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Examining internalizing symptoms in child and youth victims of emotional abuse and bullying: The mediating effects of individual and family strength factors in clinical samples

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Abstract

Child and youth experiences of emotional abuse and bullying are harmful interactions by caregivers and peers, which produce adverse mental health and social outcomes (Glaser, 2011). This study examined the relationships between trauma exposure and internalizing outcomes through individual and parenting level strength factors. The study comprised 1,297 child and youth participants, aged 4 to 18, from inpatient and outpatient mental health facilities across Ontario, who were administered the interRAI Child and Youth Mental Health assessment (ChYMH; Stewart, Hirdes et al., 2015) with their parents/caregivers. Generalized linear modelling (Nelder & Wedderburn, 1972) was used to determine the relationships between trauma types: bullying, emotional abuse, and poly-victimization, and internalizing outcome symptoms (i.e., depressive severity, anxiety, and anhedonia). Mediation analyses with bootstrapping (Hayes, & Preacher, 2014) were then used to estimate the effects of trauma types on internalizing symptoms through individual and parenting level strength variables. Children and youth who experienced poly-victimization, bullying, and emotional abuse reported more depression and anxiety than those who were not abused, with the highest internalizing symptoms reported by poly-victimized children and youth. Poly-victimized and bullied children and youth reported more anhedonia as compared to non-abused children. Mediation analyses demonstrated there were no significant correlations between trauma types and individual strength factors. There was no evidence that parenting strengths mediated the relationships between trauma types and depression. However, there was evidence of suppressing effects of parenting on the relationship between trauma and anxiety. Auxiliary analyses revealed that parenting did not moderate the effect of trauma on anxiety. The study exemplifies the detrimental effects of bullying and emotional abuse trauma, as well as the necessity for future examinations of the roles of risk, parent-child/youth attachment styles, and strength factors that promote resilience in the face of adversity.

Key words: internalizing symptoms; interRAI, strength factors; bullying and peer victimization; emotional abuse

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Chapter 1: Introduction

1.1 Brief Overview

Resilience, as an ecological framework construct, refers to the maintenance of reasonably healthy and successful functioning amid threat or severe stress (Martinez-Torteya, Bogat, Von Eye, & Levendosky, 2009; Herrenkohl et al., 2008; Masten, 2007). As described by Ann Masten, resilience in children is an "ordinary magic" (2001) that counters and buffers the effects of adverse conditions like bullying victimization, emotional abuse, and other forms of trauma (Herrenkohl et al., 2008; Cicchetti & Rogosch, 2009). Multilevel dynamics represent the ways in which resilience is shaped by interactions across levels of analysis (Masten, 2007), where, in contexts of adversity, dimensions of adaptation are documented to influence resilience in children and youth (Martinez-Torteya, Bogat, Von Eye, & Levendosky, 2009; Cicchetti & Rogosch, 2009). Dimensions of individual adaptation are understood through examinations of the various ecological contexts in which children function and that impact mental health and well-being (Crooks et al., 2007); such contexts are understood, not only as risk factors which inhibit resilience, but strength factors which foster it. Strength factors which include, but are not limited to, individual and family levels, have been identified as being robust across a range of health and social outcomes (Roffey, 2015; Masten et al., 2009; Benzies & Mychasiuk, 2008).

With stark statistics about the prevalence of mental illness among Canadian children and youth (Canadian Mental Health Association, 2013) and the wave of resilience research (Masten, 2007), this study examined the effects of bullying and emotional abuse trauma on a clinical sample of children and youth users of mental health services across Ontario. The study also considered the conditions for dimensions of individual adaptation, specifically strength factors at individual and family levels, to function as buffers of internalizing symptoms among those who experience

the noted trauma types. In turn, this study directs tactful and evidence-based systems of mental health intervention and prevention across levels of policy. Data from 1,297 children and youth across Ontario was used to model how bullying and emotional abuse traumas predicted internalizing symptoms, as characterized by depression, anxiety, and anhedonia, and to examine whether individual and family strengths mediated the outcomes. This chapter provides contextual descriptions of trauma types, mental health symptoms, and strengths to highlight the study's significances. The chapter will also provide a description of the differences between strength and protective factors. Table 1 provides a glossary of terms and concepts utilized in this thesis.

Table 1

Glossary of key terms and concepts

Term	Definition	Examples
Strength factor	A positive characteristic or situation associated with better adaptation, including high risk levels; strength factors are also often termed assets, compensatory factors (e.g., Garmezy, Masten, & Tellegen, 1984), or promotive factors (e.g., Sameroff, 1999)	Cognitive skills; talent; good school performance; adaptability to change; competent parenting
Protective factor	A predictor of better adaptation, particularly in contexts of risk, trauma, or adversity (e.g., Rutter, 1979); the main difference between strength and protective factors is whether the factor played a special kind of role under high risk conditions.	Affiliation with a supportive organized sports team or faith/religious group
Risk factor	A measurable characteristic that predicts a negative outcome on a specific outcome criteria	Mental illness; child maltreatment
Adaptation	Systems that keep universal and healthy human development on course and facilitate recovery from adversity (e.g., Masten, 2007)	Development of attachment relationships; self-regulatory systems for modulating emotions and behaviour; information processing capabilities

Resilience	Positive adaptation in the face of risk or adversity; the capacity for a child/adolescent to withstand or recover from a disturbance (e.g., Martinez-Torteya, Bogat, Von Eye, & Levendosky, 2009; Herrenkohl et al., 2008; Masten, 2007)	A child from a violent family performs well in school and is able to form healthy relationships with peers and teachers
Trauma	An experience or source of disturbance that threatens adaptation or development; a category of risk factor (e.g., (Herrenkohl et al., 2008)	Child maltreatment; emotional abuse; bullying; sexual abuse; physical abuse
Emotional abuse	A repeated pattern of caregiver behaviour that transmits to the child they are worthless, unloved, endangered, or only valuable in meeting another's needs; also referred to as emotional neglect, emotional maltreatment, and verbal abuse (e.g., Wolfe & McIsaac, 2010)	Characterized by intimidation, isolation, denigration of emotional needs
Bullying	Patterns of peer aggressive behaviour in contexts of power imbalance; bullying that takes place in virtual spaces (e.g., the Internet, cellular phones) is referred to as cyber bullying (e.g., Lapidot-Lefler & Dolev-Cohen, 2014)	Characterized by physical violence, verbal harassment, intimidation, and/or mental influence to affect bullying victim's social status
Internalizing symptoms	One of two broad categories of psychopathology; also referred to as over-controlled symptoms	Refer to Table 3, "Description of ChYMH Scales and Items" for descriptions of specific internalizing symptoms
Strength-based assessment	Assessment that measures promotive features like behaviours, skills, and characteristics that support healthy development and adaptation; also measures adaptive and problem behaviours for holistic understanding (e.g., Moore, 2013)	InterRAI Child and Youth Mental Health (Stewart, & Hirdes, 2015); Behaviour Assessment for Children (Reynolds & Kamphaus, 1992)

1.2 Trauma: Bullying and Emotional Abuse

The protection of young people from abuse and maltreatment is entrenched in international conventions and national laws. As a ratifying member of the United Nations *Convention on the Rights of the Child*, Canada strives to ensure care and protection through the *Criminal Code of Canada*, in addition to Provincial and Territorial protection legislation. According to Statistics

Canada (2013), 8 out of 10 of police-reported violent crimes against children and youth are perpetrated by a family member, friend, or acquaintance. The effects of such traumas are well-documented as contributors to negative behavioural outcomes (Glaser, 2011).

Trauma types experienced by children and youth, including sexual abuse, physical abuse, neglect, and domestic violence witness, are rightfully deemed as serious. They require child welfare service supports that are evidence-directed. At the same time however, measuring the extent of violence against children and youth is challenging because data on abuse and trauma are limited to official sources of information from police and child welfare services. The true extent of childhood and youth trauma experiences are therefore not truly known, despite the presence of initiatives that facilitate reporting of violent offences (Trocmé et al., 2010). This study examines bullying and emotional abuse as two adverse and under-acknowledged (Glaser, 2011; Avenibiowo & Akinbode, 2011; Calvete, 2014) trauma types that require equal amounts of child welfare supports as other trauma.

Emotional abuse—which in the scientific and professional literature, is interchangeably referred to as emotional maltreatment, emotional neglect, and verbal abuse—has been recognized as a social problem within the last three decades (Chamberland et al., 2011). The American Professional Society on the Abuse of Children (APSAC, 1995; Myers et al., 2002 in Wolfe & McIsaac, 2010) defines psychological maltreatment (which for all intents and purposes is a term identical to emotional abuse) as involving a repeated pattern of caregiver behaviour that transmits to the child they are worthless, unloved, endangered, or only valuable in meeting another's needs. Such abuse is defined through six broad categories referenced across the literature (Chamberland et al., 2011; Wolfe & McIsaac, 2010): intimidating and terrorizing, spurning, confining and isolating, exploiting, denigrating emotional needs, and neglecting health needs. Several sources of

data are used to estimate the prevalence of emotional abuse. According to North American studies, emotional abuse represents 4 to 78 per cent of trauma in administrative data (e.g., child protective services, epidemiological surveys of abuse-related reports, or convenience sampling from children and youth in protective care). Similarly, Canadian-specific protective care data from 2009 found that 68 per cent of female and 55 per cent of male adolescents have been victims of emotional abuse (Wekerle et al., 2009). Studies that have documented the parameters used to identify emotional abuse and its impacts on adaptation (Larkin & McSherry, 2007; Yates & Egeland, 2009; Shaffer et al., 2009), indicate that the effects of such categories of abuse depend, in part, on the life span stage of occurrence, wherein earlier occurrence is tied with more difficulties in controlling subsequent stages of development (Shaffer et al., 2009). A study by Claussen and Crittenden (as cited by Chamberland et al., 2011) found that 90 per cent of child victims of physical abuse are also emotionally abused. However, even in co-occurrence with other forms of trauma, emotional abuse generates its own effects in all spheres of development (Hart et al., 2002 in Chamberland et al., 2011; Iwaniec et al., 2007).

Bullying, which is reportedly experienced by 1 in 3 young people in Canada (Canadian Institute of Health Research, 2012), is defined as aggressive behaviour in contexts of power imbalance, where a powerful individual or group (i.e. bully or bullies) display anti-social behaviour to harm a less powerful individual (Lapidot-Lefler & Dolev-Cohen, 2014). Bullying is characterized by physical violence, verbal harassment, intimidation, and/or mental influence to affect the bullying victim's social status or identity. A plethora of studies, including longitudinal research and a meta-analysis of 23 studies and over 5,000 children by Hawker and Boulton (2000), have demonstrated that bullying, which is also often referred to as peer victimization, is concurrently associated with a range of adjustment difficulties, including anxiety, loneliness,

depression, low self-esteem, and other forms of psychosocial maladjustment (Reijntjes et al., 2010). The associations found were independent of whether reporting was by way of a parent, teacher, or a child/adolescent (Zwierzynska, Wolke, 7 Lereya, 2013). Conversely, the 2010 meta-analysis by Reijntjes and colleagues found similar significant findings in the reverse path, such that adjustment difficulties were potential causal factors associated with increased risk for or experience of bullying. While no significant gender differences are present among those who report bullying victimization (Lapidot-Lefler & Dolev-Cohen, 2014), cyber bullying is more likely to be reported by girls (Canadian Institute of Health Research, 2012).

According to Lapidot-Lefler and Barak (2012), recent technological developments have added cyberspace to the milieu of child and youth experience of trauma. The definition of cyber bullying, then, is based on accepted definitions of bullying available in the literature and specifically takes place in virtual spaces, including the Internet, cellular phones, and other technological platforms that enable interpersonal communication (Lapidot-Lefler &Barak 2012 in Lapidot-Lefler & Dolev-Cohen, 2014). Such bullying entails aggressive behaviours in platforms that are paradoxically-private, but uninhibited in openness. In other words, cyber bullying is less detectable and less reported than non-virtual bullying because of the bully's perceived sense of privacy and subjective sense of distance from the victim, which contributes to unrestrained abuse (Lapidot-Lefler & Barak as cited in Lapidot-Lefler & Dolev-Cohen, 2014).

Poly-victimization, Cumulative Risk, and Multiple Trauma Exposure: Like all forms of trauma, bullying, cyber bullying, and emotional abuse are associated with mental health challenges (Arseneault, Bowes, & Shakoor, 2010; Price et al., 2013; Takizawa, Maughan, & Arseneault, 2014; Chamberland et al., 2011). The field of literature that assesses the roles of multiple trauma is defined through the terms, poly-victimization (Finkelhor et al., 2009) and cumulative risk

(Seery, Holman, & Silver, 2010). The term, cumulative risk describes the experience of multiple forms of trauma and stressful events (e.g., emotional abuse, bullying, serious illness, and chronic poverty). On the other hand, the term, poly-victimization encompasses the experience of multiple forms of abuse, violence, or other victimization experiences. Poly-victimization, like cumulative risk, is highly predictive of mental health problems and greater challenges to accessing supportive environments, more so than the experience of individual trauma and victimization types (Finkelhor, Ormrod, & Turner, 2007). Therefore, the scope and diversity of joint exposures to trauma should be more recognized to tailor prevention and intervention to the full range of threats that children and youth face in the home and at school in the forms of emotional abuse and bullying, respectively. For the purpose of this study, the term multiple trauma exposure is used as a synonym for poly-victimization to describe young people's experiences of both emotional abuse and bullying.

1.3 Description to Internalizing Symptoms

Research identifies two broad categories of psychopathology among children and youth, one reflecting internalizing or over-controlled symptoms and the other reflecting externalizing, or under-controlled symptoms (Perle Levine, Odland, Ketterer, Cannon, & Marker, 2013). Within the two dimensions of symptoms are specific sub-dimensions identified in research and include anxiety, depression, and anhedonia as internalizing symptoms. Anxiety is expressed through unrealistic fears, obsessive thoughts, compulsive behavior, panic episodes, and repetitive or intrusive thoughts (Stewart, Hirdes, et al., 2015; Mash & Barkley, 2009). Depression reported by children and youth, on the other hand, is characterized by sadness and worried facial expressions, the expressions of guilt, hopelessness, and irritability, as well as lack of motivation and withdrawal

from activities of interest (Stewart, Hirdes, et al., 2015; Mash & Barkley, 2009). Similarly, anhedonia, or the inability to feel pleasure, is expressed through lack of motivation and interest in social activities, leading to withdrawal from such activities (Stewart, Hirdes, et al., 2015; Mash & Barkley, 2009).

This study examined internalizing symptoms specifically, as carried by the first rationale that they are common and most experience across the age ranges of children and youth (Mash & Barkley, 2009). Second, internalizing disorders are often undetected until later in life or when they are linked to major issues such as depression and suicide (Sheidow, Henry, Tolan, & Strchan, 2013; Schwartz et al., 2015). Early identification and trauma-informed care is therefore necessary to address specific symptoms and associated trauma types (Trudeau et al., 2012; Roza, Hofstra, van der Ende, & Verhulst, 2014). Certainly, sub-dimensions of internalizing symptoms vary from study to study as a function of age, sex, informant source, and method of assessment. The items reflected by the internalizing sub-dimension of childhood mental health symptoms accounts for high rates of problems among clinical children and youth in a multitude of environmental and social contexts—home, school, and community (Mash & Barkley, 2009). Therefore, examinations of depression, anxiety, and anhedonia as internalizing symptoms are necessary because they are overlooked, under-recognized, and under-addressed, unlike externalizing behaviours that tend to attract attention and express more readily than internal suffering (Mash & Barkley, 2009).

1.4 Strength Factors

Descriptions of the mental health outcomes and the effects of bullying- and emotional abuse-related traumas truly present bleak pictures of the lived realities and developmental pathways for children and youth. Hope exists, however, and stems from strength and protective factors at

multiple ecological levels that allow children and youth at all stages of life to navigate and negotiate social, cultural, and physical resources in the contexts of trauma exposure (Ungar, 2014). They protect from impairment in contexts of stress, trauma, and adversity (Afifi & MacMillan, 2011) and are predictors categorized at the individual, family, and societal levels (Afifi & MacMillan, 2011; Crooks et al., 2007). This section highlights the study's focused strength factors: individual and parent strength factors. Before delving into specific individual and parent strength factors and their significances in the literature, it is necessary to distinguish between protective factors and strength factors by defining the two terms and first expanding on the origins of strength-based clinical assessment.

1.4.1 A shift in clinical assessment focus

The field of clinical psychology, and those relating to mental health, has undergone a dramatic expansion in focus (Rashid & Ostermann, 2009; Tedeschi & Kilmer, 2005). Traditionally, clinical assessments focused on identifying and treating requisite problem behaviours, symptoms, emotional concerns, and functional deficits (Jimerson, Sharkey, Nyborg, & Furlong, 2004). More recently, however, new foci seek to expand the range of information necessary to guide clinical intervention by emphasizing strengths, growth, competence, development, and wellness enhancement (Tedeschi & Kilmer, 2005; Rudolph & Epstein, 2000; Jimerson, Sharkey, Nyborg, & Furlong, 2004). For example, assessments such as the interRAI Child and Youth Mental Health (Stewart, Hirdes, et al., 2015) and the Behaviour Assessment for Children (Reynolds & Kamphaus, 1992) document not only adaptive and problem behaviours, but strength-based, or promotive (Moore, 2013) features like adaptability, social skills, leadership, talent, and school functioning. Strengths, therefore, are defined as tasks, actions, personal abilities, and external resources that a

child, youth, parent, or family do well (Moore, 2013; Bandura, 2006; Kia-Keating et al., 2011) and lead to positive outcomes, regardless of whether or not adversity or risk exists (Sandler, 2001). Strength factors in clinical assessment are measured and evaluated with the same empirical and psychometric rigor characteristic in traditional deficit-based assessment approaches (Cox, 2015; Tedeschi & Kilmer, 2005; Rudolph & Epstein, 2000).

In this respect, the definition of strength-based assessment, according to Epstein and Sharma, is to measure behaviours, emotional skills, and characteristics that promote personal, social, and academic development; foster a sense of personal accomplishment; and allow people to experience satisfied relationships in home, school, and other social contexts (Tedeschi & Kilmer, 2005; Rudolph & Epstein, 2000). In the field of child psychopathology, assessing strengths (in unison with problems) holds significant merits. The process and product of strength-based assessment provides clinicians, counsellors, and researchers with a balanced view of the child/youth client, thereby aiding in the comprehensive development, monitoring, and evaluation of treatment plans (Kenkel, Sammons, Tedeschi, & Kilmer, 2005; Romer et al., 2011). In turn, holistic identification of individual-, family-, and society-related resources available in the contexts of clients' lives directs clinicians and researchers in creating mental health intervention and prevention strategies aimed, not only on fixing problems, but enhancing long-term performance and adjustment (Tedeschi & Kilmer, 2005; Rudolph & Epstein, 2000). At the micro level, strength-based assessment holds far-reaching relational influences. For instance, client-clinician rapport and even parent-clinician relations are enhanced through the affirmation and empowerment associated with exploring strengths (Rashid & Ostermann, 2009). Strength-based assessment therefore send a clear message that the client and their family are recognized and

supported (Tedeschi & Kilmer, 2005), therefore yielding comprehensiveness in client and family profiles for solution-focused treatment planning (Tedeschi & Kilmer, 2005).

1.4.2 Distinguishing strengths and protective factors

As stated in the previous section, strength factors are competencies relevant to children and youth and their families. It should be emphasized that strengths are resources that exist regardless of risk (Albrecht & Braaten, 2008; Epstein, Rudolph, & Epstein, 2008). The detail marks a defining feature of strength factors and distinguishes the term from "protective factors" (Benzies & Mychasiuk, 2009; Moore, 2013).

While protective factors stem from positive psychology (Brendtro, Brokenleg, & Van Bockern, 2005) and strength-based literature (Masten, 2007; Benzies & Mychasiuk, 2009), the concept is predominately referred in the literature of resilience (Benzies & Mychasiuk, 2009; Martinez-Torteya, Bogat, Von Eye, & Levendosky, 2009; Herrenkohl et al., 2008; Masten, 2007). As stated at the beginning of the chapter, resilience, which is fostered by protective factors and inhibited by risk factors, is defined as the multi-dimensional maintenance of successful functioning, achievement of positive outcomes, and avoidance of negative development paths through successful coping mechanisms amid contexts of threat or severe stress (Zolkoski & Bullock, 2012; Masten, 2007; Cicchetti & Rogosch, 2009). Risk factors are generally categorized as biological factors, including illness, and environmental factors, including poverty, family dissonance, and trauma exposure (Zolkoski & Bullock, 2012). On the other hand, protective factors are categorized across individual, family, and environmental or community levels (Moore, 2013; Zolkoski & Bullock, 2012). Meta-analyses by Zolkoski and Bullock (2012) and Benzies and Mychasiuk (2009) have cited protective factors named most frequently across the literature as

generally including, but not limiting to: adaptability to change and self-efficacy; and positive parenting, effective parent-child communication, and stability in housing and income (Sheridan, Sjuts, & Coutts, 2013; Zolkoski & Bullock, 2012; Zhou et al., 2012; Benzies & Mychasiuk, 2009; Cutuli, Herbers, Lafavor, & Masten, 2008).

While the terms, strength and protective factors entail distinct conceptual differences, they are concordant across the resilience and strength-based assessment literatures. The key difference between them is whether the factor played a specific kind of role under high risk conditions (O'Dougherty Wright et al., 2012). In the contexts of this study, they can be used interchangeably, especially since the study focuses on children who face emotional abuse- and bullying-related risks. (Moore, 2013).

1.4.3 Individual Strengths

Individual strength factors refer to children's personal characteristics, including personality traits, temperament, and resources like self-esteem, coping ability, the ability to appraise maltreatment, intellect, self-efficacy, and life satisfaction (Afifi & MacMillan, 2011). Such traits aid in the development and maintenance of adaptation, a dimension of resilience, which encompasses the absence of psychopathology, the mastery of appropriate development tasks, and the development of behavioural and cognitive competencies (Martinez-Torteya et al., 2009). Longitudinal research design has been ideal for developing research evidence on the relationships between individual strength factors and positive adaptation in children and adolescents and into early adulthood.

Adaptability to change: Adaptability for a child or youth is the skill of accepting and adjusting to routine or environmental changes with minimum difficulty (Stewart, Hirdes et al., 2015; Zhou et al., 2012; Benzies & Mychasiuk, 2009). For instance, a child who adapts well to

change does not become upset or distraught when experiencing a change in daily routine (Stewart, Hirdes et al., 2015), but studies on clinical intervention for children with anxiety report that program effectiveness is attributable to resilience-based skill building, and specifically the development of flexibility, or adaptability in facing everyday stressors and challenges (e.g., Sandler, et al., 2015). A summary of protective factors associated with resilience in conditions of child and youth maltreatment also cited adaptability to change and during coping to be related to resilience (Afifi & MacMillan, 2011). For example, adaptive coping, in addition to life satisfaction and social connections were predictors of resilience in a study of sexually abused girls who ranged from 11 to 17 years of age. In all the studies reviewed by Afifi and MacMillan (2011), a stable family environment and supportive relationships were consistently identified as promoters of adaptability and adaptive functioning.

Presence of a notable talent: Talents, or special skills are well-cited strength and protective factors (Brooks, 2012; Benzies & Mychasiuk, 2009) and describe qualities that are typically valued, recognized, and enjoyed by individuals and society (O'Doughterty Wright et al., 2012; Brooks, 2012; Chen & Taylor, 2012). According to Werner (2012), children who cope successfully with adversity possess several of the strengths described in this chapter, including a talent that was valued by peers. According to Chen and Taylor (2012), youth self-reports identified talents among the strengths that supported successful coping during childhood adversity. Overall, several replicated large-scale studies compiled by Werner (2012) found a special talent to be associated with successful coping in high-risk children and youth in contexts of multiple risk factors (e.g., combinations of sexual, physical, and/or emotional abuse), poverty, and parental mental illness. Successful family support, resilience building, and mental health intervention and prevention

programs should encompass and reflect strengths and competencies within children and youth (Crenshaw, 2012).

Positive school performance: In a mental health assessment such as the interRAI ChYMH (Stewart, Hirdes et al., 2015), overall academic ability records a child's or youth's academic functioning, both as an objective measure of performance (e.g., age-specific metrics including grade point average) and a subjective assessment of capacity (e.g., frequency of successful homework completion).

Good school performance entails a combination of personal beliefs, values, and skills known to enhance academic success (Zolkoski & Bullock, 2012) such that children and youth who perform well in school are committed to learning, meaning they are motivated to do well in school and are actively engaged in their learning. They possess social-emotional skills, such as self-control, cooperative interactions, and appropriate assertiveness and problem solving on day-to-day academic tasks and during periods of preparation of studying (Elias & Haynes, 2008). They also care about their school responsibilities, tasks, and the overall school environment.

The commitment to learning associated with good school performance has two main sources that relate to positive developmental experiences with peers and adults. Parental attitudes, encouragement, involvement, and modeling are key qualities that set the stage for motivation and engagement (Masten et al., 2008). Additionally, the quality of schooling, including informal and formal curricula, plays a central role in child development (Masten et al., 2008). According to Masten and colleagues (2008), the resilience of adults who work in schools and education settings is important because they serve as brokers of resources in the lives of at-risk children and youth. In many ways, then, even if a child or youth possesses the requisite skills to do well in school,

motivation for school-related performance is related to perceptions of social support vis-à-vis parents, teachers, and overall environments of school connectedness.

The sources described are also factors that contribute to academic capacity. The term, *capacity*, refers to the potential and resources for positive school achievement. For example, a child or youth may have poor grades due to frequent non-completion of assignment work. However, he or she may obtain top marks on the few occasions that he or she submits completed work. Children and youth with strong academic capacity have, not only positive role models and the environment resources necessary to model achievement, but cognitive factors that promote optimal development, even in non-optimal conditions (Wang & Deater-Deckard, 2012).

In all cases, academic performance and capacity are strong and consistent predictors of resilience in children and youth (Wang & Deater-Deckard, 2012). Children who are more facile with information sources and better equipped with work ethic and problem solving abilities are more likely to succeed academically (Wang & Deater-Deckard, 2012). They also have a broad repertoire of coping strategies, including behavioural and emotional regulation, which protect against various internalizing and externalizing problems (Greenberg, 2010; Masten et al., 2008; Wang & Deater-Deckard, 2012).

Consistent positive outlook: Considerable research documents both the psychological and physiological effects of a positive outlook in coping with stressful situations, recovering from trauma, and overcoming barriers to successful adaptation (Brooks, 2012; O'Dougherty Wright et al., 2012; Ungar, 2012). Positive outlook, or hopefulness, is the belief system used to make meaning of adversity (Benzies & Mychasiuk, 2009). An individual with a positive outlook holds the belief they have control over their destiny, the power to change their situation, and the ability to create their own circumstances (Moore, 2013; Masten et al., 2008, Benzies & Mychasiuk, 2009).

A child and youth with appropriately-consistent positive outlook is less likely to be affected by crisis and more likely to feel empowered to put in the effort required to make positive changes in his or her life (Judy & Rycraft, 2004). Hallmark traits in children and youth with positive outlooks are self-efficacy, which is defined as an individual's judgment of their own ability to succeed in reaching a specific goal (Benzies & Mychasiuk, 2009) and internal locus of control, which is the skill of taking responsibility for ones successes and failures (Goldstein & Brooks, 2012). Multiple replicated large scale longitudinal studies found the individual skills and beliefs characteristic of positive outlook to be associated with successful coping in contexts of multiple risk factors, poverty, parental mental illness, child abuse, and divorce (Werner, 2012).

In studies about *learned optimism*, repeated experiences of futility and trauma caused young people to become passive and feel pessimistic, thereby generalizing beliefs that bad things always happen to them (Walsh, 2012). However, Seligman's work from as early as the 1990's found that hopelessness and helplessness can be unlearned, and traits associated with positive outlook can be learned, rebuilt, and sustained through successful experiences, nurturing communities, and programs centred on building confidence and competence (Walsh, 2012).

In the cases of children and youth who are at-risk due to traumatic experiences and who have, for example, an internalizing symptom such as depression (i.e., where expressions of hopelessness and lack of motivation are among the symptomatology (Stewart, Hirdes et al., 2015; Silk et al., 2007), resilience-building interventions tend to and should centre on enhancing current relationship functioning in school and home contexts (Supkoff et al., 2012). In particular, social contextual factors associated with the emotional climate of the family, including parent-child relationship quality and secure attachments, are cited as being predictive of positive adaptation among children and youth (Silk et al., 2007; Groh et al., 2012; Sawle, Lennings, & Heard, 2015;

Sloman & Taylor, 2015). Aside from social contexts, neurobiological factors, according to Silk and colleagues (2007) are associated with low levels of internalizing problems and high levels of social skills among children and youth at risk for depression. The following section investigates attachment theory and parenting-related strength factors, which in contexts of risk and adversity, are accurately termed protective factors for children and youth.

1.4.4 Parenting Strengths as Protective Factors

Family is broadly defined as a combination of two or more persons, brought together over time by ties of mutual consent, birth and or adoption (Benzies & Mychasiuk, 2009) and collectively assume responsibilities for family functions (Vanier Institute of the Family, 2004). In contexts of risk, family resilience is the ability of a family to respond positively to an adverse event and emerge strengthened, more resourceful, and more confident (Simon et al., 2005). Resilience develops, not through the aversion from adverse events, but through parenting-related protective factors and secure attachments that aid in coping with these events (Kim & Cicchetti, 2010).

The debate on the extent to which parents influence the development of resilience in children and youth does not possess a clear-cut answer; such is especially the case given the complexity of child and youth development (Benzies & Mychasiuk, 2009; Brooks, 2012). Specifically, the development of recent measurement instruments and assessments have put into question the magnitude to which parents influence child development (Brooks, 2012), consequently prompting the call for more precise understandings of the impacts of parents and attachments on the present and future lives of children. Several studies on twins reared together or apart have contended that, while parenting does not appear to significantly influence a child's

intelligence or personality in the short term, relationships and parent-child attachments are major long term determinants of mental health and adaptation (Brooks, 2012; Pinker, 2002).

It is therefore clear that secure attachments of parents and their children or youth are consistently linked with positive adjustment for young people across behavioural and social domains (Sawle, Lennings, & Heard, 2015). While the current study does not measure parenting attachment styles, this section will describe attachment theory and attachment types to preface the multidimensional contexts through which parent strengths function. The following section will discuss the relevance of specific parenting strengths in contexts of adaptation and risk.

1.4.4.1 Attachment Theory and the Roles of Secure Family Relationships

Developed by John Bowlby (e.g., 1969/1982, 1973) and later verified through assessment by Mary Ainsworth (e.g., 1978), attachment theory models the developmental pathways of psychopathology by understanding parent-child/youth attachment relationships (Groh et al., 2012). The term, attachment, is used to describe biologically-determined proximity-seeking through which individuals develop particular attachment styles (Groh et al., 2012). The theory posits that the quality of interactions and experiences between children and their caregivers help shape particular attachment styles and that experiences of early loss, separation, or psychological unavailability of an attached caregiver have enduring effects that carry forward in later development and psychosocial functioning (Sawle, Lennings, & Heard, 2015). It is through parent-child attachment relationships that children and youth develop either adaptive or maladaptive emotional regulation strategies that serve as protective or risk factors for later psychopathology (Madigan, Atkinson, Laurin, & Benoit, 2013). On one hand, secure attachment relationships provide a children or youth with assurance that they can depend on their caregiver when distressed

and that they may use their attachment figure as a secure base from which to explore their environments (Madigan, Atkinson, Laurin, & Benoit, 2013). On the other hand, the significant manifestations of depression, anxiety, and other internalizing symptoms originate, in part, from insecure attachments, which represent the uncertainties of young people that their caregivers will respond to their attachment needs (Groh et al., 2012). In turn, young people develop strategies from as early as infanthood to deal with rejecting, inadequate, or inconsistent parenting that resultantly decreases their abilities to cope with stress, while increasing the likelihood they will behave in ways that bring about more adverse experiences (Groh et al., 2012). Insecure attachment strategies belong in three groups: resisting, avoiding, and disorganized attachment behaviours (Groh et al., 2012; Sawle, Lennings, & Heard, 2015; Sloman & Taylor, 2015).

In particular, children who exhibit resistant attachment typically have inconsistent, overprotective, or overinvolved parents. They demonstrate behavioural ambivalence by signaling the desire for proximity, while simultaneously failing to be soothed by parental contact (Sawle, Lennings, & Heard, 2015). Attachment resistance is associated with greater symptoms of anxiety, emotional dependence towards the parent, and social isolation (Groh et al., 2012).

Avoidant attachment, on the other hand is characterized by discomfort with closeness or weak attachment bonds and is demonstrated by thosee who have experienced rejecting parenting or not learned to form stable attachments (Sawle, Lennings, & Heard, 2015). Young people in avoidant attachment relationships are more likely to exhibit externalizing symptoms rooted in their experiences of rejecting and antagonistic treatment from caregivers (Groh et al., 2012).

Disorganized attachment, which is associated with a range of psychological disturbances and commonly identified in high risk populations with known parenting challenges, develops when

young people are emotionally- or physically-dependent on a caregiver who is also a source of fear due to parental emotional abuse or disruptive parenting behaviour (Groh et al., 2012).

1.4.4.2 Parenting Strengths as Protective Factors for Attachment Security

Secure attachments help children and youth develop the adaptive behaviours necessary to cope with stress through emotional and behavioural regulation (Groh et al., 2013). Parenting strengths, which facilitate secure and healthy attachments are described below.

Effective communication: Parents and caregivers who communicate effectively with children and youth listen attentively, validate appropriate concerns, and are patient, respectful, and responsive to the child's or youth's problems (Stewart, Hirdes et al., 2015). Effective communication also entails communicational responses that exclude power struggle tactics like interruptions, derogation, and demeaning language (Brooks, 2012). Among the benefits of effective parent communication is the reduction of conflict, which improves emotional connection and creates a sense of affection and trust for parents, as well as children or youth (Kuhlberg, Peña, & Zayas, 2010). Results from the same study (2010) also suggest that parenting practices that promote effective communication specifically help build or retain youth self-esteem and reduce the risk for internalizing behaviours. Similar results are reiterated in other studies, which confirm that parent-youth trust and communication about children's activities translate to higher scores of well-being, including self-esteem and life satisfaction, while insecure attachments to parents are associated with higher scores of depression and anxiety (Sousa et al., 2011; Bacchini et al., 2011). Across the literature exists consensus that a positive atmosphere, characterized by warmth and communication, among other strength factors, protects children and youth against risk-taking behaviours and externalizing behaviours (Kliewer & Murrelle, 2007; Bacchini et al., 2011), while

encouraging prosocial values and positive adaptation (Bacchini et al., 2011). Positive parenting programs serve an important role to play in promoting the psychological wellbeing of children and youth who are frequently exposed to risk and trauma (Zolkoski & Bullock, 2012; van de Looij-Jansen et al., 2011; Bacchini et al., 2011; Kuhlberg, Peña, & Zayas, 2010).

Assistance in emotional regulation: Emotion regulation is the ability for a child or youth to modulate their actions, behaviours, and emotional responses in relation to self-control and responding to stressful situations (Kim & Cicchetti, 2010; Shaffer et al., 2005). Young people who are able to modulate their emotions generate positive social relationships (Kim & Cicchetti, 2010) and exhibit cognitive and socio-emotional competence (Benzies & Mychasiuk, 2009; Alvord & Grados, 2006). Secure parent-child/youth relationships are therefore ones where caregivers assist the child or youth in regulating her or his emotions. For instance, when overly upset or angry, parent or primary caregiver puts things into perspective for the child or youth (Stewart, Hirdes et al., 2015). They are typically attuned to the child's or youth's mood and can assist and be responsive when necessary (Stewart, Hirdes et al., 2015).

In maltreating families and school contexts, children and youth may experience overwhelming emotional arousal that leads to difficulties in managing and processing negative emotionality (Kim & Cicchetti, 2010). Emotional dysregulation in children and youth is therefore representative of the presence of constricted emotions, attenuated empathy, and contextually inappropriate affective display (Kim & Cicchetti, 2010). A 2010 study by Kim and Cicchetti, which examined the longitudinal pathways that linked child trauma with emotional regulation, among other factors, found emotional regulation to be both a risk and protective mechanism in the link between trauma and internalizing symptoms, externalizing symptoms, and in home (e.g., neglect, physical, and sexual abuse) and school (e.g., rejection and acceptance) contexts. For

example, maltreatment was related to emotion dysregulation. Conversely, high levels of emotional regulation were connected to high peer acceptance in school contexts with peer acceptance also linked with lower internalizing problems. According to Kim and Cicchetti (2006), emotional maltreatment, which can occur in cases of family emotional abuse and school bullying, has a significant negative impact on the development of self-esteem and is predictive of increases in depression among school-aged children. The stated findings articulate only some of the significances of understanding emotional regulation within parent-child/youth relationships.

Use of appropriate disciplinary practices, supervision, and limit-setting: This section provides descriptions of caregiver use of appropriate disciplinary practices, monitoring, and expectations for the precise reason all three strengths, like others discussed in this section, represent authoritative parenting style. Authoritative parents are responsive and demanding, while not overbearing or controlling (Moore, 2013; Zolkoski & Bullock, 2012; Zhou et al., 2012; Masten, 2008). Across the literature, such a style is positively associated with optimal competence in children and youth (Zolkoski & Bullock, 2012; Benzies & Mychasiuk, 2009). Such a parenting style is also linked to academic achievement, positive peer relationships, and independence in children, while being correlated with resiliency to stress in children (Sheridan et al., 2012). Necessary to note is that other styles of parenting include authoritarian parenting, which is characterized by high parental control, verbal hostility, restrictiveness, and other punitive discipline strategies, while permissive parenting may include lax or inconsistent discipline and general ignorance of child or youth misbehaviour (Williams et al., 2009).

Definitions for parenting-based strengths are defined as follows:

Parents and caregivers who utilize appropriate disciplinary practices address their misbehaviour with calm demeanor and through practices that take into account the developmental stage of their child or youth (Stewart, Hirdes et al., 2015).

Similarly, parents who demonstrate appropriate supervision have clear understandings of age-appropriate norms for monitoring (Stewart, Hirdes et al., 2015). Evidence suggests that parental monitoring creates balance in family relationships and is linked with high levels of communication (Bacchini et al., 2011). Parents who set appropriate limits communicate clearly and set expectations based on reasonable and age-specific criteria (Stewart, Hirdes et al., 2015).

Studies cited by Goldstein and Rider (e.g., Eddy, Leve, & Fagot, 2001; Wasserman, Miller, Pinner, & Jaramilo, 1996) indicate that negative practices of child-rearing, including parent-child conflict management, monitoring, and harsh or inconsistent discipline, are correlated with disruptive or delinquent behaviour among children and youth. Conversely, the presence of authoritative parenting-based discipline, monitoring, and expectation-setting is negatively associated with internalizing and externalizing problems in childhood and adolescence (Williams et al., 2009).

Demonstration of warmth and support: Parent warmth, or support is an indicator of a positive parent-child relationship and subsequent secure parent-child attachment (Zolkoski & Bullock, 2012; Zhou et al., 2012; Benzies & Mychasiuk, 2009). Such relationships contribute to positive outcomes and positive adjustment for children and youth in high risk situations in areas of school performance, self-confidence, positive relationships with peers, and lower levels of emotional distress (Brennan et al., 2003; Conger and Conger, 2002; DePanfilis, 2006). According to Stewart and colleagues (2015), the demonstration of parental warmth includes responsiveness and sensitivity to the child's or youth's needs. For example, a responsive parent addresses their

child's needs through actions such as smiling, touching, and responding positively (Stewart, Hirdes et al., 2015).

The extent to which young people achieve successful and acceptable levels of psychosocial functioning is even detectable in cases of risk and adversity (e.g., maternal depression), which signifies the extent to which parental warmth serves as a protective factor for children and youth (Goldstein & Brooks, 2012). The availability of a supportive caregiver has been identified as one of the most important factors that distinguish trauma-exposed children and youth with good developmental outcomes from those with more negative outcomes (Houshar et al., 2012). The impacts are far-reaching as demonstrated by Houshyar and colleagues, who produced a 2012 meta-analysis on resilience among maltreated children that demonstrated that even adults who were maltreated in childhood and reported the presence of a supportive primary caregiver were found to have more years of education, greater housing stability, higher rates of self-support, and better parenting skills.

Summary: The described parenting strengths promote relationships that are positive and affirmative. While such features are linked directly with positive outcomes, relationships interplay with a number of genetic and environmental factors that produce multiple pathways to resilience and produce impacts that are not always obvious (Brooks, 2012). Since positive family relationships, which either reduce risk or exposure to risk, are associated with lower levels of antisocial behaviours, emotional distress, and internalizing symptoms, effective interventions are those which focus on reducing risk factors and determinants of mental health (Brooks, 2012; Reed-Victor, 2008).

Chapter 2: Study Directives

2.1 Study Significances

Interacting risk and protective factors impact trajectories of child development, including problem outcome risks and mental wellbeing (Masten et al., 2009; Benzies & Mychasiuk, 2008; Ungar, 2014). Risk factors at multi-ecological levels are well-established and understood for children and youth in general population contexts (Cicchetti et al., 2009; Garmezy, 1991). The underlying premise of this study, then, is to address often neglected understandings of strength factors that specifically impact clinical samples of children, who exhibit greater frequencies of mental health challenges and are most at risk of challenges that stifle or impede healthy development. Determining whether strength factors mediate internalizing symptoms in samples where risk is high, adversity is multidimensional, and protective sources are scarce will tactfully inform mental health intervention and prevention strategies, policies, and services.

2.2 Research Questions

The study's reasoning is summarized above and the analytical goals are presented as two groups of nine research questions.

2.2.1 Trauma types as predictors of internalizing symptoms

Research questions 1 to 3:

How do experiences of emotional abuse and bullying victimization predict a) depression, b) anxiety, or c) anhedonia in the clinical sample of Ontario children and youth?

2.2.2 Individual and parenting strengths as mediating factors

Research questions 4 to 6:

How do individual strengths mediate the relationship between trauma and a) depression, b) anxiety, or c) anhedonia in a clinical sample of children and youth?

Research question 7 to 9:

How do parenting strengths mediate the relationship between trauma and a) depression, b) anxiety, or c) anhedonia?

Chapter 3: Methodology

3.1 Sample and Material

Study data were collected between October, 2012 until August, 2015 from 1,297 children and youth (64.8% male; Age: $M = 11.20$; $SD = 3.46$; Range: 4-18) using the interRAI Child and Youth Mental Health (ChYMH) and Adolescent Supplement instrument. The ChYMH, which is part of the internationally-utilized interRAI suite of assessments, is a 400-item, standardized semi-structured interviewing format that supports the collection of both quantitative and qualitative information for assessment, care planning, research, and knowledge mobilization (Stewart, Hirdes et al., 2015). Data were collected from across twenty hospitals, tertiary care facilities, inpatient, and community outpatient mental health facilities in Ontario, Canada by trained clinicians (i.e., nurses, psychologists, psychiatrists, social workers, child and youth workers, and speech and language pathologists). All available sources of information were used for assessment, including direct contact with the family, their child or youth, and other service providers (e.g., teachers and therapists), as well as case record data and other collateral information sources. All assessors attended mandatory training for at least 2-days related to the administration of the interRAI ChYMH and Adolescent Supplement. The Adolescent Supplement is integrated into the ChYMH for completion with all youth who are twelve years old or older. Assessors also completed this

supplement for younger children who reported engaging in mature or risky behaviours, such as substance use and sexual activity, to generate a more comprehensive assessment of the child.

The following subsections provide details about the study's sample, data security procedures, information about the instrument's reliability and validity, as well as the relevant scales and items of the interRAI ChYMH used in this study.

3.1.1 Family Demographic Information

This subsection provides diverse details about study respondents' unique health, social, and living conditions, which demonstrate the clinical nature of the sample.

Reasons for Admissions to Mental Health Facilities: Children and youth were referred to mental health agencies and assessed using the interRAI ChYMH as part of their standard of care: 32.9% of those included in the sample were referred to care facilities due to self-harm behaviours (e.g., cutting, suicidal ideation), while 42.8% were referred due to aggression or harm to others. A problem with drug addiction or dependency was the admission reason for 3.5% of the children and youth. The large majority of children and youth, 67.7%, were admitted because they experienced specific psychiatric symptoms, while 5.6% of the respondents were involved in the youth justice system.

Parent/Caregiver and Foster Care Information: At the time of assessment, parents and caregivers of children and youth reported a diverse range of information on their marital statuses. An overall 42.3% of parents were married, 14.6% divorced, 12.1% separated, 1.9% widowed, and 19.5% never married. Additionally, 4.7% of parents and caregivers reported being with a partner or significant other.

The majority of children and youth, N = 1,065, resided with their birth parents and families and had no history of foster care. However, 107 children and youth transferred through multiple foster homes, while 125 children and youth resided in only one foster home.

Immigrant, Refugee, and Indigenous Identity within the Sample: The diversity of the sample was also represented through a small percentage of immigrant and refugee families, in addition to a combined 5.2% of families who identified as First Nations, Métis, or Inuit.

3.1.2 Data Storage and Security Procedures

The collection and use of the interRAI ChYMH was approved by the University of Western Ontario's Ethics Board (REB 106415). All collected data were stored on the interRAI Canada secure server in the University of Waterloo and protected using measurers equated to those of the Canadian Institute of Health Information. De-identified data used in this study were provided to the lead interRAI developer and stored on a password-protected standalone computer in the secured laboratory of Dr. Stewart at the Faculty of Education, Western University.

3.1.3 interRAI ChYMH Instrument Reliability and Validity

Multiple reliability and validity studies that have been conducted on the interRAI ChYMH and other interRAI instrument within the suite displayed strong psychometric properties for children, youth (Phillips et al., 2012; Stewart, Currie, Arbeau, Leschied, & Kerry, 2015; Philips & Hawes, 2015), and adults (Burrows, Morris, Simon, Hirdes, & Phillips, 2000; Hirdes et al., 2008; Hirdes et al., 2002; Morris, Carpenter, Berg, & Jones, 2000; Morris et al., 1997). Further reliability analyses have found excellent internal consistency of interRAI items with child samples (Phillips, Patnaik, Moudouni, Naiser, Dyer, Hawes, et al., 2012). The following section, which describes

trauma, internalizing symptoms, and strength factors scales, includes reliability analyses results that are specific to the study.

3.1.4 Items and Scales Used for Study Analyses

Study objectives were met using specific items and scales of the interRAI ChYMH that focused on trauma types, mental state indicators and strength factors. Tables 2a and 2b provide details about those items and scales, including descriptions, scoring, interpretations, and reliabilities.

Table 2a

Descriptions of interRAI ChYMH Scales and Items

Item/Scale Category	Item/Scale Name	Scale Description, Item Names/Weights	Scoring and Interpretation
Independent Variable (IV): Trauma Types	Victim of Bullying	Bullying is identified as abuse caused by peers.	Scores range from 0 to 5 in the ChYMH assessment and 0 to 1 in this study. Higher scores in the assessment indicate more recent experience of bullying, as follows: 0=Never, 1=More than 1 year ago, 2=31 days-1 year ago, 3=8-30 days ago, 4=4-7 days ago, 5=In last 3 days.
	Victim of Emotional Abuse	A form of stress or trauma caused by parent(s)/primary caregiver(s).	Scores range from 0 to 5 in the ChYMH assessment and 0 to 1 in this study. Higher scores in the assessment indicate more recent experience of emotional abuse, as follows: 0=Never, 1=More than 1 year ago, 2=31 days-1 year ago, 3=8-30 days ago, 4=4-7 days ago, 5=In last 3 days.
Study Usage IV	Combined Bullying & Emotional Abuse Scale	Bullying, emotional abuse, and poly-victimization are tabulated into one variable for study examination.	Scores: No trauma (reference group) = 1; Only emotional abuse = 2; Only bullying = 3; Poly-victimization = 4.
Study Usage Dependent Variable: Internalizing Symptoms	Anxiety Scale	Scale measures the frequency of symptoms of anxiety and comprises of the following items: 1. Repetitive anxious complaints/concerns (0-4) 2. Unrealistic fears (0-4) 3. Obsessive thoughts (0-4) 4. Compulsive behavior (0-4) 5. Intrusive thoughts or flashbacks (0-4) 6. Episodes of panic (0-4) 7. Nightmares (0-4)	Scores range from 0 to 28. Higher scores indicate more anxiety symptoms.

	Depressive Severity Index Scale	Scale measures the frequency of the indicators of depression and comprises of the following items: 1. Sad, pained, or worried facial expressions (0-4) 2. Crying, tearfulness (0-4) 3. Made negative statements (0-4) 4. Self-deprecation (0-4) 5. Expressions of guilt or shame (0-4) 6. Expressions of hopelessness (0-4) 7. Irritability (0-4) 8. Lack of motivation (0-4) 9. Withdrawal from activities/interests (0-4)	Scores range from 0 to 36 with each item weighing from 0 to 4. Higher scores indicate more severe depressive symptoms.
	Anhedonia Scale	Scale measures the frequency of symptoms related to anhedonia and comprises of the following items: 1. Lack of interest in social interaction (0-4) 2. Lack of motivation (0-4) 3. Anhedonia (0-4) 4. Withdrawal from activities of interest (0-4)	Scores range from 0 to 16. Higher scores indicate higher levels of anhedonia.
Study Usage Mediator Variable: Strength Factors	Individual Strength Scale	Scale measures the strength factors inherent in the child/youth and comprises the following items: 1. Notable talent (0-1) 2. Good school performance in the last 6 months (0-1) 3. Consistent positive outlook (0-1) 4. Adaptability to change in routine (0-2)	Scores range from 0 to 5. Higher scores indicate higher levels of individual strengths.
	Parenting Strengths Scale	Scale measures the degree of strengths that the parent is demonstrating in parenting activities and comprise the following items toward a child/youth: 1. Effective communication (0-1) 2. Assistance in emotional regulation (0-1) 3. Use of appropriate disciplinary practices (0-1) 4. Demonstrates warmth and support (0-1) 5. Appropriate supervision and monitoring (0-1) 6. Appropriate limit setting or expectations (0-1)	Scores range from 0 to 12 Higher scores indicate higher levels of parenting strengths.
Other	Sex	The sex (i.e., male or female) of the child/youth	1 = male 2 = female

Table 2b

Basic Descriptive Statistics and Cronbach Alpha

Variable	*M*	*SD*	A
Depressive Severity Index Scale	11.16	6.83	.744
Anxiety Scale	6.99	5.61	.710
Anhedonia Scale	3.50	4.05	.781
Individual Strengths Scale	2.67	1.33	.419
Parenting Strengths Scale	17.06	1.94	.845

Note. Cronbach alpha coefficient values above .7 represent acceptable internal consistencies (Pavot, Diener, Colvin, & Sandvik, 1991).

3.2 Data Analyses

IBM SPSS for Windows version 23 (SPSS Inc, Chicago, IL) was used for all data analyses, and particularly for two association test sets: 1) the associations between trauma and internalizing symptoms; and 2) the mediating impacts of individual and parenting strength factors on the trauma-outcome associations.

Generalized linear modeling (GLM; McCullagh & Nelder, 1983), which is suitable for non-normal distributions, was used to examine the relationship between trauma types and internalizing symptoms. Three GLM models using gamma distribution and link identity were used to separately examine the main effects for continuous variables, depression, anxiety, and anhedonia, across categories of the predictor variable, bullying-emotional abuse. Bullying, emotional abuse, and poly-victimization were tabulated into one variable with four levels as follows: *No trauma (reference group) = 1*; *Only emotional abuse = 2*; *Only bullying = 3*; and *All trauma types = 4*. Parameter estimation was conducted using the *method* option in SPSS through

100 maximum likelihood and Fisher scoring iterations. For each iteration, we reduced the step halving size by a factor of five. Bonferroni post hoc comparisons were displayed and the confidence interval value was set at 95% to control for Type I errors.

GLM, with an assumed gamma variance function, was the chosen analysis method because it accommodated the non-normal distributions of the continuous dependent variables and their residuals. The distributions in the interRAI ChYMH's internalizing problem scales (i.e., Depression Severity Index (DSI) scale, Anhedonia scale, and Anxiety scale) were positively scaled, skewed towards larger values, and specifically positively skewed with light tail. GLM was the suitable method because it allows for dependent response variables with error distribution models other than normal distributions (IBM statistical manual, 2013). As a parametric method of analysis, GLM was also the more powerful and robust method, compared to non-parametric method such as the Kruskal-Wallis test (IBM Corporation, 2013). Note that since gamma distribution cases are only appropriate for data values greater than 0 (IBM Corporation, 2013), each of the internalizing symptoms scales were re-computed by adding 1. Mean values were re-calculated by subtracting 1 from the values estimated by the GLM model.

A previous study by Dembo, Williams, and Wothke (1992), which assessed the interrelatedness of childhood abuse, neglect, and family dysfunction, defended the use of GLM by providing sensitivity analyses to determine if the reported results were comparable with alternative operationalizations of their dependent variables. The authors reported no substantive changes in conclusions through GLM and other, more complex structural model techniques. In another study of internalizing and externalizing symptoms among youth juvenile offenders, Imbach and colleagues (2013) defended their use of GLM over other non-parametric methods as a means of avoiding Type 1 error.

MEDIATE (Hayes, A.F., & Preacher, K.J., 2014) was computed to estimate the total and direct effects of bullying and emotional abuse on depression, anxiety, and anhedonia symptoms. The procedure also computed indirect effects, which reflected the potential amounts by which the total effect of trauma (i.e., bullying and emotional abuse) was decreased when mediators (i.e., individual or parenting strengths) were included in the analyses. This way, six mediation models were conducted with bootstrap indirect effect confidence intervals for the cases where GLM identified trauma exposure types as being significantly associated with internalizing symptoms. For all models, the number of samples to be used for indirect effect confidence intervals was set to 5,000. We also specified 95% as the level for confidence intervals, produced omnibus tests for the total effects to examine the null hypothesis, and used dummy coding to set the control condition (i.e., no emotional abuse and no bullying) as the reference group.

The choice of statistical mediation was supported by its modernization of previously used and reportedly-flawed methods of testing indirect influences (Hayes, 2009). This study's method utilized bootstrapping, which is used to generate multiple empirical resampling of the observed data with replacement to produce an interval estimate of the indirect effect (Hayes, 2009; Fritz & MacKinnon, 2007). In other words, bootstrapping treats the sample as a representation of the population in miniature (Hayes, 2009). Indirect effects, as described in a study about depressive symptoms among neglected children (Bennett, Wolan Sullivan, & Lewis, 2010) were estimated by multiplying component direct effects for each bootstrap sample to calculate one estimate of an indirect effect per bootstrap; the distributions of those multiple estimates provided Bennett and colleagues (2010) with an approximation of the sampling distribution of the indirect effect and was used to form a confidence interval. When bootstrap forms a 95% confidence interval for an indirect effect that does not include zero, one can reject a null hypothesis for no direct effect

(Bennett, Wolan Sullivan, & Lewis, 2010). The selection of bootstrapping in this study was therefore supported by its recommendation in the methodological literature and use in previous studies that explored child abuse, exposure to violence, and psychopathology. According to the literature, the bootstrapping method is more powerful than alternatives for testing intervening variable effects precisely because of its valid use of multiple resampling to produce an interval estimate, as previously explained (Preacher & Hayes, 2004, 2008, 2009; Sheidow, Henry, Tolan, & Strachan, 2014; Oshri, Rogosch, & Cicchetti, 2012; McGoron et al., 2012; Bennett, Wolan Sullivan, & Lewis, 2010; Fang & Corso, 2007).

Chapter 4: Results

4.1 Preliminary Exploration of Data

4.1.1 Analyses of Trauma Variables

Trauma Demographics: Child and youth respondents experienced a range of trauma and adversity types, as well as behavioural, emotional, and/or psychological challenges. In particular, 107 (65.4% male) children and youth within the sample were victims of emotional abuse; 347 (60.5% male) reported experiencing bullying; 250 (63.2% male) reported experiencing both types of trauma; and 593, or 45.7% of the overall respondents (68.0% male) experienced neither emotional abuse nor bullying. No significant interactions existed for sex and trauma exposure types. Table 3 outlines the male and female trauma distributions.

Table 3

Males and Females Count and Percent of Total for Each Type of Trauma (N = 1297)

Trauma Type	Male	Female	Total
Emotional Abuse	70 5.4%	37 2.9%	107 8.2%
Bullying	210 16.2%	137 10.6%	347 26.8%
Both Trauma Types	158 12.2%	92 7.1%	250 19.3%
No Trauma	403 31.1%	190 14.5%	593 45.7%

Abuse Experience and Foster Care History: Within the sample, 82.0% of children and youth lived at home, while 9.6% of them were living in one foster home; 8.2% experienced multiple foster home placement. Among those who were not living in foster care, 6.3% reported experiencing emotional abuse, while 22.4% of those who experienced multiple placements reported experiencing emotional abuse. Within the sample, 12.9% of children who were living in one foster home reported emotional abuse. Bullying-related trauma was reported by 28.1% of the children and youth who were living at home, 8.4% of those who transferred through multiple foster homes, and 31.5% of those who lived in one foster home.

Associations between Trauma Types: Chi-square testing was conducted to investigate whether there were any association between the trauma type variables, bullying victimization and emotional abuse experience. The analysis was found to be statistically significant, such that there was a medium association between bullying and emotional abuse trauma. Specifically, those children who experienced bullying were also victims of emotional abuse and vise versa, $\chi 2$ (N = 1,297) = 114.20, $p < .001$, phi = .30. The association demonstrated the presence of multiple trauma exposure, or poly-victimization, and reiterated the significance of exploring the impacts that bullying and emotional abuse have on internalizing symptoms, both separately and jointly. The

discussion on poly-victimization in Section 1.3 of this paper prefaced the significance of collapsing bullying and emotional abuse into one variable.

4.1.2 Preliminary Analyses of Internalizing Symptoms Scales

A GLM procedure was used to model potential sex differences in anxiety, depression, and anhedonia scales among boys and girls in the clinical sample. Studies of general populations of young people typically demonstrate that internalizing symptoms are significantly more common among girls than boys (e.g., Rescorla et al., 2012). The analyses found some significant sex differences in internalizing symptoms. Girls were statistically more likely than boys to report experiencing depression (Female: M = 13.64, SD = 7.76; Male: M = 12.38, SD = 7.19; Wald Chi-Square = 8.18, p = .004). Anxiety (Female: M = 6.37, SD = 5.30; Male: M = 6.25, SD = 5.14; Wald Chi-Square = .16, p = .686) and anhedonia (Female: M = 4.60, SD = 4.04; Male: M = 4.44, SD = 4.05; Wald Chi-Square = .46, p = .500) reports were not statistically different for boys and girls.

4.1.3 Correlation Analyses of Internalizing Symptoms and Strength Scales

Pearson bivariate correlation analysis was also used to investigate the relationships between different internalizing symptoms, as well as individual strength and parenting strength factors. The correlations between variables are displayed on Table 4 and show that there were significant negative correlations between depression and individual strengths, as well as anhedonia and individual strengths.

Table 4

Bivariate Correlations between Internalizing Problem and Strength Variables

Variable	1	2	3	4	5
1. Depression Severity Index	--				
2. Anxiety	.47**	--			
3. Anhedonia	.60**	.34**	--		
4. Individual Strengths	-.12**	-.02	-.13**	--	
5. Parenting Strengths	-.04	.02	-.05	.10**	--

Note: **p<.001 (2-tailed).

4.2 Results for Research Questions

4.2.1 Trauma Types as Predictors of Internalizing Symptoms

Research Question 1:

Emotional Abuse and Bullying as Predictors of Depression

Through the use of Generalized linear modeling (GLM), the relationship between bullying and emotional abuse in predicting depression was explored, while controlling for sex (refer to section 4.1.2). A Wald Chi-Square overall test indicated that the independent variables generated a statistically significant overall model, Wald Chi-Square = 53.14, df = 3, p = .000). Specifically, girls and boys in all trauma groups reported more depression as compared to the reference group of no trauma, with the highest depression reported by poly-victimized children and youth, followed by those who were bullied. Refer to Table 5 for regression analysis results.

Table 5

Regression Analysis for Effects of Trauma on Depression

Predictor	Mean	B	Wald Chi-Square	95% Wald Confidence Interval	*p*
Both Trauma Types	13.39	3.16	31.41	2.06 - 4.27	.000
Bullying	13.21	2.98	37.11	2.02 - 3.93	.000
Emotional Abuse	12.45	2.22	8.01	.68 - 3.76	.005
No Trauma	10.23	9.95	258.25	8.73 - 11.16	.000
Sex Covariate	.35	.95	4.54	.08 - 1.83	.033

Research Question 2:

Emotional Abuse and Bullying as Predictors of Anxiety

GLM was also run to model how trauma predicted anxiety, with a Wald Chi-Square overall test indicating that the independent variables generated a statistically significant overall model, Wald Chi-Square = 33.24, $df = 3$, $p = .000$. Within the model, all trauma groups reported more anxiety as compared to the reference group. Poly-victimized children and youth reported the highest anxiety, followed by those who were emotionally abused. Refer to Table 6 for the regression analysis results.

Table 6

Regression Analysis for Effects of Trauma on Anxiety

Predictor	Mean	B	Wald Chi-Square	95% Wald Confidence Interval	*p*
Both Trauma Types	7.96	2.54	28.99	1.62 - 3.47	.000
Bullying	6.39	.96	7.18	.27 - 1.67	.007
Emotional Abuse	6.88	1.46	5.72	.26 - 2.65	.017
No Trauma	5.42	6.42	1041.05	6.03 - 6.81	.000

Research Question 3: Emotional Abuse and Bullying as Predictors of Anhedonia

GLM was utilized to examine how trauma experience predicted anhedonia. The Wald Chi-Square overall test indicated that the independent variables generated a statistically significant overall model, Wald Chi-Square = 32.72; $df = 3$; $p = .000$. Poly-victimized, followed by bullied groups reported more anhedonia as compared to the reference group. However, there was no significant relationship between anhedonia and emotional abuse, as presented on Table 7.

Table 7

Regression Analysis for Effects of Trauma on Anhedonia

Predictor	Mean	B	Wald Chi-Square	95% Wald Confidence Interval	*p*
Both Trauma Types	4.23	1.37	18.92	.75 - 1.99	.000
Bullying	4.10	1.24	20.87	.71- 1.77	.000
Emotional Abuse	3.34	.47	1.52	-.28 - 1.23	.218
No Trauma	2.86	3.86	806.52	3.60 - 4.13	.000

4.2.2 Mediation Results for Individual and Parenting Strengths

The following mediation test results examined how individual and parenting strengths potentially mediated the effects of trauma on internalizing symptoms. As described in Section 3.2, bootstrapping mediation modeling was utilized as the most suitable method for addressing the research questions outlined in Section 2.2.2. As discussed by Baron and Kenny (1986), Judd and Kenny (1981), and James and Brett (1984), the four steps for successful mediation involve:

1) estimating *test path c*, which involves verifying a correlation between the independent, categorical trauma variable (i.e., bullying and emotional abuse) with the specific internalizing symptom outcome scale (i.e., depression, anxiety, or anhedonia);
2) estimating *test path a* by verifying a correlation between the independent variable with the mediator (i.e., individual strengths or parenting strengths);
3) estimating *test path b* by showing that the mediator significantly predicts the outcome, or dependent variable; and

4) establishing *test path c',* which denotes whether that the mediator completely mediates the causal-outcome relationship by verifying the effect of the independent variable and dependent variable, controlling for the mediator variable as zero.

For all mediation procedures, bootstrap confidence intervals were based on random samples of the data with the number of samples set to 5,000. The mediate macro on SPSS was also set to produce omnibus tests of total, direct, and indirect effects using the *omnibus* and *total* subcommands.

Mediation Model for Question 4:

Effects of Trauma on Depression through Individual Strengths

The purpose of the first mediation model was to estimate the total, direct, and indirect effects of bullying and emotional abuse traumas on depression through individual strength factors. We controlled for sex because the difference between depression in male and female children/youth was significant (see Section 4.1.2). In accordance with the four-step mediation procedure (Baron & Kenny, 1986), the direct effect showed there was a significant positive effect of trauma on depression at the $p < .05$ level ($R^2 = .05$, $F(4,1292) = 15.86$, $p < .01$). Refer to Section 4.1 for GLM results and Table 8 for the total effects model.

Given the significant relationship, the second step investigated whether emotional abuse and bullying traumas were related to individual strengths ($R^2 = .04$, $F(4,1292) = 12.68$, $p < .01$), wherein bullying victimization and multiple trauma types were not correlated with individual strengths. Emotional abuse, however, was negatively correlated with individual strengths, such that more emotional abuse indicated a lower presence of individual strengths and vice versa. The

mediation procedure was therefore ceased given the insignificant results. Refer to Table 8 for the model summary.

Table 8

Model Coefficients (Total Effects and Individual Strength Effects for Trauma and Depression)

Trauma	***Total Effects Test Path (c)***			***Mediator and Causal Variable Test Path (a)***		
	B	*T*	*P*	B	*T*	*P*
Emotional Abuse vs. No Abuse	2.30	3.02	.003	-.32	-2.36	.019
Bullying vs. No Abuse	2.99	6.09	.000	-.13	-1.46	.143
Both Trauma Types vs. No Abuse	3.19	5.83	.000	-.18	-1.82	.069
Covariate: Sex	1.07	2.52	.012	.50	6.66	.000

Mediation Model for Question 5:

Effects of Trauma on Depression through Parenting Strengths

The mediation model estimated the total, direct, and indirect effects of bullying, emotional abuse, and poly-victimization on depression through parenting strengths, while controlling for sex (see Section 4.1.2). Traumas positively predicted depression among young people with the causal variable explaining 4.73% of the variance on the Depressive Severity Index scale ($F(4,1260) = 15.62$, $p < .01$) and the following specific findings: emotional abuse only: $b = 2.50$, $t = 3.22$, $p = .001$; bullying only: $b = 3.04$, $t = 6.13$, $p = .000$; and both trauma types: $b = 3.24$, $t = 5.82$, $p = .000$. The sex covariate also positively predicted depression, $b = .95$, $t = 2.22$, $p = .027$.

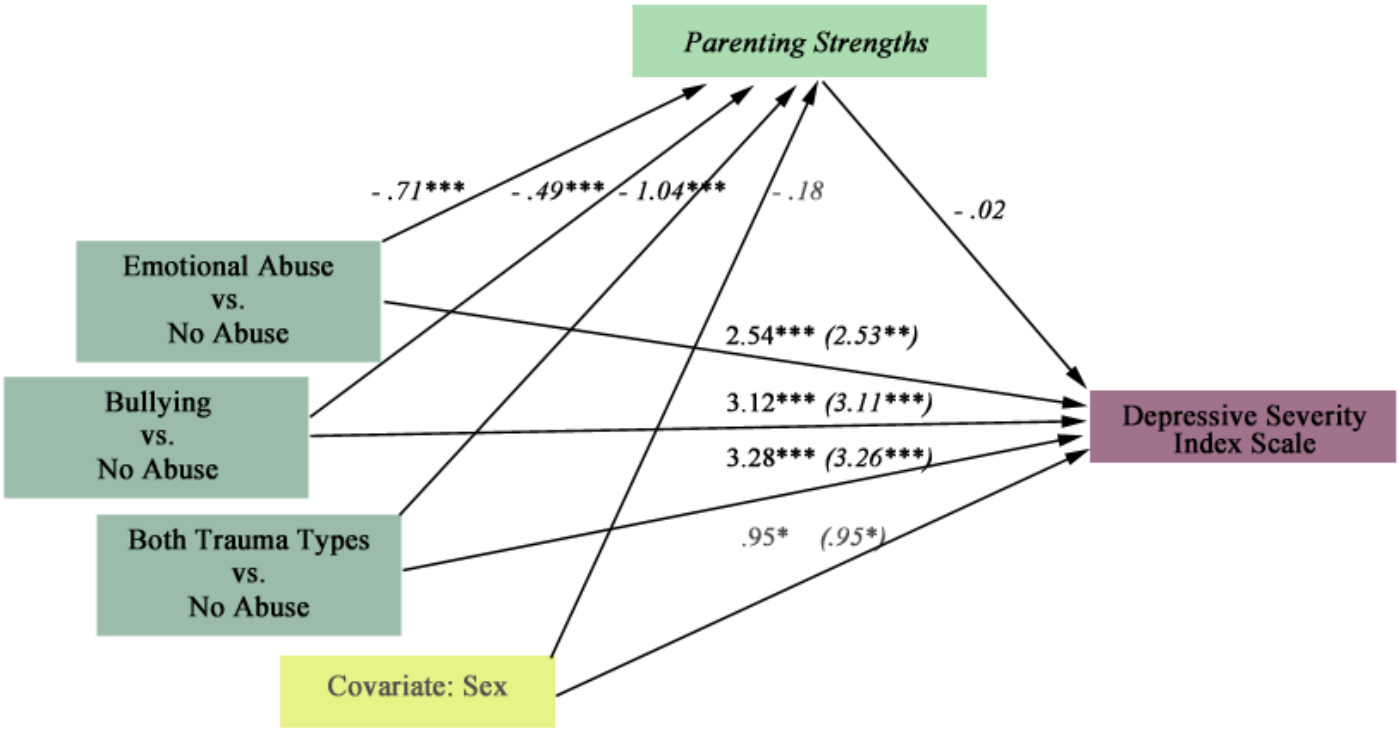
In the second step of the analysis, emotional abuse, bullying victimization, and multiple trauma reporting were negatively correlated with parenting strengths and explained 4.52% of the variance ($F(4,1260) = 14.92$, $p < .01$): emotional abuse only: $b = -.70$, $t = -3.47$, $p = .001$; bullying

only: b = -.47, t = -3.66, p = .000; both trauma types: b = -1.04, t = 7.13, p = .000; and sex: b = -.18, t = -1.64, p = .102.

In the third step, which explored parenting strengths' effect on depression, the model, which included trauma types (R^2 = .05, F(5,1259) = 12.49, p < .01) satisfied the assumption of non-homogeneity of regression, but did not significantly predict the dependent variable (b = -.01, t = -.08, p = .934). Therefore, there was no significant indirect effect of bullying and emotional abuse on depression through parenting strengths: only emotional abuse, b = .006, SE = .08, BCa CI [-.16, .16]; only bullying, b = .004, SE = .05, BCa CI [-.1, .10]; both trauma types, b = .009, SE = .01, BCa CI [-.21, .23]. A very small effect was represented in the model, κ^2 = -.001, 95% BCa CI [-.01, .01]. The summary model—which presents total effect (*path c*), direct effect (c'), correlations between the causal variable and mediator (a), and the mediator's impact on the outcome variable (b)—is presented on Figure 1.

Figure 1

Effect of Bullying-Emotional Abuse on Depression Through Parenting Strengths



Note: *p < .05, **p<.01, ***p<.001

Mediation Model for Question 6:

Effects of Trauma on Anxiety through Individual Strengths

The first step of the procedure demonstrated that trauma types positively predicted anxiety among children and youth. The causal variable explained 3.40% of the variance on the anxiety scale (F(3,1293) = 15.15, p < .01). Refer to Table 9 for the total effects model summary.

The significant relationship allowed for investigation of whether emotional abuse and bullying were related to individual strengths. Overall, the regression equation used to model *test path a* was not significant (R^2 = .005, F(3,1293) = 2.07, p = .102), as indicated through the insignificant correlation between bullying and individual strengths and poly-victimization and

individual strengths. The findings therefore prompted the cessation of the mediation analysis. See Table 9 for the model coefficients.

Table 9.

Model Coefficients (Total Effects and Individual Strength Effects for Trauma and Anxiety)

Trauma	***Total Effects Test Path (c)***			***Mediator and Causal Variable Test Path (a)***		
	B	*T*	*P*	B	*T*	*P*
Emotional Abuse vs. No Abuse	1.46	2.71	.007	-.30	-2.23	.026
Bullying vs. No Abuse	.96	2.79	.005	-.09	-1.02	.306
Both Trauma Types vs. No Abuse	2.54	6.59	.000	-.15	-1.55	.121

Mediation Model for Questions 7:

Effects of Trauma on Anxiety through Parenting Strengths

Mediation was used to examine the effects of bullying and emotional abuse on anxiety through parenting strengths, whereby the first step demonstrated that bullying and emotional abuse positively predicted anxiety among children and youth. The causal variable explained 3.33% of the variance on the anxiety scale ($F(3,1261) = 14.46$, $p < .01$), a significance also specified through the following model coefficients on Figure 2.

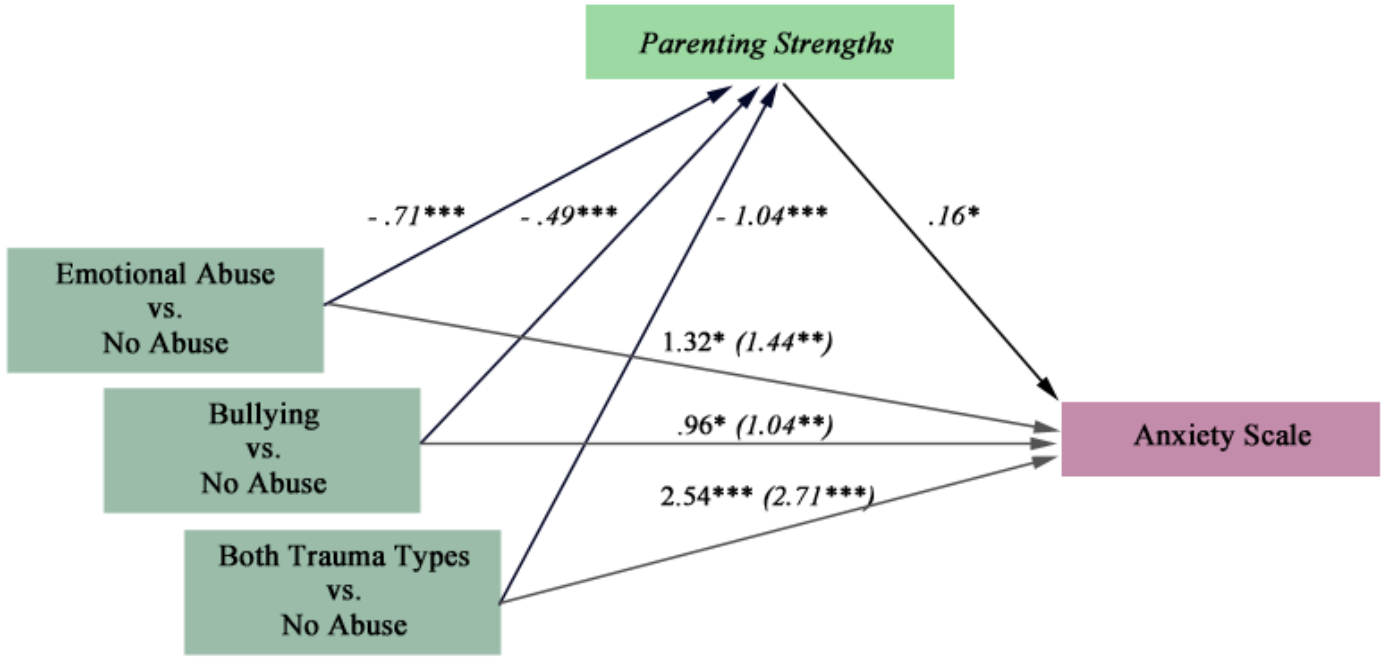
Given the significant relationship, the second step of mediation demonstrated that child and youth exposure to emotional abuse, bullying, and the multiple trauma types were negatively correlated with parenting strengths, explained 4.32% of the variance, and the overall effect was significant ($F(3, 1261) = 18.98$, $p = .000$).

The third step was then initiated to demonstrate the indirect effects, or *test path b*, of parenting on trauma and anxiety. Parenting strengths significantly predicted 3.68% of the variance

of anxiety ($F(4,1260) = 12.02$, $p < .01$) and satisfied the assumption of non-homogeneity of regression. The model for the effects of trauma on anxiety through parenting included significant indirect effects as follows: emotional abuse only, $b = -.116$, $SE = .07$, BCa CI [-.29, -.02]; bullying only, $b = -.080$, $SE = .04$, BCa CI [-.18, -.01]; and both trauma types, $b = -.169$, $SE = .08$, BCa CI [-.35, -.02]. However, the model did not represent a mediation effect because the inclusion of the parenting mediator caused an amplified, rather than buffered effect on the relationship between trauma and anxiety, as shown on Figure 2. In other words, the model established a significant positive relationship between the mediator and anxiety, while controlling for trauma, but comprised of *test path c'*, direct effects that was larger than the *test path c*, total effects. The outcome represented a very small effect, $\kappa^2 = -.007$, $SE = .00$, BCa CI [.00, -.015].

Figure 2

Model for Effect of Bullying-Emotional Abuse on Anxiety Through Parenting



Note: *p < .05, **p<.01, ***p<.001

Among the criteria for successful mediation, as outlined in Section 4.2.2, is the demonstration that the mediator is a significant predictor of the dependent variable in an equation that includes both the mediator and the independent variable. In mediational hypotheses, then, it is assumed that a mediator will reduce the magnitude of the relationship between the independent and dependent variables (McKinnon, Krull, & Lockwood, 2000). However, the mediation model for the effects of trauma on anxiety through parenting strengths represented a common statistical phenomenon called a suppression effect (Ludlow & Klein, 2014; Rucker et al., 2011; MacKinnon, Krull, & Lockwood, 2000). This type of inconsistent mediation occurred because the magnitude of the relationship between trauma and anxiety became larger, instead of smaller, when the mediator variable was included (MacKinnon, Krull, & Lockwood, 2000; Sheih, 2006). The

concept of suppression effects is often discussed in contexts of education and social psychology research (MacKinnon, Krull, & Lockwood, 2000).

Research Questions 8 and 9: Mediation Model Details for Trauma, Anhedonia, and Strengths

The final proposed mediation procedures were designed to examine the effects of bullying and emotional abuse on anhedonia through individual and parenting strengths. Refer to Section 4.1 for GLM results that found no significant relationship between emotional abuse and anhedonia.

4.2.3 Auxiliary Analysis

The mediation model findings prompted an exploration of whether positive parenting strengths significantly moderated the effects of trauma on anxiety. A gamma-distribution GLM was conducted with the interaction of trauma and parenting strengths in the model. Prior to analysis, the parenting strengths variable was computed into a centered product term to counteract issues of high multicollinearity (Aiken & West, 1991). The linear model demonstrated that both main effects remained significant, but the interaction did not account for a significant proportion of the variance in anxiety, as summarized on Table 10. Therefore, parenting strength did not moderate the effect of trauma on anxiety.

Table 10:

Wald Chi-Square Model Effects: Interaction of Trauma and Parenting Strengths on Anxiety

Variable			
	Wald Chi-Square	Degrees of Freedom	Significance
Trauma*Parenting Strengths	1.04	3	.791
Trauma	47.61	3	.000
Parenting Strengths	4.84	1	.038

Chapter 5: Discussion

Among general populations of children and youth, the negative effects of trauma and internalizing symptoms, as well as the associated roles of resilience-related factors, are well documented and understood (Glaser, 2011; Herrenkohl et al., 2008; Martinez-Torteya et al., 2009; Cicchetti & Rogosch, 2009). The current study was designed to enrich the literature on child and youth resilience by exploring bullying and emotional abuse traumas, mental health, and strength factors among a specifically clinical sample of young people. Children and youth who utilize mental health services are those who experience greater risk and trauma, in parallel to less access to the protective resources that preserve and promote mental well-being (Mash & Barkley, 2009). Addressing the needs of those children and youth is especially significant considering the growing acknowledgements of the high prevalence of trauma, or victimization exposure among clinical samples, the predictive extent of independent and cumulative trauma on mental health, including internalizing symptoms, and the incidence of psychological distress as a risk factor for re-victimization (Cuevas et al., 2010; Cuevas, 2009; Ford, Wasser, & Connor, 2011). As the literature

purports, the association between trauma and maladaptive development must be combated by bolstering strength factors at individual and interpersonal levels (McLaughlin, Hatzenbuehler, & Hilt, 2009). Such a priority further signified the need to examine such resources among clinical samples. This chapter will present the study's findings in the contexts of previous literature. It will also discuss design strengths, limitations, implications for clinical practice, and future directions.

5.1 Results Summaries and Relevant Previous Literature

5.1.1 Emotional Abuse and Bullying as Predictors of Internalizing Symptoms

The first part of the study explored the main effects of depression, anxiety, and anhedonia among a clinical sample of children and youth across individual and poly-victimization categories bullying and emotional abuse. Based on distribution analyses of internalizing symptoms scales, GLM was selected as the most suitable method of representing the data (IBM statistical manual, 2013). In the first test, which modelled the effects of trauma on depression, we controlled for sex because the difference between depression in male and female children and youth was significant; however, sex was not controlled for in the second test, which modelled the effects of trauma on anxiety because no such association was found (see Section 4.1.2). Consistent with the literature, bullied, emotionally abused, and poly-victimized children and youth significantly reported more depression and anxiety as compared to the reference groups of non-abused children, with both depression and anxiety found to be most highly reported among those who were poly-victimized. A study by Finkelhor and colleagues (2005) found poly-victimization to be a powerful predictor of depression and anxiety for younger and older children. The study's examination of individual types of trauma, including bullying and emotional abuse, among others, also revealed that poly-victimization reduces the statistical associations between individual types of trauma and

internalizing symptoms, thereby suggesting that poly-victimized children and youth are those who carry much of the mental health morbidity. The study's findings are also consistent with prospective and longitudinal studies which demonstrate that the risks of depression and anxiety impacted by emotional abuse and bullying continue into adulthood, and in many cases, a greater percentage of those who have been victimized in childhood experience greater risks of substance abuse than those who have not been victimized (Herrenkohl et al., 2013; Stapinski et al., 2015; Carter, Andershed, & Andershed, 2014; Malecki et al., 2015).

The third test of this study, which analyzed the effects of trauma on anhedonia, demonstrated that, while poly-victimized and bullied children and youth reported more anhedonia as compared to the reference group, no significance was found among those who were emotionally abused. The latter finding was inconsistent with the literature. For instance, studies such as those by Heather and colleagues (2013) and Andersen (2015) have demonstrated that anhedonia in children and youth is commonly assessed as a subscale of depressive behavior, wherein anhedonia (as a category under depression), bullying, and victimization are significantly and positively related to one another. The long term effects of trauma on child and youth mental well-being are alarming, with studies suggesting that the mental health needs of adults with histories of child and youth maltreatment are not suitably met, leading to increased risks of mental health problems during adulthood (Ringeisen et al., 2015; Lereya et al., 2015; Herrenkohl et al., 2013). As stated by Ringeisen and colleagues, shifts from child- to adult-oriented care systems are complicated by more restrictive eligibility criteria and unsuitably-tailored care in adult mental health services (2015).

5.1.2 Individual Strengths as Mediators

Two mediation models were established to estimate the total, direct, and indirect effects of trauma on depression and trauma on anxiety through individual strengths. Given the insignificant relationship between emotional abuse and anhedonia, we could not run mediation to test the effects of trauma on anhedonia through individual strengths. Similar to GLM results, the mediation models that were established, however, demonstrated significant total effects between trauma and internalizing problems, such that bullying, emotional abuse, and poly-victimization positively predicted both depression and anxiety among children and youth. On the other hand, both mediation processes were ceased because a relationship between trauma and the individual strengths mediator was not established. To illustrate, in examining depression, we found that emotional abuse and individual strengths, when compared to the reference group of no trauma, were significantly negatively related, but the relations were not significant for bullying and poly-victimization. The same was found when examining the effects of trauma on individual strengths within the model that included anxiety. On one hand, the findings contradicted some literature on the protective roles of individual strengths and attributes (Benzies & Mychasiuk, 2009; Brooks, 2012; Zolkoski & Bullock, 2012). It is possible that the absence of the relationship between trauma and individual strength stem from the low inter-item composite score represented on the individual strengths measurement scale. The individual strengths measurement scale utilized in this study is not an official scale within the interRAI ChYMH suite of instruments and further developmental efforts are required. While ensuring that individual strengths are reflected when examining a needs-based assessment of children, further validation efforts are needed to examine individual resources of children and youth in clinical contexts.

On the other hand, a considerable body of resilience literature provides a reasonable second interpretation of the given results. Evidence on the behavioural, emotional, academic, and relational impacts of young people's exposure to multiple risks, or cumulative stressors (e.g., poly-victimization) suggests that individual strengths may not hold buffering merits within high-risk populations. Specifically, *multiple risks*, according to Ungar (2004) and other pioneering "recovery after trauma" resilience researchers (e.g., Garmezy, 1993; Beardslee, 1989; Garmezy, Masten, & Tellegan, 1984; Rutter, 1979/2000; Cicchetti & Rogosch, 1993; Sameroff & Seifer, 1990) refers to the effects of multiple demographic, psychosocial, and environmental risk factors on child adjustment. Rather, multiple risk factors exponentially increase vulnerabilities and maladaptive outcomes for children and youth across the lifespan (Lanza, Rhoades, Nix, & Greenberg, 2010; Kolar, 2011; Olsson et al., 2003). Exposure to particularly cumulative stressors is associated not only with depressive and anxious symptoms, but aggressive behaviour, poor academic performance, and disruptions in social relationships (Kliewer, Reid-Quiñones, Shields, & Foutz, 2009). Such findings put into context the idea that regardless of racial or ethnic background, young people who live in at-risk neighborhoods or have fewer resources, for example, are more likely to exhibit negative outcomes than those who face fewer environmental, social, and individual risks (Kliewer, Reid-Quiñones, Shields, & Foutz, 2009).

5.1.3 Parenting Strengths as Mediators

Two mediation models were also established to examine the relationships between internalizing symptoms and bullying and emotional abuse trauma through parental behaviours known to promote security, resilience, and mental well-being (Kim & Cicchetti, 2010; Benzies &

Mychasiuk, 2009; Thomasgard et al., 1995). The first model demonstrated that the relationship between trauma and depression was not mediated by parenting strengths.

However, the second model demonstrated a suppression effect, wherein the magnitude of the negative direct effects of trauma on anxiety were greater, instead of reduced, when parenting strengths were considered. In response, an auxiliary analysis was conducted to examine whether an interaction between trauma and parenting existed that could explain a significant change in variance in anxiety. The model indicated that parenting strengths were not a significant moderator of the relationship between trauma and anxiety.

It was originally anticipated that the study's results would function in concordance with previous literature that suggests that positive parenting practices correlate positively with secure attachments and negatively with internalizing behaviours among children and youth (Kuhlberg, Peña, & Zayas, 2010; Sousa et al., 2011; Bacchini et al., 2011; Zhou et al., 2012; Zolkoski & Bullock, 2012). In contrast, research on the pervasive developmental impacts of sustained trauma among at-risk populations (Hanson & Lang, 2014; Bath, 2008), the foundations of attachment theory (Madigan, Atkinson, Laurin, & Benoit, 2013; Groh et al., 2012), and specific literature on parental overprotectiveness (Oldehinkel et al., 2006; Spokas & Heimberg, 2009; McShane & Hastings, 2009) provide viable interpretations for the study's findings. This section elucidates potential explanations for the insignificant or suppressing effects of parenting on child and youth depression, anxiety, emotional abuse, and bullying victimization pathways.

As described in the previous section, multiple risk experiences stifle the buffering effects of individual strengths. The same may apply for the non-mediating effects of parenting strengths on the trauma-depression relationship for at-risk children and youth. To elaborate, Bath (2008) assesses the extent to which sustained risk influences development (e.g., attachment systems,

behavioural control, and affect regulation) by focusing on the brain-based stress response system. Sustained trauma causes young people to devote their attention on ensuring safety, as opposed to engaging in growth-promoting interests and activities. Even when no external threats exist, traumatized children and youth are therefore in a constant state of alarm, view adults as threats instead of support systems, and are often described as hypervigilant in school and substitute settings because they constantly scan their environments for potential sources of danger (Bath, 2008). The development of bullied, emotionally abused, and poly-victimized children and youth is further complicated by factors relating to attachment.

As described in Chapter 1, attachment theory posits that experiences of secure or insecure attachments promote healthy adaptive behaviours or contribute to maladaptive coping mechanism (Groh et al., 2012). For example, secure attachments help young people cope with stress, while resisting, avoiding, and disorganized insecure attachment behaviours contribute to internalizing and externalizing symptoms, in addition to other psychological disturbances (Groh et al., 2012; Sawle, Lennings, & Heard, 2015; Sloman & Taylor, 2015). This discussion addresses various dimensions of parenting and attachment relevant to the current study.

A) *Parents of depressed children and youth:* Evidence suggests that depression among children and youth is associated with the resistant attachment style, illustrated by preoccupations with relationships or the need for approval that follows abuse and/or victimization (Mikulincer & Shaver, 2005). At the same time, it is possible that high levels of parenting strengths reported through the ChYMH assessment were perceived by children and youth as demonstrations of overprotective parenting, as opposed to mediators of the relationships between trauma and depression. Study results regarding the relationships between internalizing symptoms and trauma through parental behaviours may therefore be explained by literature on the inadvertent impacts

of resistant attachments and perceptions of parental protectiveness. Research suggests that young people's perceptions of parental overprotection are positively associated with depressive symptoms and social anxiety, as well as other internalizing problems like inhibited temperament or shyness (Oldehinkel et al., 2006; Spokas & Heimberg, 2009; McShane & Hastings, 2009).

B) *Parents of anxious children and youth:* The dimensions of parenting most consistently associated with childhood anxiety (and not assessed in the current study) are parental control, acceptance, and the modelling of resistant or avoidant behaviour (Brown & Whiteside, 2007; Wood et al., 2003). Empirical research and direct observations of parent-child interactions have specifically found that the parents of anxious children are more overprotective (Rubin, Coplan, & Bowker, 2009; Brumariu & Kerns, 2008); less tolerant or accepting of differences of opinions (Rubin, Coplan, & Bowker, 2009); and more likely to model anxious behaviours and maladaptive problem solving strategies to their children or youth (Brown & Whiteside, 2007). As a result, anxious children and youth with restrictive, protective, and controlling parents do not develop the coping, problem-solving, and autonomy-based strategies necessary to overcome adversity and trauma (Rubin, Coplan, & Bowker, 2009; Van Zalk & Kerr, 2011). To specify, some studies have reported higher scores of internalizing symptoms among traumatized boys with insecure parent-child attachments, compared with traumatized girls with insecure attachment (Madigan Atkinson, Laurin, & Benoit, 2013).

Van Zalk and Kerr (2011) argue that controlling parent practices are motivated by warmth and love. For example, some parents shield or take control when their children or youth are anxious in demanding situations. They therefore model to children and youth that the world is an unsafe place for which they require protection and over which they possess minimal control. The stated

literature findings provide potential explanation for the current study's results on the relationship between trauma and anxiety through parenting strengths.

C) *Dimensions of Emotionally Abusive Parenting:* In situations of trauma, which are known to impair the functioning of the attachment system (Riggs, 2010), individuals perceive their individual strength resources as insufficient to handle the demands, meaning children and youth seek alternate means of buffering adverse conditions through attachments with caregivers. In cases of emotionally-abusive parents and caregivers, who may be both frightening/abusive and a source of security, children and youth depend on suboptimal attachment strategies and behaviours, which pose long-term stifling effects on emotional regulation strategies, relationship-building skills, and future vulnerabilities (Sloman & Taylor, 2015).

D) *Parents of Bullied Children and Youth:* Attachment theory posits that the relationship between a child/youth and his or her caregiver functions as models for that young person's relationships with others (Rubin, Coplan, & Bowker, 2013). Studies on the attachment styles of children/youth with insecure attachments demonstrate that their social and behavioural deficits are linked with depression, in addition to lower levels of interpersonal competence with peers, less assertiveness, more submissiveness in social situations, and less ego-resilience than their securely-attached peers (Abela & Hankin, 2008). As a result, young people with insecure attachments are more likely to be victims of bullying (Abela & Hankin, 2008).

In certain cases, seemingly protective, involved, and warm parenting attributes contribute to peer victimization. Espelage and Swearer (2010) specifically report that families of bullying victims demonstrate overprotective and over-controlling parenting that possibly inhibits the development of confidence, independence, and assertiveness. The stated attributes are necessary to foster positive peer relationships (Espelage & Swearer, 2010). Such conclusions explain the

suppressing effects of parenting on the relationship between trauma and anxiety, while functioning in concordance with studies on anxiety and behavioural inhibition in children and youth, including bullying victims (Rubin, Coplan, & Bowker, 2013; Negreiros & Miller, 2014).

The population under study comprised of an already at-risk group of children and youth, whose adaptive development was further jeopardized by experiences of emotional abuse, bullying, or poly-victimization. Study results, which demonstrated the non-mediating and suppressing effects of parenting qualities on the relationships between trauma on depression and trauma on anxiety, respectively, can be explained using resilience research on the complex and interacting factors that help predict developmental outcomes. The intersections between sustained trauma experience, insecure child/youth attachment styles, and maladaptive modelling through seemingly-protective parenting practices provide insights into the truly challenging developmental pathways of clinical samples of young people.

5.2 Clinical Implications and Future Directions

The pathways to internalizing problems are complex and it is unlikely that single risk or strength factors are sufficient to cause or prevent psychopathology (Madigan Atkinson, Laurin, & Benoit, 2013). The current study's findings demonstrate that young people in clinical contexts who experience bullying, emotional abuse, and poly-victimization are more likely to experience depressive and anxious symptoms than non-traumatized children, but not all children and youth with available individual and parenting strength resources are problem- or risk-free. The present study furthers two themes in research: 1) multiple risks are so compounded in high risk samples that individual and parenting strengths do not have the power to buffer the effects of risk and 2) attachment is a factor that complicates the functioning of parenting strengths in contexts of risk,

trauma, attachment, and mental health. To illustrate, multiple risk impact is cumulative and factors like poly-victimization combine exponentially (Ungar, 2004), while elevated levels of emotional, behavioural, and social problems among children and youth predict elevated stress among caregivers (Leve et al., 2012). Without additional supports or education, caregivers' stress levels remain high and the attachment relationships necessary for the development of young people's adaptive skills become compromised (Leve et al., 2012). The outcomes of trauma on mental health therefore demonstrate the paramount necessities for evidence-based interventions and trauma-informed treatment approaches to care for children, youth, and their families.

Attachment-Related Evidence-based interventions:

For young children, Circle of Security (COS) intervention is a means of solidifying the roles of parents and caregivers as secure bases for young children (Powell et al., 2014). COS uses video feedback during time-limited group psychotherapy or individual therapy that emphasize the capabilities of children by drawing caregiver attention to the meanings of their subtle behaviours (McDonough, 2000; Mikulincer & Shaver, 2007). The intervention also teaches caregivers about their young children's attachment needs and the equired parenting behaviours they should use in response in given situations (Zeanah, Berlin, & Boris, 2011).

A small percentage of the current study's sample consists of users of foster care services and their caregivers, making it necessary to note the unique challenges that face caregivers who foster young children. The work of Dozier and colleagues (2005, 2009) suggests that children in foster care tend to 1) reject care that is offered to them, 2) require special help with emotional- and self-regulation, and 3) may be hypersensitive to frightening behaviours in caregivers as a result of past trauma experiences (Zeanah, Berlin, & Boris, 2011). As well, the foster parents of the children are often likely to have their own histories of non-nurturance or negative emotional reactions

(Zeanah, Berlin, & Boris, 2011). A notable intervention developed to address the stated areas of challenge for foster young children and their caregivers is Attachment and Biobehavioural Catch-up (ABC), which provides video and live interaction psychoeducation therapy to address the stated unique challenges of foster children and their caregivers (Dozier et al., 2009). In recent years, the ABC program has been adapted for birth parents whose children have been maltreated, but not moved to foster care (Zeanah, Berlin, & Boris, 2011).

For older children, Attachment-Based Family Therapy (ABFT) (e.g., Diamond, Reis, Diamond, Siqueland, & Isaacs, 2002; Diamond, Siqueland, & Diamond, 2003) is useful for treating depression among adolescents by building parent-child relations and attachments, while promoting competency (Kaslow, Broth, Smith, & Collins, 2012). For parents, the intervention promotes healthy attachments and encourages caregivers to become aware, then address issues of disengagement, personal stressors, and criticisms. On the other hand, the intervention's treatment foci for youth include promoting affect regulation, self-concept, motivation, and engagement. ABFT is cited as being successful in reducing depression and anxiety symptoms, hopelessness, and suicidal ideations among youth. The therapy is also linked with improvements in mother-youth attachments (Diamond et al., 2002 as cited by Kaslow, Broth, Smith, & Collins, 2012).

Trauma-Informed Care (TIC): A body of research conveys the effectiveness of responding to trauma conditions through clinical-based interventions and care strategies. Much of young people's healing from trauma also takes place in non-clinical organizations with parents, teachers, counsellors, coaches, direct case works, and case managers (Bath, 2008; Greenwald, 2005). All organizations that interact with traumatized children and youth can therefore make important contributions to healing and growth through TIC implementation. The concept of trauma-informed systems of care are broadly defined as ones which 1) promote increased awareness of the impacts

of trauma across child and youth services; 2) increase awareness and access to evidence-based assessment and treatment; 3) provide education for health and service providers to impact practical change; and 4) strengthen collaborations across the multiple organizations involved in service delivery for those impacted by trauma (Hanson & Lang, 2014; Bath, 2008). For children and youth, the key prerequisites for healing (i.e., pillars of TIC) entail development of safe environments, promotion of healing relationships, and teaching of self-management and coping skills (Bath, 2008). Such pillars, according to Bloom and colleagues (2003) translate to residential programs for traumatized children and youth that are "sanctuaries" with the relational and environmental safeguards to prevent further re-traumatization, promote secure relationships, and develop adaptive skills (Hanson & Lang, 2014). With time, organizations are realizing the principles of TIC necessary to develop sustainable strategies for promoting and improving the well-being of young people and families.

5.3 Study Limitations

This section notes several sampling, design, and scope limitations of the present study.

Sampling. First, the study's clinical mental health sample is not generalizable to school samples of children and youth who are seeking mental health services and require trauma-informed care. Rather, the current sample was limited to child and youth users of community and tertiary care mental health facilities. Additionally, the sample was not randomly selected. Rather, it entailed convenience sampling, whereby consent for completion of the interRAI ChYMH assessment was acquired from parents and guardians of children and youth who were seeking mental health services at various agencies within the Province of Ontario.

Design. The study design did not account for trauma-type severity and chronicity, which may have impacted the efficacy of trauma correlations with internalizing problems and the buffering effects of strength factors. Additionally, the design did not operationalize individual strength and parenting strength factors in ways that accounted for the frequencies of children and youth who possessed both, one, or no strengths. As stated earlier, the individual strengths scales used in the study, for instance, was not an official scale for the interRAI ChYMH.

Scope. The literature on child and youth mental health symptoms is riddled with inconsistencies regarding whether trauma is a cause or consequence of psychological maladjustment. Many studies consider trauma as an agent for future adjustment problems (Reinjntjes et al., 2010). This was the hypothetical basis for the current study. Because of the study's cross-sectional design, which does not allow cause-effect conclusions to be made, the question of whether emotional abuse, bullying and parenting strengths are causes or consequences of internalizing problems, or both, was beyond the scope of this study. Future studies should utilize longitudinal design to examine changes in internalizing problems at specific exposure points to trauma and protection.

Finally, study data lacked information on the types of parenting/caregiving strategies and specific forms of attachment insecurity of children/youth that pose risks for specific internalizing symptoms. Future studies should qualitatively and empirically investigate types of attachment patterns and the factors that may mediate or moderate the relations between attachment and trauma and attachment and internalizing problems. Research that focuses on such factors will contribute the clinical field with new targets for treatments and therapies for internalizing symptoms. Such findings will also inform intervention and prevention strategies that build healthy relationships for young people, while promoting positive adjustment into adulthood.

5.4 Closing Remark

Despite the stated limitations, important information emerged from the current study that aids clinical research on child mental health, resilience, and victimization. Bullying, emotional abuse, and poly-victimization were found to be positively related to anxiety and depression, while parenting and individual strength factors failed to mediate or functioned to suppress the relationships. It was likely that the sample of children and youth were so highly at-risk and with multiple risk factors, that any individual and parenting strengths were not strong enough to buffer the negative effects of trauma. This predominant interpretation of the results stems from the literature on multiple risk and cumulative stressor impact (Lanza, Rhoades, Nix, & Greenberg, 2010). The given results also sparked pertinent investigations on the types of insecure parent-child/youth attachment styles (Sawle, Lennings, & Heard, 2015; Groh et al., 2012) common among clinical samples of traumatized young people, for whom protective resources are sometimes scarce. The study prompts discussions on family-centered and attachment-based intervention strategies (Zeanah, Berlin, & Boris, 2011; Kaslow, Broth, Smith, & Collins, 2012), as well as trauma-informed care (Hanson & Lang, 2014; Bath, 2008) for children and youth who experience adversity and risk. Overall, the study commenced with the evidence-based postulation that strength and protective factors at multiple ecological levels continue to be sources of hope and resilience for even the most at-risk groups of children and youth. The sentiment is verified by the expansion of the field of child developmental resilience, the growing base of attachment- and family-based childhood and youth intervention efforts, and the continued mobilization of trauma-informed approaches of care. All developments continue to enhance understandings of emotional, social, and psychological development across the lifespan.

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Curriculum Vitae
Amani Elrofaie

Education

2016	**MA Education (policy focus):** Western University, Faculty of Education *Supervisors:* Dr. Shannon Stewart, PhD, C.Psych & Dr. Vicki Schwean, PhD, C.Psych
2013	**Bachelor of Education (BEd) and Ontario College of Teachers (OCT) Certified:** Western University, Faculty of Education *Division:* Intermediate/Senior (Grades 5-12), English and Individual & Society
2012	**Bachelor of Health Sciences (BHSc):** Western University Specialization in Health Sciences with Minor in Creative Writing and Rhetoric

Research-Related Experience

Research Employment

2014-Present	**Research Associate: Huron University College/WesternU** *Supervisor:* Dr. Ingrid Mattson, PhD
Oct., 2016	**Data Analyst: Queen'sU, Assessment and Evaluation Group, and Let's Talk Science (Funded by the Ontario Ministry of Education)** *Project title:* Capacity building in education: A collaborative education of K-12 Science resources and professional learning in online communities
Dec., 2015	**Research Associate: Queen'sU, Tanzania Intl. Service Learning** *Supervisor*: Dr. Michelle Searle, PhD
Oct., 2015	**Research Associate: WesternU "Single Ceiling Project"** *Supervisor:* Dr. Karen Bax, PhD, C.Psych
May-Apr., 2015	**Research Associate: Western Faculty of Education "Heart of the Discipline"** *Supervisor*: Dr. Michelle Searle, PhD

Conferences, Presentations, & Education

Jul., 2015	**Poster Presenter: The International Society for the Study of Individual Differences (ISSID) Annual Convention, London, Ontario** *Title:* "Elrofaie, "A., Lapshina, N., Stewart, S., & Schwean, V. (July 2015). Child abuse and domestic violence: An examination of mental health outcomes and challenges within a clinical sample"
Apr., 2015	**Speaker: "Retiring with Strong Minds" Graduate Student Series, Schulich Medicine and Dentistry, WesternU**

Presentation title: "Single Ceiling" project: Addressing the mental health needs of children and families in collaboration with Merrymount Family Support Centre & the Child and Youth Network"

Apr., 2015 **Panel Presenter: Migration and Ethnic Relations (MER) Graduate Student Conference, WesternU**
Presentation title: "Examining Europe's and North America's research methodologies for assessing mental health problems among culturally diverse groups of children"

Apr., 2014 **Roundtable Presenter: Robert Macmillan Graduate Research in Education Symposium, WesternU**
Presentation title: "Socioeconomic status, family relationships, and parental education as determinants of mental health symptoms in children"

Dec., 2014 **Workshop Presenter: Education Mental Health Day, Western University**
Presentation title: "Nurturing mental health literacy in Canadian school contexts: What teachers should know to support student mental well-being"

Feb., 2014 **Workshop Presenter: Faculty of Education's Embracing Diversity Conference, WesternU**
Presentation Title: Engaging diversity: Resource planning for pre-service teachers

Publishing & Editing

Aug., 2014 ***Author*: "Mood & Irritability"**
Chapter for *Wiley Encyclopaedia of Personality and Individual Differences*
Chapter compilers: Dr. Carducci, Dr. Di Fabio, Dr. Stough, & Dr. Saklofske

May, 2014 ***Author:* "Providing Diversity Competent Care for Muslims: A Guidebook for Health Care Providers"**
Commissioned by the Fraser Health Authority

Apr., 2014 ***Journal reviewer and editor:* "Daily Stressors in Primary Education Students"**
Canadian Journal of School Psychology
Requested to serve as reviewer by Dr. Saklofske, PhD, C.Psych

Other Relevant Experience & Accolades

2015 Trained Assessor: interRAI *Child and Youth Mental Health* (ChYMH)

2015 Recipient of the Muslim Association of Canada (MAC) EMAAN 2015 *Young Professional's Writing Scholarship*

2014 Certificate of Successful Completion of the Teaching Assistant and Micro-Teaching Training Program, WesternU

2013 Recipient of the *F.C. Biehl Memorial Award for Excellence in English Education,* Faculty of Education, WesternU