=E

Strine, T. W., Dube, S. R., Edwards, V. J., Prehn, A. W., Rasmussen, S., Wagenfield,

    M.,…Croft, J. B. (2012). Associations between adverse childhood experiences,

    psychological distress, and adult alcohol problems. *American Journal of Health

    Behavior, 36*(3), 408-423. doi:10.5993/AJHB.36.3.11

Substance Abuse and Mental Health Services Administration. (2014). *SAMHSA's concept of

    trauma and guidance for a trauma-informed approach*. HHS Publication No. (SMA)

    14-4884. Rockville, MD: Substance Abuse and Mental Health Services

    Administration. Retrieved from https://store.samhsa.gov/product/SAMHSA-s-

    Concept-of-Trauma-and-Guidance-for-a-Trauma-Informed-Approach/SMA14-

    4884.html

Sullivan, P. M., & Knutson, J. F. (2000). Maltreatment and disabilities: A population-based

    epidemiological study. *Child Abuse & Neglect, 24*(10), 1257-1273.

Taylor, R. D., Oberle, E., Durlak, J. A., & Weissberg, R. P. (2017). Promoting positive youth

    development through school-based social and emotional learning interventions: A

    meta-analysis of follow-up effects. *Child Development, 88*(4), 1156-1171.

    doi:10.111/cdev.12864

Teddlie, C., & Tashakkori, A. (Eds.). (2009). *Foundations of mixed methods research:

    Integrating quantitative and qualitative approaches in the behavioral sciences*.

    Thousand Oaks, CA: SAGE Publications.

Terr, L. C. (1991). Childhood traumas: An outline and overview. *American Journal of Psychiatry, 148*(1), 10-20. doi:10.1176/ajp.148.1.10

Terrasi, S., & Crain de Galarce, P. (2017). Trauma and learning in America's classrooms. *Phi Delta Kappan, 98*(6), 35-42. doi:10.1177/0031721717696476

Theron, L. C., & Engelbrecht, P. (2013). Caring teachers: Teacher-youth transactions to promote resilience. In M. Ungar (Ed.), *The social ecology of resilience: A handbook of theory and practice* (pp. 265-280). New York, NY: Springer.

Ungar, M. (2013). Social ecologies and their contribution to resilience. In M. Ungar (Ed.), *The social ecology of resilience: A handbook of theory and practice* (pp. 13-32). New York, NY: Springer.

Ungar, M., & Perry, B. D. (2012). Violence, trauma and resilience. In R. Alaggia & C. Vine (Eds.), *Cruel but not unusual: Violence in Canadian families* (pp. 1-21). Retrieved from http://cctasi.northwestern.edu/wp-content/uploads/Trauma-Violence-and-Resilience.pdf

Valencia, R. R. (1997). Conceptualizing the notion of deficit-thinking. In R. R. Valencia (Ed.), *The evolution of deficit-thinking: Educational thought and practice* (pp. 1-12). Bristol, PA: The Falmer Press.

Van der Kolk, B. A. (2003). The neurobiology of childhood trauma and abuse. *Child & Adolescent Psychiatric Clinics of North America, 12*(2), 293-317. doi:10.1016/S1056-4993(03)00003-8

Van der Kolk, B. A. (2014). *The body keeps the score: Brain, mind and body in the healing of trauma.* New York, NY: Viking Press.

Vasilevski, V., & Tucker, A. (2015). Wide-ranging cognitive deficits in adolescents following early life maltreatment. *Neuropsychology, 30*(2), 239-246. doi:10.1037/neu0000215

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.

Waasdorp, T. E., Bradshaw, C. P., & Leaf, P. J. (2012). The impact of schoolwide positive behavioral interventions and supports on bullying and peer rejection: A randomized controlled effectiveness trial. *Archives of Pediatrics and Adolescent Medicine, 166*(2), 149-156. doi:10.1001/archpediatrics.2011.755

Walkley, M., & Cox, T. L. (2013). Building trauma-informed schools and communities. *Children & Schools, 35*(2), 123-126. doi:10.1093/cs/cdt007

Weed Phifer, L. W., & Hull, R, (2016). Helping students heal: Observations of trauma-informed practices in schools. *School Mental Health, 8*(1), 201-205. doi:10.1007/s12310-016-9183-2

White, J., Drew, S., & Hay, T. (2009). Ethnography versus case study: Positioning research and researchers. *Qualitative Research Journal, 9*(1), 18-27. doi:10.3316/QRJ0901018

Willis, A. S., & Nagel, M. C. (2015). The role that teachers play in overcoming the effects of stress and trauma on children's social psychological development: Evidence from Northern Uganda. *Social Psychology of Education, 18*(1), 37-54. doi:10.1007/s11218-014-9282-6

Wolpow, R., Johnson, M. M., Hertel, R., & Kincaid, S. (2011). *The heart of learning and teaching: Compassion, resiliency, and academic success* (2nd ed.). Retrieved from http://www.k12.wa.us/CompassionateSchools/pubdocs/TheHeartofLearningandTeaching.pdf

Yin, R. K. (2014). *Case study research: Design and methods* (5th ed.). Thousand Oaks, CA: SAGE Publications.

Appendix A-Participant Information Letter and Consent

Research Title: Teachers' Perspectives On Trauma-Informed Education
Principal Investigator: Sandra Browne-Kealey, PhD Candidate, Nipissing University

Participant Letter of Information and Consent

Invitation to Participate

You are being invited to participate in this research study exploring teachers' perspectives on working with students who have experienced trauma.

Purpose of the Letter

The purpose of this letter is to provide you with the necessary information to make an informed decision regarding participation in this research study.

Purpose and Objectives of this Study

The goal of this research is to gain an increased understanding of teachers' perspectives and experiences as they relate to supporting students who have experienced trauma or significant adversity. For the purposes of this study, trauma is defined as the impact of "an event, series of events, or set of circumstances that is experienced by an individual as physically or emotionally harmful or life threatening and that has lasting adverse effects on the individual's functioning and mental, physical, social, emotional or spiritual well-being" (SAMHSA, 2014, p. 7). Examples of adverse experiences that could potentially be traumatic for a child include neglect, abuse, bullying, accidents, high conflict divorce, death of a loved one, parental mental health and substance abuse problems, poverty, family dysfunction and refugee displacement.

While some students may not display any overt signs or symptoms of trauma exposure, many will exhibit problems with emotion regulation, social impairment and learning difficulties that impact their ability to function in the classroom. Given that teachers play a pivotal role in addressing both the academic and non-academic (e.g., emotional, social) needs of their students, more school boards are recognizing the importance of adopting policies and practices that support teachers in their work with students who have been impacted by trauma. An understanding of teachers' perspectives is a critical first step towards creating learning environments in all schools that better recognize and honour the lived experiences of its students including those who have experienced trauma.

Participation Selection

Teachers who have at least five (5) years of full-time classroom experience teaching students in grades 1-12 (including special education) are eligible to participate in this study.

Study Procedures

This study consists of two components, a survey and an interview that can be conducted either by telephone or in person. Both components are strictly voluntary. The survey exploring perspectives on teaching students with trauma will take 10-15 minutes and can be completed prior to or during the interview session. The interviews will take 40-60 minutes and will be scheduled at the time/location that is most convenient for you. There is the possibility that the researcher may request a brief follow-up interview (by telephone) to clarify responses but this would also be voluntary. Interviews will be audio-taped (with participant consent) to ensure accurate transcription of responses.

Possible Risks of Participation in the Study

As this study deals with issues related to childhood trauma and adverse experiences, some participants may find topics of discussion unsettling or distressing. If this occurs, participants will be provided contact information to access counselling and other supports. You may also choose to take a break from the interview, reschedule for another time or voluntarily withdraw your participation including consent for the use of your data.

Counselling and Support Resources

Mental Health Crisis Lines

Employee Assistance Program contact information that is specific to your school board will be provided.

Possible Benefits of Participation in the Study

The potential benefits of participation in this study include the opportunity to share and reflect on your professional practices and experiences working with students with trauma. Your contribution will also be invaluable in contributing to educational research that informs teacher education and curriculum development that focuses on socio-emotional learning and student mental health.

Compensation

Participants will be compensated with a gift card in the amount of $25.

Voluntary Participation

Your participation in this study is entirely voluntary. If you decide to participate, you can withdraw at any time without penalty. You may also choose to withdraw consent for the use of your data in which case it will be removed and destroyed.

Anonymity and Confidentiality

To protect the privacy and anonymity of all participants, no identifying information will be used. The survey data will only be displayed in aggregate form. The data collected from interviews will be coded to ensure that you, your school or school board cannot be

identified in the dissertation, presentations or any published material from the study. All data collected will remain confidential and accessible only to the researcher and the Faculty Supervisor of this study.

Disposal of Data
Electronic data, including survey data and electronic documents will be stored on the researcher's password protected computer. Hard copy documents (e.g., interview protocols) will be stored in a locked filing cabinet in the researcher's office and all information will be kept for a period of five (5) years following completion of the study. At that time, electronic files will be securely deleted, audio-tapes will be destroyed and any paper files will be shredded.

Dissemination of Results
It is anticipated that the results of this research study will be reported in the researcher's doctoral dissertation, published in professional journals and presented at research conferences for the educational community. If you would like a summary of the final study, please contact me by telephone or email as listed below.

Subsequent Use of Data
Data collected during this research will not be used for any other purposes other than as outlined in the dissemination of results.

Contacts for Further Information
If you would like any additional information about participation in the study, please contact:

Researcher: Sandra Browne-Kealey, ███████████

Faculty Supervisor: Dr. Susan Elliott-Johns, ███████████

Consent(s)
Approval for this research has been granted by the Nipissing University Research Ethics Board. Your signature in the appropriate section below indicates that you understand the above conditions of participation in this study and that you have had the opportunity to have any questions answered by the researcher.

Consent for Survey

☐   I consent to participation in the survey component of this study.

_____   _____   _____

Name of Participant   Signature   Date

Consent for Interview

    ☐ I consent to the audiotaping of my interview.

    ☐ I do not consent to the audiotaping of my interview.

_____   _____ _____

Name of Participant   Signature   Date

A copy of this consent will be given to you and a copy taken by the researcher.

NIPISSING

Appendix B-Research Debriefing Letter

Study Title: Teachers' Perspectives On Trauma-Informed Education
The goal of my research is to gain an increased understanding of teachers' perspectives and experiences as they relate to supporting students who have experienced trauma or significant adversity. Given the prevalence of trauma exposure in children and youth and its significant impact on brain development and learning, many of these students struggle to function in the classroom. As teachers play a pivotal role in addressing both the academic and non-academic (e.g., emotional, social) needs of their students, more school boards are recognizing the importance of adopting policies and practices that support teachers in their work with students who have been impacted by trauma. It is hoped that the findings of this study will contribute to the knowledge base in this increasingly important area of education.

If you would like to learn more about trauma-informed education, these articles may be of interest:

Dods, J. (2015). Bringing trauma to school: Sharing the educational experiences of three
youths. *Exceptionality Education International, 25*(1), 112-135. Retrieved from
http://ir.lib.uwo.ca/eei/vol25/iss1/6

Overstreet, S., & Chafouleas, S. M. (2016). Trauma-informed schools: Introduction to the
special issue. *School Mental Health, 8*(1), 1-6. doi:10.1007/12310-106-9184-1

Thank you for participating in this study and I hope that you have enjoyed the experience. In the event that any aspects of the research process have been upsetting or have caused any distress, please contact the counselling resources provided to access support.

As you know, your participation in this study is entirely voluntary, is not associated with your school or school board and you may withdraw at any time. Should you wish to withdraw or have any questions, concerns or comments, please email me as soon as possible at the contact address provided below.

Approval for this research has been granted by the Nipissing University Research Ethics Board. If you have any questions about your rights as a participant, the contact information for the Nipissing Research Ethics Coordinator is provided.

Thank you again for your time and valuable contribution to this research study.

Researcher: Sandra Browne-Kealey, ███████████████

██ :

Appendix C-Interview Protocol Guide

****Begin interview by reviewing the information regarding the importance of protecting anonymity and confidentiality of the participant, their students, school or school board.

1. Can you tell me about any professional development that you have received relevant to working with students experiencing adversity or exposed to trauma?

2. How would you define the term "trauma-informed"? On a scale of one to ten (1-no knowledge at all, 10-very knowledgeable), where would you rate yourself as trauma-informed?

3. In answering this next question, please do not include any specific details that may identify any particular student. **What are some of the adverse experiences/traumatic events that you are aware of in your student population? Where did you find this information?** (e.g., OSR, student or parent, other school staff, community professional)?

4. In answering this next question, please do not include any specific details that may identify any particular student. **For these students, what is the general impact of the trauma?** (what does the teacher notice about these students and their functioning in the school setting). If not mentioned, specifically ask about:
i. emotion regulation
ii. peer/adult relationships
iii. learning
iv. general behaviour

5. What supports are available in your school/school board to help students who have experienced trauma? What supports/resources are available to teaching staff? What would you change? Ask about general recommendations for schools and school boards.

6. How do you see your role as a teaching professional with respect to supporting students with trauma?

7. In answering this next question, please do not include any specific details that may identify any particular student. **Tell me about some of your experiences working with students who have been exposed to trauma?**

8. How does your teaching practice support these students? What specific strategies appear to be successful for engaging and supporting students with trauma? Are there things that you have changed, or would like to change that you think are beneficial to these students? If not provided, ask about instructional as well as management practices.

9. How are you personally/professionally impacted by teaching students with trauma?

10. Is there anything else you would like to add or any questions you may have?

Appendix D-ARTIC Scale License Agreement

From: Traumatic Stress Institute - Klingberg Family Centers ▓▓▓▓▓▓
Sent: Tuesday, September 19, 2017 12:10 PM
To: ▓▓▓▓
Subject: ARTIC License

Date	September 19.2017
Contact Person	Sandra Browne-Kealey
Contact Person Job Title	Doctoral Student
Program / Department	Education
Organization	Nipissing University, North Bay Ontario, Canada
With whom and how do you plan to use the ARTIC?	The ARTIC Scale will be used in a doctoral research study exploring teachers' perspectives on trauma-informed education.
Address	
Contact Person Email Address	▓▓▓▓▓▓
Contact Person Phone Number	613-
Payment Amount	Negotiated fee
If negotiated fee, type amount here.	$XXX
Is your organization a client agency of the Traumatic Stress Institute	
Terms & Conditions	I understand that the ARTIC is copyrighted material by the Traumatic Stress Institute of Klingberg Family Centers, Tulane University, and Prerna Arora, Ph.D. All rights reserved. As such, I agree to publish sample ARTIC items only in formal publications.

Distribution	I agree not to distribute the ARTIC Scale beyond the program, agency, or institution for which it was originally purchased.
Citation	I agree to provide the following citation for the ARTIC in any publication or presentation that references the measure: Baker, C.N., Brown, S.M., Wilcox, P.D., Overstreet, S., & Arora, P. (2016). Development and psychometric evaluation of the Attitudes Related to Trauma-Informed Care (ARTIC) Scale. School Mental Health, 8(1), 61-76.
Typing your name and clicking "Submit" serves as your digital signature.	Sandra Browne-Kealey