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A Conceptual Analysis of Interpersonal Resilience as a Key Resilience Domain: Understanding the Ability to Overcome Child Sexual Abuse and Other Adverse Interpersonal Contexts

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Abstract:

Objectives: We conduct a conceptual analysis of interpersonal resilience as a domain-specific type of resilience, based on the premise that it is a multi-faceted construct. We consider interpersonal resilience within the context of child sexual abuse (CSA) as an under-attended and salient interpersonal stressor with profound implications involving the self and personal identity. Undoubtedly the most under-reported form of abuse, we examine the statistics known-to-date to highlight urgent areas for attention, pressing for resilience and developmentally focused empirical investigation.

Methods: Selected publications supporting an analysis of concepts in defining resilience are included. Given the need to conceptually develop how specific types of resilience act as potential targets for intervention and social change in trauma-related contexts, a systematic, meta-analysis, or scoping review is premature.

Results: We describe interpersonal resilience as a developed orientation that is deeply rooted in self and identity issues. Interpersonal resilience incorporates processes that develop a sense of interpersonal efficacy, social self-esteem, mattering, and self-compassion that may buffer against negative social experiences, specifically the traumatic event of CSA embedded within adverse contexts.

Conclusions and Implications: Interpersonal resilience is a distinct type of resilience, distinguishable from emotional resilience and dispositional traits. Empirical research on the nature of interpersonal resilience in challenging contexts is warranted. Intervention programs need to be expanded to include an explicit emphasis on practical resilience strategies, including promoting interpersonal resilience through skill-development, mentoring, and community-based opportunities.

Keywords:

Resilience, stress, trauma, maltreatment, interpersonal resilience, mattering, children, adolescents, child sexual abuse.

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Introduction

Abuse by a family member or someone connected with the family is in itself a barrier to victims accessing help (UK Child Commissioner's Report, 2015, p. 8)

Essentially, the strategy involved here is to support the transformation of traumatic helpless into learned helpfulness. Such a shift facilitates the need and ability to help others, altruism toward others, and the development of compassion with detachment. If children can be identified immediately after suffering a traumatic stressor and helped to cope with that stressor, they will be less prone to engage in self-destructive behaviors such as drug abuse, school failure, unsafe sex, and violence. (Bell, 2001, p.376)

Growing up as an only child on a Midwestern farm, Brett's loneliness made him a target of a local child molester – one of his elementary school teachers. For a decade, Brett suffered the diabolical combination of special attention woven together with sexual abuse; a combination that left him confused, alienated and further isolated from his peers and his family. Somehow, Brett retained an inner thread, a thin but seemingly unbreakable link to a selfhood out of reach to the man who abused him, a link to an inner reference point of what is right. At 16, Brett disclosed the abuse. (Portraits and Biographies of Male Survivors of Childhood Sexual Abuse ; http://bristleconeproject.org/men/brett-bussen/)

Youth represent more than 20% of a country's population and, as such, have been declared a priority group for this decade (World Health Organization, 2014). The early adolescence and young adult periods involve significant transitions and the accordant

stress of challenge and change. It is both a window of risk and opportunity for learning new ways of relating. In general, adversity is unavoidable in terms of major life events, as well as daily stressors in the form of hassles. Stress also comes in the form of needing to adapt to numerous transitions in a relatively short period of time, including transitions to secondary school and work force entry, driving a car, engaging in dating and romantic relationships, and having expectations for and greater interest in autonomy, peer preferences, and activities.

Our particular interest in the current paper is on individual differences in the reactions and responses of children and adolescents to interpersonal stressors. In particular, we consider the characteristics of those young people who show remarkable resilience despite being faced with exceptional interpersonal challenges and threats that come in the form of a wide array of stressors. Some stressors and strains are frequent, typical, and common in that they are experienced to some degree by most young people. Unfortunately, some young people also have unique stressors to deal with in their lives such as peer victimization and rejection (see Platt, Kadosh, & Lau, 2013) or family disruptions due to parental divorce or the death of a parent (see Sandler et al., 2010; Sigal, Wolchik, Tein, & Sandler, 2012). Unfortunately, far too many young people have to endure profound interpersonal adversities rooted in the behaviours of other people, including significant maltreatment during their childhood and adolescence and acts of exclusion that can cause hurt and social pain. As the most stigmatizing form of maltreatment, CSA youth are vulnerable to social rejection when disclosing their victimization to peers, as youth most often engage peers in personal information. While males are less likely to be help-seeking for emotional problems, research supports early disclosure for better mental health in adulthood, recognizing that masculinity demands, such as emotional control, self-reliance, and homophobia may be especially strongly enforced in adolescence (Easton, 2014). Despite such multi-layered challenges, we are particularly interested in gaining a better understanding of those young people who are still able to bounce back and flourish in the interpersonal domain despite the things that they have experienced and the people they have had to endure.

Taking a more contextualized approach, adverse childhood experiences (ACEs) include abuse and neglect (e.g., child sexual, physical, emotional abuse, neglect, witnessing inter-parental violence), as well as other traumatic events (parental death, divorce, living with someone abusing substances, or living with a household member who has mental illness, has attempted suicide, or who is going or gone to prison). The presence of ACEs is a "red flag" for adolescent health and wellbeing. For example, among child welfare-involved youth, the literature has noted compromised physical health (e.g., poor dental health; Bright, Alford, Hinojosa, Knapp & Fernandez-Baca, 2014) and overall poor health and somatic complaints (e.g., more than 90% had ACEs by age 14, primarily in experiencing neglect and caregiver depression, with recent exposures predicting somatic complaints, Flaherty et al., 2013), as well as risk for psychosis (Varese et al., 2012). Higher rates of exposure to all types of adversity were evident among lesbian/gay/bisexual young adults as compared to their heterosexual counterparts, including child physical and sexual abuse, homelessness, being kicked out of one's house, and both physical and sexual intimate partner violence (IPV), although physical IPV was higher only among bisexual respondents. This signals a greater level of ACEs in the social context of a potentially more challenged and protracted self-

acceptance for sexual minority youth and young adults (McLaughlin, Hatzenbuehler, Xuan, & Conron, 2012). In terms of health care, less than 11% of U.S. primary care pediatricians are familiar with ACEs and, when used in health screening, the most common ACEs inquired after are maternal depression and parental separation/divorce (Kerker et al., in press). ACEs may be a valuable tool alongside resilience measurement to better understand the contexts of adversity and resilience in developmental adjustment.

Some observers downplay the trauma potential of adversity and its commonality among youth, suggesting that young people are "bubble-wrapped," overprotected and, perhaps indulged, or shielded from exposure to personal failure experiences (see Malone, 2007). As seen above, statistics and empirical research are not in accordance with this claim. The socioeconomic context must also be considered. Schreier and Chan (2013) highlight the adverse context of socioeconomic disadvantage in areas of fewer safe spaces (e.g. parks, public facilities, living environments), whereby there are immediate spill-over impacts, such as reduced family physical activity, restrictive parenting practices, or toxic chemical exposure. With socioeconomic disadvantage, the resilience potential of community resources to buffer exposure to these harmful influences on health is minimal due to insufficient access and availability.

Below, we underscore how remarkable it is when a young person is still able to be interpersonally resilient by considering in detail a traumatic stressor that involves great adversity—the experience of CSA. Our description and overview of CSA focuses on what is currently known about this type of abuse with a particular emphasis on those young people who show remarkable resilience in the face of it. Heterogeneity found among CSA survivors represents a very useful context for assessing what it means to be interpersonally resilient, and the factors and processes that contribute to the development of interpersonal resilience.

Child Sexual Abuse: A Hidden Problem

While maltreatment has in the past decades been considered more as a broad category, given the data on the overlap among types, there is renewed interest in understanding unique impacts. The Fourth National Incidence Survey of Child Abuse and Neglect found that about 21/1000 early to mid-adolescents (12–14 years old) were maltreated, yet only about 8/1000 children in this adolescent age group were actually reported to child welfare or child protective services (see Sedlak et al., 2010). More recent attention has been given to CSA, a human rights, public health, and gender-based issue (Basile, 2015), where innovations are required at every ecological level across systems (individual, family, school, community, etc.) to adequately address CSA cases and reduce stigma to support early disclosure and intervention that targets resilience-building and the re-establishment of trust in self and others.

The recent *Report of the UK Children's Commissioners* (2015) advances that: (1) only one in eight youth come to the attention of protection authorities; (2) about two-thirds of CSA is experienced in and around the family; (3) many victims are abused by more than one perpetrator who tended to know each other; (4) one-third of victims tried to tell someone, with 20% telling five or more persons; and (5) obstacles to disclosure include victims not understanding their experiences with CSA until adults, holding fears of not being believed, not having a language to describe what happened to them, feelings of shame and guilt, and a

sense of responsibility to protect family members by keeping CSA a secret. In the survey for the report, 75% of victims were females in the pre- to mid-adolescent range, consistent with the gender ratio described in all epidemiological studies to date.

The impact of CSA is beginning to be mapped specifically on the brain. In a study of females, CSA was linked to cortical thinning in the somatosensory field related to the genitals and psychological abuse to thinning in the regions related to self-awareness and self-evaluation (Heim, Mayberg, Mletzko, Nemeroff, & Pruessner, 2013). Clearly, it is impossible to consider CSA as not having involved psychological abuse. CSA involves salient impacts to self-identity as well as to the body, which, in turn, consequently impacts how the young person who has experienced CSA manages and navigates him or herself within relationships.

The United States' Incident-Based Reporting System for 2013 had 6000 law enforcement agencies report their statistics on sexual offences. Rape was defined for the 2013 data collection as: Penetration, no matter how slight, of the vagina or anus with any body part or object, or oral penetration by a sex organ of another person, without the consent of the victim (https://www.fbi.go/about_us/cjis/ucr/nibrs/2013/resources/nibrs-rape-vs.-srs-rape). Other sexual offence categories included sodomy, assault with an object, fondling, and incest. While not yet considered as a national reporting system, 34% of eligible agencies (with coverage of 92 million US inhabitants) reported their data on nearly 6 million victims of crime. The findings for 2013 sex offences are reported in a monograph (https://www.fbi.gov/about-us/cjis/ucr/nibrs/2014/resource-pages/nibrs-report_sexoffenses_2013_12-1-15.pdf).

With rape, the pattern seen is similar to any statistics from child welfare. The data reinforce the overwhelming victimization of females (over 36,000), as compared to male classification of rape (611). Offenders were overwhelmingly males (26,000) as compared to females (900). The most common victims are teenagers between ages 13 and 18 years (modal age=15 years), and offenders between ages 16 and 25, committed by a male acquaintance at a place of residence (71.6%), with 88% of offenders using "personal weapons" (e.g., physical attack). The non-home locales typically include schools, campgrounds, and shopping malls.

Sodomy (oral/anal rape) constituted 10% of sex offences and the gender distribution was more even between male (3578; 47.1%) and female (4008; 52.8%) victims, with mainly male (6725) rather than female offenders (418). Nearly 88% of these involved physical attack. Offenders were mainly adults, although18.5% were between the ages of 11 and 15. The most likely victim is a five year-old male, with assaults taking place in residential locales. Primarily, the relationship to the offender was within family (33.1%) or a known relationship (47.9%). In a similar vein, physical force appears to be very frequent, with the highest injury rates in the <19 year olds group (Choudhary, Gunzler, Tu & Bossarte, 2012). Easton (2014) in his study of adult males found that the use of force by the CSA abuser was significantly predictive of adult internalizing disorder symptoms (e.g., anxiety, depression, somatization, suicidality).

Incest was found in 1,187 victims (1.6% of sexual offences), with 82% of victims being female and 90.5% of offenders being male. The prominent offender categories were: another child (32.8%), family member (26.4%), sibling (25%), step-relative (9.9%) and grandparent (5.9%). Given the high levels of siblings and other family members, the incest category seems to capture highly dysfunctional families with intra-familial assaults across generations;

50% of victims were between ages 10 and 18 years old when this incident was reported to police, but given the nature of familial dysfunctionality, one would expect a more chronic course in maltreatment overall. The presence of CSA may be a sentinel event because it is unanticipated, involves physical and/or psychological injury, and signals a maltreating environment. Moreover, when CSA is experienced at young ages, it may be indicative of not only direct familial attack, but also a pattern of CSA risk secondary to neglect. The overwhelming, unmet emotional and protection needs challenge victims to access their resilience in safer settings, such as schools.

As the above statistics attest, with CSA, there is some experience of force to hold the victim in place in order to commit the sexual assault – it is specific, targeted activity by a physically stronger, combative offender who may also practice various means of psychological manipulation (e.g., forcing a distortion of an attachment relationship; threats of damage to self and significant others; cognitive distortions de-emphasizing the coercion etc.). Thus, CSA consists of a physical attack (force), a physical invasion of private body parts, and a psychological manipulation in perpetrator explanations, severe threats, and special attention. Normatively, children have early sensitivity to the privacy of sexual body parts and schools have engaged in "good touch-bad touch" CSA prevention and awareness of "stranger danger." With CSA, there often occurs a conditioning of capitulation and silencing. Given how reticent victims are to disclose and how often they need to tell to be heard, the social environment can sometimes reinforce passivity and silence.

With CSA, there are multiple boundaries crossed which would otherwise uphold an autonomous self-in-development. For females, there are issues with cross-gender, given their assailants are mainly males. For males, there are issues with same-gender, given their assailants are mainly males. Further, there may be issues with conceptualizing "home," as most assaults occur in either the victims' or the offenders' living environment. The further issue is the age of these incidents coinciding with the transition to formal schooling.

Sexual Violence Towards Male Youth

While the true estimate of CSA is dependent on the context for safe disclosure, boys may be assaulted at earlier ages, making verbal disclosures less likely and instead displaying behavioural signs of acting out. The sexual violence victimization of boys and young men is a critical research priority given: (1) the scope of the problem; (2) the lack of knowledge about male-specific impairment patterns; (3) little to no attention paid to resilience; (4) the relative lack of services; (5) missing information on gender-specific intervention targets and promising, tailored intervention models; and (6) the numerous service entry doors that victimized males enter (e.g., child welfare, justice, street-youth services, Aboriginal services, pediatrics, psychiatry, emergency room visits, education, faith-based services), where their trauma may go undetected. Global population estimates of male CSA (8%, Stoltenborgh, van IJzendoorn, Euser, & Bakermans-Kranenburg, 2011) are in-line with Canadian estimates (5.8% before age 16; Afifi et al., 2014; 8.3% in Ontario, Tanaka, Afifi, Wathen, Boyle & MacMillan, 2014). A US national incidence study found boys report more sexual violence (SV) with age, with lifetime rates for males at 15 (4.3%) increasing at age 17

(5.1%), potentially reflecting greater risk or SV recognition (Finkelhor, Shattuck, Turner & Hamby, 2014). In US Justice data, where there were 7000 police reports/5 years, <9 years old was the peak age range for male CSA, followed by 10 -19 year olds. The most common acts were fondling, sexual assault with an object, and rape. Consistent with other data, assaults happened most in a residence; other sites were a commercial place, college, and jail.

For boys, there is an added stigma due to ideas of masculinity (Collin-Vézina, Daigneault & Hébert, 2013), given that most are young males developing a sense of self. As the most common police-based incident against males is occurring at age 5 or under, there is an added challenge for these individuals with respect to verbalizing their experiences in a societal context whereby males are expected to be primarily actors rather than verbal expressors. They are generally expected to be "tough" and, if not aggressive, assertive. What are we expecting of these preschool-age males? It is noted, for young adult and older adolescents male victims, especially if street-involved, the perpetrators will include females (e.g., Homma, Nicholson, & Saewyc, 2012; Saewyc et al., 2013). How does this further impact a male in his capacity to form and manage relationships, especially if they have experienced childhood CSA? At this point, both genders have been perpetrators for some males. The failure to reach sex trade youth is devastating, as they may be less empowered to negotiate condom use and, therefore, prone to sexual disease, broader health issues, and wider human rights violations (McClure, Chandler, & Bissell, 2014).

The neuroendocrine impacts of trauma for males may promote acting-out behaviours, possibly via the hypothalamic-pituitary-gonadal nervous/sex glandular system impacting hormone levels (Simmons et al., 2014). Male victims are at greater risk for physical aggression (LaPorte, Jiang, Pepler, & Chamberland, 2011), sexual aggression (Loh & Gidycz, 2006; Merrill, Thomsen, Gold, & Milner, 2001) and psychological abuse (Dardis, Edwards, Kelley, & Gidycz, 2013) towards dating partners. There is evidence that drinking to cope among males elevates risk for later disorder (Creswell, Chung, Clark, & Martin, 2013; Schraufnagel, Davis, George, & Norris, 2010). CSA is the strongest predictor of suicidal ideation and attempts, adjusting for other adversities. Males who experienced CSA show the strongest link to attempt severity (multiple attempts, medical attention); yet, the CSA history may go unrecognized (often not queried), and referral to services tailored to gender and trauma may be missed or not be available (Bruffaerts et al., 2010; Rhodes et al., 2014). Furthermore, youth who experienced CSA admitted to psychiatric hospital were treated with more medications, including antipsychotics, and had longer hospital stays than youth who had not experienced CSA(Keeshin et al., 2014). While homeless youth with a connection to a health practitioner used the emergency room services more often, homeless youth with CSA histories used emergency services less often (Strike et al., 2014). The effects of health impairment are broad: male victims of CSA are at greater risk to be out of the labour force due to sickness and disability, and have lower incomes (Barrett & Kamiya, 2012).

Resilient Responses to Child Sexual Abuse

A key component of wellbeing in the context of trauma is resilience (e.g., North, Abbacchi & Cloninger, 2012). Resilience is viewed as a learnable skill rather than an element of temperament; it has been conceptualized as an outcome, a moderator to stress, and a process for coping with stress and adverse contexts (Herrman et al., 2011). With resilience, the individual and their environment interact in ways that optimize development and resources are accessible, available, navigated and negotiated (Ungar, 2013a, 2013b).

Some initial accounts of resilience characterized some abuse and neglect survivors as "invulnerables," who seemed relatively impervious to stress (see Farber & Egeland, 1987). Descriptions of these "invulnerables" typically focus on their emotional resilience and their remarkable achievements and accomplishments when the odds are stacked against them. It is also important to conceptualize their resilience from an interpersonal perspective in terms of the ability or capacity to overcome the context of adverse child and adolescent experiences and go on to develop healthy relationships and social lives.

As noted earlier, one focus in the current article is to understand those young people who seem able to withstand significant interpersonal stress and strain and who go on to have social well-being. It has been clearly established that being maltreated early in life by primary caregivers is not conducive to developing resilience, yet there is substantial heterogeneity in the outcomes experiences by maltreated children and youth (see Luthar, Lyman, & Crossman, 2014). A recent systematic review of 37 studies was conducted by Domhardt, Munzer, Fegert, and Goldbeck (2015). These studies included 10 studies with data on resilience rates. Research with children and adolescents found that rates of resilience ranged from 10% to 53%, while research with adult CSA survivors found that rates of resilience ranged from 15% to 47%. The substantial variability in estimates was attributed primarily to differences in how resilience was defined (i.e., was it positive functioning in one domain or several domains?) (see Domhardt et al., 2015). How resilience is conceptualized and assessed is a key consideration as shown by previous research by Walsh, Dawson, and Mattingly (2010). They examined data from the National Survey of Child and Adolescent Well Being, and demonstrated that resilience rates varied considerably depending on which indicators of competence needed to be in place in order for a child or adolescent to be deemed resilient.

The review by Domhardt and associates (2015) is particularly informative because they identified factors that contributed to being more or less resilient. Resilience and related positive outcomes were linked with having higher levels of education, dispositional optimism and hope, beliefs about personal control and self-efficacy, an active coping style, and a tendency to make external attributions of blame. Other key factors were interpersonal and emotional competence, the development of social attachments, and garnering support from family and the wider social environment.

Given clear indications from this review by Domhardt et al. (2015) that positive interpersonal factors and associated competencies distinguish more or less resilient children and adults with a CSA history (also see Collishaw et al., 2007), it seems reasonable to conclude that within this group, the positive functioning displayed by certain individuals represents the development of a socially-based type of resilience. Given the multiple levels of relationship challenge in CSA, it seems apparent that interpersonal resilience is a key element in personal wellbeing and establishing the capacity to construct safe environs for adolescent and young adult development (Flett, Hewitt, Oliver, & Macdonald, 2002).

Toward a Domain-Specific Approach to Resilience

In a recent paper, Flett, Sue, Ma, and Guo (2014) described the need to consider resilience not only in terms of general emotional resilience, but also in terms of developing a sense of achievement or goal-related resilience, when faced with difficult performance situations, and a tendency to be interpersonally resilient (e.g., less emotional reactivity, less acting-out behaviours), when faced with problematic interpersonal situations. The current article revisits the concept of interpersonal resilience and outlines why systematic inquiry on this component of the resilience construct is needed. This emphasis on interpersonal resilience reflects the premise that the social well-being of children and adolescents is one of the most important if not the most important aspect of adaptability; accordingly, the truly resilient young person thrives and flourishes not only emotionally and academically, but socially as well.

It should be noted from the outset that our analysis is motivated, in part, by an interest in understanding certain young people who seem to be high functioning and able to cope in the achievement domain, but not in the interpersonal domain. Many of these young people are highly perfectionistic and seem to operate according to the social reaction model that sees perfectionism as a coping response to feelings of inferiority and adverse experiences (see Flett, Hewitt, Oliver, & Macdonald, 2002). When viewed from this perspective, perfectionistic strivings are not optimal; the young perfectionist feels that he or she has to be perfect and must be striving all of the time, so as to distract themselves from interpersonal problems and stressors and associated feelings of self-doubt and inadequacy. This interpretation accords with data suggesting that intellectually gifted children who are under pressure, and who feel that they must be perfect, can appear to be academically resilient and intellectually capable, yet they suffer from higher levels of sadness and anxiety (Stornelli, Flett, & Hewitt, 2009). Some of these children hide behind a façade of invulnerability based on their achievements and accomplishments and feel like imposters of functionality and control (Flett & Hewitt, 2013, 2014). In the case of maltreated youth, this high achievement orientation may be a product of parental emotional abuse that includes demands to maintain an image of the perfect family. Unfortunately, such tension in the presentational self can be met with profound self-punitiveness that can escalate into acts of intentional self-harm (see Flett, Goldstein, Hewitt, & Wekerle, 2012).

The remainder of this article will describe the various facets of interpersonal resilience. This analysis is informed by advances in the broader psychological literature. We begin by describing interpersonal resilience in more detail and by discussing how a focus on interpersonal resilience is in keeping with a multi-domain view of the self. We also discuss why an explicit focus on interpersonal resilience is needed in light of the challenges faced by children and adolescents in contemporary society. The various elements of interpersonal resilience are then outlined. Finally, we conclude by outlining some ways to promote interpersonal resilience and discussing key directions for future research.

Conceptualizing Interpersonal Resilience

Our focus on interpersonal resilience stems from the need to emphasize strengths alongside difficulties (Bell, Romano, & Flynn, 2013), and is predicated on claims that resilience should be conceptualized as a multi-dimensional construct (Luthar, Cicchetti, & Becker, 2000), and viewed from the approach that young people demonstrate multiple competencies across multiple domains. It is also based on the general premise that resilience involves key components of the self and personal identity, and typically reflects characteristics such as ego resilience, ego control, and self-esteem (see Cicchetti, 2013). The term "interpersonal resilience" is used rather than "relational resilience" to be more inclusive and reflect the need to be able to bounce back from negative treatment received from people who may not really be known to the individual. The National Scientific Council on the Developing Child (2015) suggested that some children will be able to be resilient when faced with one type of interpersonal stressor (e.g., bullying,), but these children may not be resilient when confronted with another type of interpersonal stressor (e.g., parental discord). The present definition incorporates the capability of bouncing back from social exclusion situations when relationships have not been formed.

The need to develop interpersonal resilience becomes evident when the developmental tasks outlined by Masten and Coatsworth (1998) are considered. Developmental tasks incorporate an interpersonal focus during infancy (e.g., attachment to caregivers), middle childhood (e.g., getting along with peers), and adolescence (e.g., forming close friendships). Interpersonal resilience is defined as the tendency to withstand negative feedback and less than ideal treatment by other people and persist in terms of maintaining positive relationships and pursuing personally important goals, including interpersonal goals. It is deeply rooted in the self-concept, beliefs about the self, and views of the self in relation to other people. Someone who is high in interpersonal resilience is able to adapt without withdrawing socially when they are confronted on a regular basis with social adversity. These interpersonally resilient individuals are capable of an adaptive form of disengagement when exposed to negative social feedback or placed in situations that arouse feelings of anger, resentment, and humiliation (Leitner, Hehman, Deegan, & Jones, 2014; White, Kross, & Duckworth, 2015). While negative emotions are clearly felt and experienced by such individuals, the feelings are less intense and managed in an effective manner.

In a recent analysis of preventive longitudinal investigations, Werner (2013) reiterated the need for at least one competent and caring adult early in life, and the overall benefits of developing positive interconnections among protective factors, including the vital importance of supportive relationships. Bell (2001) articulated a checklist of interpersonal resilience building blocks, including: (1) intellectual curiosity; (2) compassion; (3) mentalization; (4) obtaining the conviction of one's right to survive; (5) possessing the ability to remember and invoke images of good and sustaining figures; (6) having the ability to be in touch with affects, not denying or suppressing major affects as they arise; (7) having reasons for living; (8) having the ability to attract and use support; (9) possessing a vision of the possibility and desirability of restoration of moral order; (10) having the need and ability to help others; (10) having a non-restricted affective range; (11) being resourceful; and (12) being altruistic toward others.

In a similar vein, Cacioppo, Reis, and Zautra (2011) listed nine personal resource factors that promote social resilience. These factors are as follows: (1) the capacity and

motivation to perceive others accurately and empathically; (2) feeling connected to other individuals and collectives; (3) communicating caring and respect to others; (4) perceiving others' regard for the self; (5) values that promote the welfare of self and others; (6) ability to respond appropriately and contingently to social problems; (7) expressing social emotions appropriately and effectively; (8) trust; and (9) tolerance and openness. These nine factors largely represent either positive interpersonal tendencies or social skills and capabilities that should almost certainly facilitate positive social interactions. Their description helps provide a broader sense of the nature of interpersonal resilience. It can also form the basis for an extensive program of research on the nature of interpersonal resilience.

The emphasis on the role of a positive self-concept and self-system is based, in part, on insights gleaned from the research on maltreated children that shows the tendency towards an internalized negative self-view, especially in terms of the self in relation to other people (Beeghly & Cicchetti, 1994). As emotional maltreatment is an under-current to all forms of maltreatment, an important consideration in terms of wellbeing is recent evidence which suggests that exposure to harsh parental rejection contributes to dispositional self-criticism that, in turn, predicts depression and suicidal tendencies (Campos, Besser, & Blatt, 2013).

According to our conceptualization of interpersonal resilience, individual differences should be a reflection of a confluence of factors (e.g., child temperament, parental affection), but interpersonal resilience should not be regarded as fixed. Positive life experiences, positive role models, and direct coaching can increase levels of interpersonal resilience over time. This perspective is in keeping with dynamic views of the development of social competence (see Elicker, Englund, & Sroufe, 1992). A key component of this perspective on social competence is the notion that "… different kinds or qualities of adaptation at each stage of development have predictable implications for the preparedness of the individual to meet the challenges that follow" (Elicker et al., 1992, p. 79).

It is important when conceptualizing interpersonal resilience to be clear about other attributes and constructs it is associated with, but distinguishable from, such as interpersonal problem-solving ability. Here we are focusing on a form of "interpersonal bounce" or interpersonal buoyancy from the perspective of the person who still feels and experiences negative interpersonal experiences, but who seems to have a protective outer shell that seemingly repels interpersonal negativity directed at the self and wards off psychological pain induced by others. The interpersonally resilient adolescent is also comparatively more able to adapt to new situations that involve significant interpersonal challenges (e.g., the transition to high school), and more able to adjust to changes across interpersonal contexts in terms of their flexibility in interacting with a range of personalities, including those most people would find aversive. This may involve a greater tolerance for ambiguity when interpersonally relating to others, perhaps an outcome of the typically unpredictable relational experiences in the maltreating home, or due in part to being appropriately assertive and developing creative ways of resolving interpersonal conflicts. For these same individuals, however, it may come at a cost of being mainly other-oriented through the use of maltreatment-related hyper-vigilance and sensitivity to subtle emotional changes (Wekerle, Dunston, Alldred, & Wolfe, 2014).

Before we examine interpersonal resilience in more detail, we briefly consider why it is important for children and adolescents to develop interpersonal resilience. We then summarize the existing literature on interpersonal resilience.

Why is Interpersonal Resilience Important for Children and Adolescents?

Our emphasis on interpersonal resilience is based on several considerations. First, with the exception of a few noteworthy contributions, there is a paucity of theoretical or empirical inquiry on this topic, and this is especially the case with interpersonal resilience among children and adolescents. The lack of systematic inquiry is perplexing given the importance of social wellbeing, and how basic psychological needs reflect the need to be positively connected with other people and establish a healthy sense of autonomy.

Second, there is a need to understand interpersonal resilience given that it is widely accepted that interpersonal stress in general is one of the most distressing and impactful types of stress that people experience. While our focus in the current article has been on the experience of CSA and other adverse events, research on the general experience of negative social interactions suggests that daily interpersonal stressors and unsupportive interactions can have a substantial negative impact on psychological well-being over and above the impact of other types of stress (Flett, Hewitt, Garshowitz, & Martin, 1997; Lakey, Tardiff, & Drew, 1994; Lee, Hankin, & Mermelstein, 2010; McCaskill & Lakey, 2000).People who remain interpersonally resilient despite exposure to negative social interactions can tell us much about what is involved in successful life adaptation.

Third, we live in a time period that is unique in that other people can make our lives incredibly stressful via negative experiences delivered online. Researchers are just beginning to explore the concept of "digital stress" (Weinstein & Selman, 2014). It is evident that digital stress is highly interpersonal in nature since it can typically involve being exposed to such things as personal attacks, public shaming and humiliation, being imitated in a derogatory way, or being pressured (Weinstein & Selman, 2014).

A growing body of research has established that uncontrollable interpersonal stressors can be a significant source of distress for adolescents. Some of the stressors are experienced within the context of key interpersonal relationships (Seiffge-Krenke, 2011). A meta-analysis of the ability of adolescents to cope with interpersonal stressors showed that when the results of 40 studies were compiled, there were small but significant associations between maladaptive coping with interpersonal stress and poorer psychosocial functioning. Moreover, the goodness-of-fit hypothesis was supported; that is, the use of active forms of coping was more effective when confronted with a controllable interpersonal stressor (Clarke, 2006). This meta-analysis conducted by Clarke (2006) was illuminating in various other respects as well. Most notably, the 40 studies included in this meta-analysis provide an overview of the many possible stressors that adolescents may be faced with. Stressors included events involving family members (e.g., parental divorce, family conflict, parental criticism), romantic partners (e.g., argument with partner), peers (e.g., peer hassles, argument with a friend), and traumatic events (e.g., CSA, being physically attacked). It should be noted that this meta-analysis was based on studies conducted in 2001 or earlier, and this would explain

why highly salient modern stressors such as cyber-bullying and Internet harassment were not included; these stressors can be quite persistent and can provide intense distress (see Cappadocia, Craig, & Pepler, 2013; Fenaughty & Harre, 2013).

Contemporary research also has a unique focus on self-generated stressors that are typically interpersonal in nature, and are seen as emanating from personal choices and actions, such as initiating a relationship with an undesirable, disagreeable partner. This type of stress is known as "dependent stress' because it is dependent on the actions, choices, and emotional functioning of the individual. This type of stress is also quite deleterious; self-generated "dependent" stress in adolescents is linked concurrently and longitudinally with depression (Chan, Doan, & Tompson, 2014; Rudolph et al., 2000), combining with other vulnerability factors to heighten mental health risk (Hamilton et al., 2014). An explicit focus on the destructive process of self-generated stress is essential in developing contemporary programs that are designed to enhance resilience and that make note of interpersonal options in terms of response and the selection of people to interact with (see, for example, Wekerle & Avgoustis, 2003, for a discussion of attachment style and dating violence).

Distinguishing Interpersonal Resilience from Access to Social Resources

The existing literature on interpersonal resilience (or social resilience) is not extensive, and it is limited further by the fact that several authors refer to interpersonal resilience when they have actually assessed social factors that can promote or bolster a person's interpersonal resilience. Unfortunately, many researchers purport to be studying interpersonal resilience when they are assessing resource factors such as social support.

To our knowledge, only one team of researchers has extensively described interpersonal resilience. Cacioppo et al. (2011) described the concept of "social resilience" in a highly informative paper. Their timely analysis went beyond a focus on individual resilience to also include an emphasis on social resilience in groups. They define social resilience as "… the capacity to foster, engage in, and sustain positive relationships and to endure and recover from life stressors and social isolation. Its unique signature is the transformation of adversity into personal, relational, and collective growth through strengthening existing social engagements, and developing new relationships, with creative collective actions" (Cacioppo et al., 2011, p. 44). In this conceptualization, there is a strong emphasis placed on the ability to work with others, consistent with the concept of post-traumatic growth. These researchers have developed a social resilience training program designed to promote social cohesion in military personnel (Cacioppo et al., 2015).

Jordan (2013) has used the term "relational resilience" to describe a similar concept, which is derived from a relational model of development and resilience. This model has as its main tenet the notion that the core motivation in life is to be engaged in growth-fostering relationships that reciprocate empathy and empowerment. Relational resilience is defined as "… the capacity to move back into growth-fostering connections following an acute disconnection or in times of stress" (p. 77). While the notion of relational resilience is not as extensively described as the concept of social resilience outlined by Cacioppo and colleagues, relational resilience does include an emphasis on mutuality, being able to build relationships and have relational awareness, as well as not allowing oneself to be dominated by others.

It is likely that there is overlap between a person's level of interpersonal resilience and their overall resilience. However, there are various lines of evidence that point to the likely existence of a distinct type of interpersonal resilience. For instance, analyses of the structure of the self-concept have identified several interrelated yet distinguishable areas, including the physical, achievement, and interpersonal self-concepts (Harter, 1986; Rosenberg, 1979; Shavelson & Marsh, 1986). On a similar note, it is possible and important to distinguish levels of social self-efficacy and academic self-efficacy (see Bandura, Barbaranelli, Caprara, & Pastorelli, 1996). Research on life satisfaction indicates that it is meaningful to distinguish life satisfaction in the physical, achievement, and interpersonal domains (see Alfonso, Allison, Rader, & Gorman, 1996). Just as it is possible to identify young people who have high academic self-efficacy, but moderate to low social self-efficacy, or the young people who have high athletic self-concepts, but low academic self-concepts, it should be possible to identify a subset who are relatively invulnerable in terms of their academic buoyancy, but who are vulnerable due to relatively low levels of interpersonal buoyancy, or vice versa.

Below, we list a number of key components hypothesized to be facets of interpersonal resilience. The facets listed below seem to reflect some recurring themes. Most notably, the elements of interpersonal resilience reflect a strong sense of self and maintaining a positive orientation toward other people both proximally and in the future, despite having experienced significant interpersonal adversity in the past. It may extend to viewing the

Table 1. Facets of Interpersonal Resilience

Social Self-Efficacy	A perceived capability to generate positive interpersonal outcomes and connections
Self-Esteem via Mattering	A felt sense of being important and feeling significant to other people that has been internalized by the self and the person realizes "I matter"
Social Hope/Optimism	A tendency to have positive outcome expectancies when envisioning the interpersonal future
Social Approach Orientation	A position orientation to move toward people after experiencing interpersonal adversity and setbacks
Social Malleability/Adaptability	The capability to change and positively redefine and extend the self when in a novel or challenging social situation
Low Sensitivity to Rejection/Criticism	A low readiness to attend to, perceive, and react to negative social feedback
Adaptive Interpersonal Disengagement	An unwillingness to let negative social feedback and adverse experiences influence self-worth appraisals
Social Self-Compassion	The capability of responding mindfully toward the self with kindness and self-acceptance after experiencing interpersonal adversities, commiting social blunders, or failing to meet social expectations
Growth Mindset Toward the Social Self	Cognitively appraising social blunders and adverse experiences as learning opportunities and chances to develop social capabilities from a process perspective

past in reasonable, positive ways. For example, one youth in the MAP study relayed that he knew he was abused, but that the parent made a bad decision, that they were not a through-and-through bad person. (The youth maintained only phone contact with the perpetrating parent). This sort of view may be more coherent as perpetrators offer some positive experiences, and such "meaning-making" of abuse keeps personal integrity in tact and personal safety a priority. The various facets that are described include social self-efficacy, interpersonal optimism and hope, and self-compassion in challenging interpersonal circumstances. Other key facets include developing a sense of mattering to other people and establishing the ability to adaptively disengage from adverse interpersonal experiences.

Facets of Interpersonal Resilience

The key facets of interpersonal resilience are summarized in Table 1. We underscore our belief that interpersonal resilience is clearly reflected in a person's sense of self and identity by beginning with a discussion of social self-efficacy and establishing a sense of personal control.

Social Self-Efficacy and Internal Locus of Control

The interpersonally resilient child or adolescent has a sense of self-determination with respect to social matters that is reflected by a high degree of social self-efficacy and an internal locus of control, with the capacity to interact and accept help from others. For maltreated youth, the relational context of their abuse and neglect can translate distrust into a view of dominating independence, which may come at the cost of a dismissing (versus dependent/pre-occupied or secure) form of relating (Wekerle & Avgoustis, 2003). Nonetheless, the adaptiveness of having a higher level of perceived self-efficacy in conflictual peer relations has been shown for both maltreated and non-maltreated children (Kim & Cicchetti, 2003). A sense of being able to generate more positive interpersonal outcomes is a safeguard against feelings of social helplessness and hopelessness, and the feelings of distress and anger that otherwise might be experienced.

The importance of an internal locus of control in resilience has been shown in several studies (Bolger & Patterson, 2003; Werner, 2013), but it is particularly relevant in terms of being interpersonally resilient. Relevant to maltreatment and other adverse events in childhood or adolescence, Levenson (1981) posited a locus of control dimension involving powerful others that was assessed by items such as "I feel like what happens in my life is mostly determined by other people." Similarly, the Spheres of Control Scale (Paulhus, 1983; Paulhus & Van Selst, 1990) has a subscale that assesses individual differences in interpersonal control (i.e., control over other people in dyadic and group situations). This type of control is clearly distinguishable from personal control in non-social situations (i.e., achievement situations) (Paulhus, 1983).

According to this type of perspective, the key component for interpersonal resilience is a determination to not let other people dictate personal outcomes and choices that should come from the self. That is, there is not simply a strong resistance to negative social influence, there is also a propensity to make active choices and structure activities in ways that promote this sense of being in charge, and have a clear sense of mastery in interpersonal contexts. The person who has developed interpersonal resilience has also come to accept that many things done by other people are beyond his or her control, and it is much better to focus on what can be controlled according to a sense of personal autonomy, self-determination, personal mastery, and values.

This tendency to exert self-determination, and resist and overcome negative social influences, was illustrated in a case excerpt of Ellen, who was one of seven sisters forced to contend with psychotic behaviors of a mother suffering from manic depression, as well as the aberrant tendencies of a psychopathic, sadistic father (Anthony, 1987). Ellen was described as a child who "… thrived scholastically, emotionally, and interpersonally" (Anthony, 1987; p. 181). Ellen's interpersonal resilience was shown when she was asked to use materials to construct what her life with her mother was like. Ellen built a castle that clearly was more than a metaphor for her. When asked what it was like in the castle, Ellen responded as follows:

> *"It was like being in a world in which everything worked and everyone worked together and where you had a job to do that was the job that you wanted to do and no one could stop you from doing it. I am the queen of this castle and I do not want anyone to enter who can spoil my life" (Anthony, 1987, p. 182).*

Mattering and Social Self-Esteem

Social self-esteem is a concept introduced originally by Ziller and associates, describing high self-evaluation in social contexts, where there is also a high degree of self-acceptance and social acceptance (Ziller, Hagey, Smith, & Long, 1969). Our conceptualization of interpersonal resilience involves an emphasis on having moderate to high social self-esteem that is relatively stable. In contrast, children and adolescents who are interpersonally vulnerable have lower social self-esteem that is relatively unstable. The need to consider not only the level of self-esteem, but also the within-person stability, is illustrated by an impressive longitudinal study of developmental trajectories showing that adolescents with fluctuating social self-esteem are especially prone to adjustment difficulties (Molloy, Ram, & Gest, 2011).

We maintain that a vitally important aspect of interpersonal resilience is the tendency to have high social self-esteem in terms of a sense of mattering to other people. This emphasis on mattering is in keeping with the many illustrations of how exposure to a caring adult can promote a more positive self-identity and heightened resilience (e.g.,, Anawati, & Flynn, 2006). Mattering reflects the normative need to feel significant and make meaningful connections with others. Rosenberg and McCullough (1981) focused on three components: (1) the sense that other people depend on us; (2) the perception that other people regard us as important; and (3) that other people are actively paying attention to us. Rosenberg (1985) expanded on this conceptualization by suggesting that mattering also included the notion that others would miss the person if he or she were no longer around. Mattering is regarded as a component of self-esteem in a way that is in keeping with our understanding of social self-esteem (Rosenberg, 1985).

The importance of mattering was demonstrated within a sample of over 1,000 boys. It was reported that self-esteem was higher among those boys who were made to feel significant by their parent (Coopersmith, 1967). As might be expected, several researchers have found that among adolescents and adults, a stronger perceived sense of mattering predicts less depression, less suicide ideation, and greater self-esteem (Elliott, Colangelo, & Gelles, 2005; Elliott, Kao, & Grant, 2004; Marshall, 2001; Schieman & Taylor, 2001; Taylor & Turner, 2001).

Unfortunately, while a sense of mattering is protective and should facilitate resistance to interpersonal stress and other types of stressors, a sense of not mattering is a highly deleterious orientation that is often implicated in suicidal tendencies, and it is for this reason that suicide prevention initiatives emphasize the theme "You Matter." The most well-known initiative is the "You Matter" campaign in the United States that was developed by the National Suicide Prevention Lifeline (youmatter.suicidepreventionlifeline.org).

Recent research conducted with emerging adults indicates that lower levels of mattering are associated with a history of child maltreatment, including emotional maltreatment and emotional neglect (Flett, Goldstein, Pechenkov, Nepon, & Wekerle, 2016). This research showed that the negative associations between maltreatment and low levels of mattering were still evident after controlling for variance attributable to other broad personality styles such as neuroticism. It was also found in this investigation that there is a robust negative association between mattering and loneliness, in keeping with the notion that not mattering fosters social disconnection and alienation from other people.

Collectively, these data suggest that those young people who have been treated as if they don't matter will likely have reduced levels of interpersonal resilience and they will be socially isolated and avoidant. However, it also follows that subsequent exposure to caring, influential people and caring communities can build a sense of mattering and interpersonal resilience among those who have encountered trauma and other adverse interpersonal events and occurrences.

A resilient orientation will be most evident among those young people who have incorporated and internalized mattering experiences into their sense of personal identity. This may have been fostered by self-reflection, mentoring, excelling in areas of recognition, and observations of a highly regarded other. Our analysis recognizes that people can be treated as if they matter or they don't matter, and only a proportion of people will internalize these experiences into their self-views. The internalization of mattering has great potential significance in terms of responding resiliently to adversities such as the experience of CSA, where individuals may regard themselves (and be told) that they are objects to be used, by different persons, in different settings, but in the same (sexual) way. People who maintain an identity reflecting the theme "I don't matter" will not proactively address stressors and, in all likelihood, will have negligible levels of self-care.

Social Hope/Social Optimism

Another key aspect of interpersonal resilience is the ability to retain a sense of interpersonal or social hope. General research on interpersonal schemas and working models distinguishes people who are relatively pessimistic versus those people who have positive expectancies about the future, including the self in relation to other people (Baldwin, 1992; Bowlby, 1980, 1989; Main, Kaplan, & Cassidy, 1985). While hope has been examined most typically as a global, monolithic entity, some research attests to the feasibility and usefulness of examining hope from a domain-specific approach. This approach shows clearly that it is both possible and meaningful to identity individual differences in interpersonal hopefulness (Campbell & Kwon, 2001; Shorey, Roberts, & Huprich, 2012). It is possible to examine social hope or optimism at a global level, but it is also possible to examine social optimism at the relationship level in terms of expectancies about specific other people (Carnelley & Janoff-Bulman, 1992). Interpersonal resilience should incorporate a generally optimistic view, as well as an optimistic view of relationships with specific others.

Social Approach Orientation

A young person can falsely seem to be interpersonally resilient by becoming adept at avoiding threatening social situations. It is essential to be able to distinguish between youth who seems resilient but are actually not, and those who are truly interpersonally resilient. Accordingly, interpersonal resilience must also include a willingness to approach other people, without being manipulative, especially when making transitions that require interpersonal adaptation. This positive orientation is a form of interpersonal responsiveness when interpersonal problems arise that contrast with the tendency for seemingly resilient youth to become socially or psychologically disconnected.

This tendency to be positively and responsively oriented toward others was illustrated via person-oriented analyses of a group of four-year-old African American children enrolled in Head Start, an early child development program. Mendez, Fantuzzo, and Cicchetti (2002) analyzed profiles of social competence, identifying a group of children characterized as "prosocial resilients." These children were described as highly adaptable with few peer difficulties, and most importantly for our current purposes, they had a tendency to approach peers and new situations in a socially competent and sensitive manner.

The notion of social approach can also be considered at a motivational level. Elliot, Gable, and Mapes (2006) extended past work on achievement goals to the interpersonal domain; they showed that it is possible and meaningful to distinguish between interpersonal approach goals versus interpersonal avoidance goals. Approach goals reflect hopes for affiliation; avoidance goals reflect fears of rejection. Emerging adolescents were assessed in terms of their friendship-approach goals versus their friendship-avoidance goals. It was established that having friendship-approach goals was associated with better psychosocial outcomes (i.e., greater relationship satisfaction, reduced loneliness), and a lower frequency of negative interpersonal events (Elliot et al. 2006). The degree to which interpersonal resilience involves approach goals remains to be explored in future research, but it follows from this work that adolescents with an elevated level of interpersonal resilience will be better able to withstand social stressors due to a proactive orientation toward other people that could foster the sense of mattering to others discussed above.

Social Malleability and Adaptability

The interpersonally resilient individual is also someone who has developed the capability of extending the self in a positive manner when new social situations are encountered, or there is a need to accommodate to people who would be described by other people as having "strong personalities." Social malleability involves the capacity to call on or develop inner resources when in a situation or in a role that requires adapting or accommodating to challenging interpersonal circumstances. This emphasis is in keeping with the broader emphasis on the role of adaptability in resilience and coping with unique circumstances (Martin, Nejad, Colmar, & Gregory, 2013). It is highly related to the description of functional interpersonal flexibility described by Paulhus and Martin (1988), but is specific to circumstances that call for a resilient response to an interpersonal challenge.

It is important to emphasize that social malleability is not simply a tendency to be non-assertive and self-silencing, while succumbing to the wishes of domineering people. Rather, it is a growth-oriented style that involves developing a social cognitive orientation and using interpersonal skills in response to less than optimal social situations (e.g., constant exposure to a disagreeable or controlling peer or co-worker).

Low Sensitivity to Rejection and Criticism

A high level of rejection sensitivity is another factor implicated in emotional vulnerability that can escalate into extreme anxiety, depression, and suicidality. Rejection sensitivity is defined as a disposition to anxiously expect, perceive, and over-react emotionally to rejection (Downey & Feldman, 1996). Rejection sensitivity is conceptualized as a defensive motivational system that incorporates the attentional and perceptual processes underlying social information processing (Romero-Canyas, Downey, Berenson, Ayduk, & Kang, 2010). Rejection sensitivity is linked with risk of distress, especially among people high in this personality disposition who experience relationship stress (Chango, McElhaney, Allen, Schad, & Marston, 2012) and who have relationships terminated by partners (Ayduk, Downey, & Kim, 2001). The link between rejection sensitivity and depressive symptoms is especially evident among adolescents with low perceived support from their parents and friends (McDonald, Bowker, Rubin, Laursen, & Duchene, 2010).

In contrast, interpersonally resilient children and adolescents are much less sensitive to rejection, criticism, and negative evaluation, perhaps as a result of several inter-related characteristics, including an overarching sense of mattering, interpersonal self-efficacy, and secure attachment. The interpersonally resilient child has comparatively less need for social approval, reassurance, and acceptance, given that she or he has developed the capacity to understand that not everyone is going to hold them in high regard or be nice to them. Accordingly, rejections and criticisms are cognitively reappraised in a manner that involves attributing negative social feedback to factors outside the self or external circumstances. However, in those situations where cognitive reappraisal is not possible, there is a tendency to respond with self-compassion, rather than self-criticism or self-hatred.

Adaptive Interpersonal Disengagement

The lower level of rejection sensitivity described above should be accompanied by the capability to adaptively disengage (i.e., by using self-protection and self-safety strivings), after experiencing social mistreatment. The concept of adaptive disengagement was introduced in an earlier segment of our article. Leitner and colleagues (2014) describe it as the tendency to disengage self-esteem from negative outcomes. That is, the adaptively disengaged person has come to make her or his sense of self-worth relatively impervious to negative experiences and challenging outcomes, so the sense of self and identity is simply not at stake. In contrast, the young person with low interpersonal resilience has his or her self-concept shaped and unduly influenced by feedback and mistreatment from others.

Parenthetically, it should be noted that Leitner et al. (2014) did not focus on interpersonal adaptive engagement due to their more general emphasis on the ability to disengage from negative experiences. However, when they evaluated their new measure of adaptive disengagement, they did so in an experimental situation that involved some participants being ostracized by a confederate. This paradigm underscores the relevance of adaptive disengagement in challenging social situations.

Social Self-Compassion

According to a recently proposed self-punitiveness model of self-harm behaviour (Flett et al., 2012), some individuals are highly sensitized to the negative self-worth implications of failing to meet expectations, and their self-harm tendencies reflect a need or desire to harm the self, which is fueled by feelings of self-criticism, shame, and broad over-generalizations of the self as deficient and inadequate. Setting up high personal expectations may be an unconscious or conscious "trap-setting" for the self to experience failure. One of the keys to fostering resilience in a vulnerable young person with these tendencies is to transform their sense of self so that self-acceptance and self-compassion develop as a defense against their overgeneralized self-criticism. Self-compassion involves being kind and accepting toward oneself as an alternative to self-criticism and self-hatred (Neff, 2003). The role of self-compassion in resilience is in keeping with recent evidence illustrating that self-compassion can help mitigate exposure to maltreatment (Játiva & Cerezo, 2014; Tanaka, Wekerle, Schmuck, Paglia-Boak, & The MAP Research Team, 2011; Vettese, Dyer, Li, & Wekerle, 2011).

In keeping with our emphasis on interpersonal resilience, self-compassion is particularly needed following adverse interpersonal experiences in general, but especially in those situations in which another person is hypercritical and claims that personal deficiencies and defects of the target person are responsible (i.e., toxicity of persons with other-oriented blame and other-oriented perfectionism). Any lasting tendencies to be punitive toward oneself must be countered by developing the tendency to exercise self-compassion following interpersonal adversities. This form of self-compassion includes developing a sense that other people also undergo interpersonal adversities and self-kindness is called for following social blunders and rejections. This involves a detachment from adversities, such that there is no over-identification with the experience as somehow uniquely related to the self (e.g., not preferring "poor me" or "if I didn't have bad luck, I'd have no luck" sort of interpretations).

Seeing the Social Self from a Growth Mindset Perspective

Finally, another vitally important element of interpersonal resilience is having developed a healthy cognitive orientation as part of the social self. There is a strong tendency among young people to blame themselves when things do not go well with other people, including a tendency to internalize criticisms and humiliations that other people direct toward them. This social self-criticism is usually not warranted, but reflects an egocentric tendency to focus attention on the self, and see the self as the causal agent, as the core adolescent developmental task is self-identity in the context of increasing autonomy. However, the development of interpersonal resilience requires having established a social-cognitive capacity that is complex, and cognitively reappraising feedback and experiences directed toward the self, so that negative attributions are not made solely to one's character and other relatively permanent attributes. In the case of maltreatment, the victim experiences a causal self-focused attribution for the maltreatment that is sustained. The victimizer puts not only abuse, but also blame upon the youth victim, and CSA may be a context for bizarre, reality-testing challenges that may take the form of illogical self-blame (Wekerle et al., 2014).

An essential element in the formation of a positive cognitive orientation is having developed the growth-oriented mindset. Carol Dweck and her colleagues have shown the clear benefits of having a growth mindset that sees mistakes, blunders, and failures as learning opportunities rather than a less adaptive fixed mindset that promotes a focus on fixed personal defects, and a tendency to respond with helplessness and hopelessness in the face of stressors and threats (see Dweck, 2012; Yeager & Dweck, 2012). Recent work indicates that the growth mindset can be developed with respect to beliefs about intellectual ability, but also with respect to beliefs about emotion-regulation capabilities (Romero, Master, Paunesku, Dweck, & Gross, 2014). The growth mindset in the context of interpersonal resilience entails seeing interpersonal setbacks and social blunders as typical and expected (similar to self-compassion), and reframing these experiences as information that can be used for the purpose of new learning . According to this perspective, mistakes and errors made in public may initially seem catastrophic, but eventually they come to be viewed as an opportunity for growth and the implementation of more adaptive approaches when similar situations arise in the future. Here the growth mindset includes a view that the interpersonal capabilities that foster resilience in adverse interpersonal contexts can be developed and enhanced in ways that fit with a process orientation rather than a static sense of fixed capabilities.

Promoting Resilience from an Interpersonal Perspective

We will conclude our analysis of interpersonal resilience with a brief discussion of the importance of promoting interpersonal resilience. First, however, it is important to reiterate that our conceptualization of interpersonal resilience emphasizes that it is a capability that can be developed and enhanced. That is, it can be learned and encouraged. The notion that interpersonal resilience can be fostered and promoted fits with our description of the factors that underscore interpersonal resilience. Perhaps the clearest illustration of this position is the concept of mattering. Key exposure to caring adults or to friends who make the young person feel significant and important can have a positive and transformative effect. However, there are many ways to promote a sense of mattering in order to enhance interpersonal resilience. It is important to develop a sense of mattering outside the home in community and school settings. Several studies have utilized the Youth Risk Behavior Survey, which includes a one-item global assessment of mattering to the community. Unfortunately, only about half of the young people surveyed indicated that they mattered to some extent in their community (Murphey, Lamonda, Carney, & Duncan, 2004), and there seems to be much room for improvement in terms of finding meaningful ways to foster a sense of community mattering. Accordingly, analyses of ways to promote positive youth development have identified community support for mattering as essential in youth-based empowerment, and a call has been issued for youth to have genuine opportunities to make a contribution to their communities through leadership and volunteer activities that help to develop or strengthen a sense of mattering (National Research Council and Institute of Medicine, 2002).

One thing is abundantly evident is that any attempt to promote interpersonal resilience should ideally engage caregivers and significant others in the youth's social network (Bell, 2001). Caregivers can play a vital role in promoting key meta-cognitive messages and opportunities for role-modeling through the use of mentalizing, which helps to counteract the need for social approval and, instead, fosters self-compassion rather than self-criticism when negative interpersonal outcomes are experienced. School-based efforts to promote interpersonal resilience and other types of resilience will be undermined if the messages received in the family context are at odds with the themes being expressed at school.

Directions for Future Research

Coherent work is now needed to explore and illuminate the interpersonal resilience construct and evaluate our contention that interpersonal resilience is a potentially worthy target for intervention as a multi-dimensional construct. This work seems critical to understanding how best to support maltreated youth and to understand the particular relational challenges posed by CSA. In particular, the impact of gender on resilience processes, and the question of how CSA victimization influences very young males are issues in need of urgent empirical attention and partnerships among police, child welfare, public health, and researchers. Given that social wellbeing is an important aspect of positive development, it will be important to empirically establish that young people who are interpersonally resilient do indeed experience more positive social and health outcomes. Key issues involve investigating how interpersonal resilience relates to other types of resilience and whether it is possible to identify various developmental trajectories in interpersonal resilience. Programmatic research on the developmental experiences that foster interpersonal resilience among maltreated youth experience diversity in resources is focal.

It is also important to conduct research that examines the feasibility and usefulness of examining factors and processes that promote resilience from an interpersonal perspective. For instance, research on hope and optimism as general constructs can be modified to include an emphasis on interpersonally-based outcome expectancies. Also, it is important to study self-compassion following negative social interactions and experiences, including committing social blunders. Presumably, the person who is prone to social avoidance

and anxiety will become more resilient and higher in social functioning to the extent that they learn to become self-compassionate and self-accepting following blunders, and have increased experience with this new way of relating to the self. The person who is able to develop the ability to cognitively reappraise interpersonal experiences in a less threatening manner should be better able to bounce back from subsequent interpersonal adversity towards renewed social engagement.

Summary

In summary, we described the parameters of adverse childhood and adolescent experiences and potential links to a multi-faceted approach to interpersonal resilience, particularly with regard to the traumatic event of CSA. Interpersonal resilience is conceptualized as a social form of buoyancy or grit that involves a determination to bounce back from and withstand negative social feedback, negative interactions, and other adverse interpersonal experiences and events, such that other people do not have an undue influence on the self. A positive view of the self is at the centre of interpersonal resilience, and this is supported by an ability to adaptively disengage and maintain a strong sense of positive self-worth despite encountering experiences that could conceivably threaten the individual's self-image and sense of identity. The interpersonally resilient youth has a sense of interpersonal efficacy and high social self-esteem, especially in terms of a sense of mattering to other people. This positive view of the self in relation to others extends to interpersonal expectancies and a socially hopeful or optimistic approach that tends to influence the interpretation of social cues and life experiences.

Interpersonal resilience is advanced as a potentially promising target for children and adolescents, especially with respect to enhancing the self-righting and healing processes related to maltreatment. A restoration of balance in interpersonal dynamics seems especially potent for the victims of CSA, particularly the young CSA victim who is entering the social arena of school and can be supported towards socially relevant growth. The maltreated youth should not be put in positions of self-disadvantage by anyone, including him- or herself, or use interpersonal avoidance as the primary form of coping. The blame and shame belongs solely to his or her perpetrator(s). When laws and competent adults fail to step forward and safeguard children and adolescents, it becomes clear that the priority intervention needs to be child abuse prevention, coupled with an integrated dedication to fostering positive social-emotional learning and resilience.

Interpersonal resilience is expected to confer and increase as life unfolds, and be demonstrated most during critical life transitions that require significant adaptability. While it may be tempting to consider any individual with a high level of interpersonal resilience as an invulnerable person who is immune to interpersonal stressors, it is more reasonable to simply accept that everyone is strongly impacted by social stressors and setbacks. However, the interpersonally resilient person has learned how to bounce back from these experiences and proactively engage with others in ways that make it less likely that subsequent interpersonal stress will be experienced as devastations of the self. This person should then be able to withstand subsequent challenges.

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Male Childhood Sexual Abuse, Self-Compassion, and Trauma Symptoms

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Abstract:

Objectives: There is limited research that has examined self-compassion among adult males who have experienced childhood sexual abuse. The current study investigated the potential role of self-compassion on post-traumatic stress symptoms in this population. In addition, we helped advance knowledge in the area of childhood sexual abuse by focusing on a range of sexual abuse characteristics (e.g., duration, relationship between the child and perpetrator) and by including other experiences of maltreatment (given that most victimized individuals have been exposed to more than one type).

Methods: Participants were recruited from across Canada and the U.S. through websites for males with histories of childhood sexual abuse. Data were collected from 213 adult males who anonymously completed an on-line study.

Results: Regression analyses indicated that childhood sexual abuse that was longer in duration and involved the use (or threat) of physical violence was associated with greater post-traumatic stress, as were the presence of emotional abuse and the absence of exposure to intimate partner violence. Once self-compassion was taken into account, these associations were no longer significant, with the exception of emotional abuse. Moreover, greater self-compassion was associated with fewer symptoms of post-traumatic stress, and it predicted 18% of the variance.

Conclusion: Future research needs to continue examining the role of self-compassion on adult males' maltreatment-related psychosocial outcomes. It also needs to take into account sexual abuse characteristics and other forms of maltreatment, given the common co-occurrence of different maltreatment types among children who experience victimization.

Implications: Findings point to the importance of including self-compassion interventions as part of one's clinical work with adult males who have experienced childhood sexual abuse. It is also important to understand the full nature of individuals' sexual abuse experiences as well as any other forms of maltreatment to which they may have been exposed.

Keywords:

Sexual abuse, trauma, resilience, male mental health, sexual violence among males, sexual exploitation

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Introduction

The Criminal Code of Canada (1985, s.163.1) defines childhood sexual abuse as any sexual activity occurring before the age of 16. The sexual activity can include contact (e.g., penetration, sexual touching) or non-contact (e.g., exposure to sexual material) behaviours, and perpetrators can encompass family or non-family members that are adults, adolescents, or even older children (Berliner, 2011; Dube et al., 2005; Holmes & Slap, 1998). Research studies on the prevalence of childhood sexual abuse have considerable methodological variability in the definition of sexual abuse, the population from which the sample is drawn (e.g., clinical, community), and the data collection method (e.g., retrospective versus prospective design, self-report questionnaires versus child welfare data). Consequently, prevalence rates also show considerable variability. For males, Hopper's (2014) review indicated that the prevalence of childhood sexual abuse ranged from 4.8-28% among university students, 2.8-16% among community-based males, and 3-23% among clinical samples. Additional review studies suggest that the mean prevalence of male sexual abuse ranges from 7.9% (Pereda, Guilera, Forns, & Gomez-Benito, 2009) to 16% (Dube et al., 2005). In general, a well-accepted statistic is that approximately 1 in 6 males experiences sexual abuse during childhood (Romano & De Luca, 2014). This statistic, however, is likely an underestimation as there are roughly four times as many cases of childhood sexual abuse that are not reported to child welfare and/or criminal justice authorities (Justice Department of Canada, 2012; Romano & De Luca, 2014). Given that childhood sexual abuse is not uncommon among males and that this population has been relatively under-studied in the

childhood sexual abuse literature (Hopper, 2014; Spataro, Moss, & Wells, 2001), the current study focused on adult males with histories of childhood sexual abuse.

Childhood Sexual Abuse and Later Mental Health Functioning

The first objective was to examine the association between characteristics of childhood sexual abuse and post-traumatic stress symptoms. The link between childhood sexual abuse and later mental health impairments is well-established (Dube et al., 2005; Romano & De Luca, 2001; Spataro, Mullen, Burgess, Wells, & Moss, 2004; Spiegel, 2003). In a review of meta-analyses conducted between 1985 and 2009 on the relationship between childhood sexual abuse and adult psychopathology (Hillberg, Hamilton-Giachritsis, & Dixon, 2011), findings from the seven identified meta-analyses indicated that individuals who had experienced sexual abuse during childhood were at increased risk for a variety of mental health difficulties, including anxiety, depression, substance use, post-traumatic stress, interpersonal problems, and suicidal behaviour. Moreover, the four meta-analyses that included sex-based analyses found similar levels of adult mental health problems for both males and females.

While childhood sexual abuse has been associated with a number of mental health outcomes, we focused on post-traumatic stress because it is well established in the research literature that children who experience sexual abuse are at risk of developing trauma-related symptoms such as post-traumatic stress disorder (PTSD; Berliner, 2011). Spataro et al.'s (2004) prospective study of children with sexual abuse histories found that anxiety and acute stress disorders (including PTSD) were the most frequent diagnoses for both adult males and females. In a literature review of 166 studies that focused on male childhood sexual abuse, PTSD rates were found to range from 25-30% (Holmes & Slap, 1998). These studies suggest that males who have experienced childhood sexual abuse are negatively impacted in many ways, including by way of trauma-related stress. In addition, there is evidence that males exhibit just as many post-traumatic symptoms as females (Garnefski & Arends, 1998; Maikovich-Fong & Jaffee, 2010; Spataro et al., 2004).

Characteristics of childhood sexual abuse. Despite empirical support for the deleterious impact of childhood sexual abuse, not all individuals who experience sexual abuse exhibit negative outcomes. Given individual variations in the response to childhood sexual abuse, several studies have explored specific abuse characteristics (e.g., duration, type of sexual acts) and the manner in which they might shape the development of psychopathology (or lack thereof). To date, studies have yielded mixed results on the impact of abuse characteristics on later outcomes (Paolucci, Genuis, & Violato, 2001), although researchers generally concede that contact forms of sexual abuse and earlier age of onset are associated with greater short- and longer-term impairments (Banyard, Williams, & Siegel, 2004; Briere & Elliott, 2003). Hillberg et al.'s (2011) review of meta-analyses found that 4 of the 7 included meta-analyses considered sexual abuse characteristics but not generally as potential moderating variables. These authors also noted that there were methodological limitations among those meta-analyses that did consider sexual abuse characteristics (e.g., operational definition of variables such as relationship to the perpetrator). As such, they concluded that the impact of childhood sexual abuse characteristics on later mental health outcomes remains unanswered. In order to clarify the role of sexual abuse characteristics on psychological outcomes, we examined the influence of childhood sexual abuse duration, age of onset, severity, relationship to the perpetrator, emotional closeness to the perpetrator, presence of physical threat/violence, and disclosure on adult males' post-traumatic stress symptoms.

Childhood sexual abuse and other maltreatment. In examining the impact of sexual abuse characteristics on post-traumatic stress among adult males, we took into account other maltreatment experiences since research has indicated that children who experience sexual abuse often also experience other types of maltreatment (Babchishin & Romano, 2014; Felitti et al., 1998). For example, the U.S. Adverse Childhood Experiences (ACE) study included 9,509 adults who retrospectively reported on experiences of maltreatment and adversity from birth to 18 years. Among individuals who experienced childhood sexual abuse, findings indicated that 1 in 4 (24%) also experienced emotional abuse while 1 in 5 (22%) also had a history of physical abuse (Felitti et al., 1998). In males, childhood sexual and physical abuse appear to have a particularly strong relationship. Several retrospective studies have found that 36-68% of males with childhood sexual abuse histories also experienced physical abuse (Harrison, Fulkerson, & Beede, 1997; Hibbard, Ingersoll, & Orr, 1990; MacMillan et al., 1997). A more recent Canadian study involving 213 caregivers of 6-12 year olds found that children's lifetime experience of sexual abuse was not as common as other forms of maltreatment (e.g., exposure to intimate partner violence), based on caregiver reports. However, when sexual victimization did occur, it had a higher likelihood of occurring with other forms of maltreatment (Babchishin & Romano, 2014).

From a theoretical perspective, the ecological framework may be helpful in understanding the co-occurrence of maltreatment types because it emphasizes that children are impacted by the various systems in which they are embedded, such as family, school, and neighbourhood (Cicchetti & Lynch, 1993; Hamby & Grych, 2013). Among children who experience maltreatment, they are typically embedded in adverse systems that influence one another and place children at risk for multiple victimization experiences; however the exact way in which factors within these various systems interact to explain maltreatment is not well-described by the ecological model (Hamby & Grych, 2013). To this extent, several authors have noted the importance of considering both individual characteristics (e.g., cognitions related to the self and the use of aggression; affective processes such as anger and emotion regulation) and situational characteristics (e.g., socio-economic disadvantage; social isolation) and the way these two components might come together at a particular point in time to elicit maltreating behaviour (DeWall, Anderson, & Bushman, 2011; Hamby & Grych, 2013). In line with these suggestions, caregivers play an instrumental role on children's well-being, and research has indicated that childhood sexual abuse often occurs alongside caregiver mental health and substance use difficulties (Felitti et al., 1998). These caregiver difficulties may compromise parenting abilities and intimate partner relationships, which may subsequently place children at risk for various forms of maltreatment, such as physical abuse, neglect, and exposure to intimate partner violence (Walsh, MacMillan, & Jamieson, 2003). In addition, there may be limited monitoring and supervision of children, which may increase risk for sexual abuse and neglect. These examples illustrate how different types of co-

occurring maltreatment may have shared risk factors at both the individual (caregiver) and situational level, such as family instability, dangerous neighbourhoods, and limited parental abilities (Coulton, Crampton, Irwin, Spilsbury, & Korbin, 2007; Zielinski & Bradshaw, 2006).

Self-Compassion

While childhood sexual abuse has been linked with numerous negative outcomes, there are many factors that can moderate or mediate this association so that abuse-related mental health impairments are either exacerbated or mitigated. In recent years, there has been growing interest in the role of self-compassion among individuals with childhood abuse histories (Tanaka, Wekerle, Schmuck, Paglia-Boak, & The MAP Research Team, 2011; Vettese, Dyer, Li, & Wekerle, 2011). As such, the second objective of the current study was to examine the role of self-compassion on mental health outcomes (i.e., post-traumatic stress) among males with childhood sexual abuse histories. To our knowledge, there is no published study that has focused on self-compassion in this population.

Self-compassion is defined as adopting a non-judgmental, kind, and empathic stance toward oneself in times of suffering, and it includes common humanity, self-kindness, and mindfulness (Neff, 2003a). Common humanity (versus isolation) is described as having the ability to see one's struggles as part of the human experience. Self-kindness (versus self-judgment) refers to being caring and understanding toward oneself during times of emotional struggle, and mindfulness (versus over-identification) is defined as being aware and tolerant of painful thoughts and/or feelings while not over-identifying with them (Neff, 2003a). Recent research has found that self-compassion may act as a mediating protective factor for individuals coping with their childhood maltreatment experiences (Miron, Orcutt, Hannan & Thompson, 2014; Tanaka et al., 2011; Vettese et al., 2011). It may be that self-compassion helps individuals regulate their emotions by cultivating awareness and acceptance of one's thoughts and feelings, a sense of connectedness with others, and kindness toward oneself (Gilbert & Proctor, 2006; Vettese et al., 2011). While shame and guilt have been associated with greater sexual abuse-related impairments (Romano & De Luca, 2014), self-compassion may lessen the impact of sexual abuse because it encourages individuals to view themselves in a realistic but kind manner and to focus on the here-and-now (Neff, 2003a). As such, it may facilitate resilient functioning because it helps alter individuals' reactions to their sexual abuse experiences by activating the caregiving system (secure attachment, safety) and deactivating the threat system (insecure attachment, defensiveness; Germer & Neff, 2013; Gilbert & Proctor, 2006).

Vettese et al. (2011) examined the relationship among childhood maltreatment, self-compassion, and emotion regulation in a cross-sectional sample of 81 youth (65.4% male) aged 16-24 years seeking substance use treatment. Findings indicated that higher self-compassion significantly predicted lower emotion dysregulation, even after accounting for such factors as maltreatment history, addiction severity, and psychological symptom severity. Moreover, self-compassion mediated the relationship between childhood maltreatment and emotional dysregulation. In a longitudinal study of 117 16-20 year old child welfare-involved youth (45.3% male), Tanaka et al. (2011) found that greater self-compassion significantly predicted lower maltreatment-related impairment (e.g., problematic alcohol use, suicide attempt), even after controlling for age, sex, and maltreatment type. Thompson and Waltz (2008) explored the relationship between self-compassion and PTSD in a sample of 210 university students (62% female). Of the 100 who met criteria for PTSD based on completion of a self-report questionnaire, results indicated that greater self-compassion was significantly and negatively correlated with avoidance but not with re-experiencing or hyper-arousal post-traumatic symptoms. Finally, MacBeth and Gumley (2012) examined the relationship between self-compassion and adult psychopathology by way of a meta-analysis that included 14 studies which all used the Self Compassion Scale (Neff, 2003b). Findings indicated a large effect size showing that greater self-compassion was associated with lower levels of psychopathology (i.e., depression, anxiety, traumatic stress). One limitation, however, is that most included studies were cross-sectional in nature. As such, it was not possible to establish temporal ordering or causality; higher self-compassion may help decrease mental health impairments or it may be that individuals with better mental health have greater compassion toward themselves.

Research indicates that males and females tend to exhibit similar levels of self-compassion. Findings from a meta-analysis of 71 studies examining sex differences on total scores on the long and short form of the Self-Compassion Scale (Neff, 2003b; Raes, Pommier, Neff, & Van Gucht, 2011) showed that males scored higher in self-compassion than females; however the effect size was small (r = .18; Yarnell et al., 2015). In the meta-analysis by MacBeth and Gumley (2012), sex was not a significant moderator of the link between self-compassion and psychopathology. While self-compassion is an emerging field of study, existing findings regarding maltreated populations suggest that individuals who demonstrate compassion toward themselves have better outcomes following their maltreatment experiences. In this way, applied interventions that target self-compassion may serve to promote resilient functioning among individuals who have experienced childhood maltreatment (Germer & Neff, 2013).

Study Hypotheses

In addressing our first study objective examining the link between childhood sexual abuse characteristics and adult post-traumatic stress symptoms, we expected the following characteristics to be associated with greater symptoms: longer duration; earlier age of onset; greater severity; closer relationship to the perpetrator; greater emotional closeness to the perpetrator; presence of physical threat/violence; and lack of disclosure. For our second objective examining the link between self-compassion and post-traumatic stress symptoms, we expected higher self-compassion to be associated with lower post-traumatic stress, even after taking into account the influence of sexual abuse characteristics.

Method

Participants and Procedure

This study was part of a larger one currently being conducted through the Children's Well-Being Laboratory at the University of Ottawa (Ontario, Canada). University ethics approval for the larger study was obtained in January 2014. The current study includes

participants who completed questionnaires up until May 2015. Participants were recruited through an anonymous on-line questionnaire hosted by Fluidsurveys, and the recruitment script containing the web-link to the questionnaire was posted on various male survivor websites (e.g., 1in6.org, 1in6.ca, themensproject.org). In order to participate, males were required to be fluent in English, to reside in Canada or the U.S., and to have had a sexual experience before the age of 16. All participants provided consent on-line before proceeding to the questionnaire, and no identifying information (e.g., names, IP addresses) was collected. The questionnaire took approximately 40-50 minutes to complete, and it inquired about childhood maltreatment and family functioning during childhood as well as current psychological functioning (e.g., post-traumatic stress, self-compassion). As several questions were sensitive in nature, relaxation techniques and a list of psychological resources were provided at the bottom of every questionnaire page.

Table 1: Socio-Demographic Characteristics (N = 213)

Variable	N	%	M(SD)	Range
Age	212	-	40.58 (13.35)	0-76
Ethnicity				
Caucasian	185	86.9		
Hispanic	7	3.3		
South Asian	5	2.3	-	-
East Asian	4	1.9		
Native	3	1.4		
Middle Eastern	3	1.4		
Black	1	0.5		
Other	5	2.3		
Country				
Canada	73	34.3	-	-
United States	140	65.7		
Education				
Elementary	8	3.8		
High School	63	30.0		
Trade Program	26	12.3	-	-
University - Undergraduate	56	26.7		
University - Graduate	44	21.0		
Other	13	6.2		
Household Income				
Less than $9,999	18	8.5		
$10,000 - $29,999	45	21.1		
$30,000 - $49,999	41	19.2	-	-
$50,000 - $69,999	28	13.1		
$60,000 - $89,999	27	12.7		
$90,000 - $109,999	20	9.4		
Over $110,000	34	16.0		
Employment				
Unemployed	15	7.0		
Employed	114	53.5		
Attending School	12	5.6	-	-
Attending School and Employed	17	8.0		
Recovering from Illness/Disability	26	12.2		
Retired	13	6.1		
Other	16	7.6		

Note: M = Mean; SD = Standard Deviation

From the 228 males who completed the on-line study, 14 were removed from the analyses because they did not report experiences that were consistent with the study's definition of childhood sexual abuse. One participant was removed because his data represented a multivariate outlier. There were no statistically significant socio-demographic differences between excluded males and those retained in the study (N = 213). Table 1 indicates that the average age of male participants was 40.58 years (SD = 13.35). They were primarily Caucasian (86.9%) and U.S. residents (65.7%). There were various levels of education, with the largest proportion (30%) of males reporting that their highest educational level was high school. Similarly, household income varied among participants, with the most common ranges between $10,000-29,999 (21.1%) and $30,000-49,999 (19.2%) in Canadian or U.S. funds. Finally, the majority of participants (53.5%) reported that they were employed on a full-time basis.

Measures

The four following measures were used: Sexual Victimization Survey (SVS; Finkelhor, 1979); Post-Traumatic Stress Checklist-Specific Version (PCL-S; Weathers, Litz, Herman, Huska, & Keane, 1993); Self-Compassion Scale-Short Form (SCS-SF; Raes et al., 2011); and the childhood maltreatment subscale from the Adverse Childhood Experiences Study (ACE; Felitti & Anda, 1997).

Sexual victimization. Information on males' childhood sexual abuse experiences was collected using a modified version of the SVS (Finkelhor, 1979). The SVS was modified so that participants could provide details for a maximum of three different sexual experiences that occurred before the age of 16. For each of these experiences, participants provided information on the perpetrator (i.e., sex, relationship to the participant), type of sexual acts, frequency, duration, age of onset, disclosure and use of violence/threat of violence. Participants also rated the emotional closeness of their relationship to the perpetrator on a 5-point Likert scale, ranging from 1 (very distant) to 5 (very close; Schultz, Passmore, & Yoder, 2000).

Given that some childhood sexual experiences can be consensual and more exploratory in nature, two research assistants separately coded each sexual experience reported by participants to determine whether it could be defined as abuse. To do this, we relied on the definition of childhood sexual abuse provided in the Canadian Criminal Code (Criminal Code, 1985). Specifically, individuals who endorsed experiences that were coercive and/or non-consensual, that occurred with an individual who was at least 5 years older, and that involved sexual activities beyond what would be considered explorative (e.g., oral or anal penetration) were coded as abuse. The agreement rate between research assistants was 93%, and disagreements were resolved by a third coder (i.e., the study's first author).

Post-traumatic stress. The PCL-S (Weathers et al., 1993) measures PTSD symptoms in response to a specific event. In the current study, participants were asked to respond to the items in relation to an early sexual experience. Participants then indicated how often they were bothered by 17 symptoms over the past month (e.g., repeated, disturbing dreams of the sexual experience) along a 5-point Likert scale, ranging from 1 (not at all) to 5

(extremely). Scores were summed to create a total score, ranging from 17 to 85, with higher scores indicating greater PTSD symptoms. According to Weathers et al. (1993), a score of 50 or above indicates a probable diagnosis of PTSD (at least in combat veterans). The PCL-S has demonstrated high internal consistency (Weathers et al., 1993) and test-retest reliability (Ruggiero, Del Ben, Scotti & Rabalais, 2003) in previous studies. In the current sample, the sample mean was 53.1 (SD = 16.7), and internal consistency was excellent (α = .93).

Self-compassion. The SCS-SF (Raes et al., 2011) includes 12 items that cover six domains of self-compassion, namely self-kindness, self-judgment, common humanity, isolation, mindfulness, and over-identification. Participants rate the frequency of behaviours (e.g. I'm disapproving and judgmental about my own flaws and inadequacies) along a 5-point Likert scale from 1 (almost never) to 5 (almost always). Items are summed to create a total score ranging from 12-60, with higher scores indicating greater self-compassion. The sample had a mean of 28.4 (SD = 10). The SCS-SF has been found to be a reliable and valid measure of self-compassion, and it has a near perfect correlation with the longer scale (r = .97; Raes et al., 2011). The internal consistency in the current study was excellent (α = .91).

Adverse childhood experiences. A modified version of the maltreatment subscale of the ACE questionnaire (Felitti & Anda, 1997) was used to measure the presence of physical abuse, emotional abuse, emotional neglect, physical neglect, and exposure to intimate partner violence (IPV). In terms of modifications, we combined emotional neglect and physical neglect into one neglect variable. We also removed the childhood sexual abuse subscale because this form of maltreatment was already assessed in the SVS. Finally, the original measure only asks about father-perpetrated IPV, but not mother-perpetrated violence. As such, we added three questions to assess this latter construct. After these modifications, there were a total of 14 items, with 2 items assessing physical abuse, 2 for emotional abuse, 4 for neglect, and 6 for IPV. Participants answered yes or no to each item. Items were summed to create a total score, with each maltreatment subscale ranging from 0-2, with the exception of exposure to IPV which ranged from 0-6. Subscale scores were dichotomized so that a score of 0 was coded as absent, and all other scores were coded as present. In prior studies, the ACE questionnaire has demonstrated good internal consistency (α = .81), test-retest reliability, and validity (Bruskas & Tessin, 2013; Dube, Williamson, Thompson, Felitti, & Anda, 2004; Felitti et al., 1998). In the current study, the internal consistency for the total scale was good (α = .83).

Statistical Analyses

As mentioned, participants could report on a maximum of three childhood sexual experiences. Past studies have tended to only include the most severe sexual experience in their analyses (e.g., the sexual experience with the longest duration), but this method does not account for the potential impact of other sexual abuse experiences, and it also relies on researchers determining which experience was the most severe. In the current study, in cases where participants indicated more than one abusive sexual experience, two research assistants independently examined participants' data across multiple experiences and coded each abuse characteristic on the response that indicated the greatest severity. Specifically, if a participant indicated that he experienced two or more sexual experiences (which were determined to meet definitional criteria for abuse), one of which began during early childhood and the other two of which began in adolescence, the "age of onset" variable was coded as early childhood because it reflects greatest severity based on past research. If a participant endorsed three sexually abusive experiences, two of which were perpetrated by individuals outside the family and one of which was perpetrated by a family member, the "relationship to the perpetrator" variable would be coded as "both" to capture the greatest severity, namely that the participant had perpetrators that were both related and unrelated to him. For the "sexual acts" variables, we adopted the following severity scale: non-contact (0); fondling (1); involvement in pornography (2); oral-genital contact (3); and penetration (4). For the remaining variables, greater perceived emotional closeness to the perpetrator, longer duration, presence of physical threat/violence, and lack of disclosure were considered more severe. Agreement between the two research assistants on severity coding across multiple sexual experiences ranged from 92-97%. Disclosure (yes or no) had the highest rate of agreement, and emotional closeness to the perpetrator had the lowest rate of agreement. The study's first author coded cases in which there was disagreement.

To address our study objectives, we conducted a hierarchical linear regression, using post-traumatic stress symptoms as the outcome variable. The first block included childhood sexual abuse characteristics (i.e., duration, age of onset, severity, relationship to the perpetrator, emotional closeness to the perpetrator, presence of physical threat/violence, and disclosure). To examine the extent to which sexual abuse characteristics would still be significantly linked with post-traumatic stress once other types of maltreatment were considered, we included these variables in the second block. Finally, to examine the potential influence of self-compassion, we included this variable in the third block. Adequate statistical power (≥ .80) was maintained with the inclusion of all predictor variables. Analyses were conducted using SPSS version 21.0, and a probability level of .05 was used to establish statistical significance.

Missing data across variables ranged from 0.4% on post-traumatic stress symptoms to 1.9% on the exposure to IPV subscale. A Little's MCAR test indicated that the data were missing at random, and expectation maximization (EM) was used to impute missing data for the predictor variables and outcome variable. Assumptions of linear regression were checked prior to conducting analyses. Findings indicated no issues with multicollinearity, normality, skewness, or homogeneity of variance. There were 3 univariate outliers on the abuse severity variable. These cases were transformed to values equivalent to 3.29 standard deviations above the mean (Tabachnick & Fidell, 2007). Finally, there was one multivariate outlier, and this participant's data were omitted from all subsequent analyses.

Results

Characteristics of Male Childhood Sexual Abuse and Other Adversities

On average, males provided information on 2.2 sexual experiences (SD = .86). Sixty-three men (29.6%) reported on one sexual experience, 51 (23.9%) reported on two sexual experiences, and 99 (46.5%) reported on three sexual experiences. Table 2 shows that the average age of sexual abuse onset was middle childhood (M = 7.68; SD = 3.36). Males experienced a range of sexual abuse acts, often at high frequencies (e.g., half reported

Table 2: Sexual Abuse Characteristics

Variable	N	%	M(SD)	Range
Age of Onset of Childhood Sexual Abuse	191	-	7.68 (3.36)	0-15
Types of Sexual Acts				
Non-contact	193	90.6		
Fondling	201	94.4		
Oral-genital	142	66.7	-	-
Penetration	106	49.8		
Pornography	35	16.4		
Relationship to Sexual Abuse Perpetrator				
Extrafamilial	107	49.8	-	-
Intrafamilial	50	23.5		
Both	57	26.8		
Emotional Closeness to Sexual Abuse Perpetrator	213	-	3.31(1.38)	1-5
Threat/Violence from Sexual Abuse Perpetrator	127	60.1	-	-
Disclosure of Childhood Sexual Abuse	185	86.9	-	-
Duration of Childhood Sexual Abuse				
Few Days	37	17.5		
Few Weeks	15	7.1	-	-
Few Months	37	17.5		
Few Years	72	34.0		
Many Years	51	24.1		
Other Types of Childhood Abuse				
Physical Abuse	131	61.8		
Emotional Abuse	141	66.8	-	-
Neglect	149	70.3		
Exposure to Intimate Partner Violence	45	21.3		

Note: M = Mean; SD = Standard Deviation

having experienced penetration). The perpetrator was primarily an individual outside the home (49.8%), although slightly more than one-quarter (26.8%) also reported sexual abuse by both family and non-family members. Males reported that they were moderately close with their perpetrator(s) prior to the sexual abuse onset, and 6 in 10 (60.1%) indicated that physical threat/violence was used by the perpetrator as a way to engage them in the sexual abuse activity. The majority disclosed their sexual abuse experience (86.9%). With regard to duration, most males reported long-term sexual abuse spanning a few years (34%) to many years (24.1%). Table 2 also indicates that childhood sexual abuse often occurred in the context of other types of maltreatment, most notably emotional and/or physical neglect (70.3%) followed by emotional abuse (66.8%), physical abuse (61.8%), and exposure to IPV (21.3%).

Correlations Among Variables

Table 3 shows a number of statistically significant correlations between variables, all in the expected direction. Greater post-traumatic stress symptomatology was significantly associated with less self-compassion, greater duration of childhood sexual abuse, presence of threat/violence during the sexual abuse experience, and disclosure. Greater post-traumatic stress symptomatology was also significantly associated with the presence of physical abuse, emotional abuse, and neglect.

In terms of sexual abuse characteristics, earlier age of onset was significantly associated with longer duration and intrafamilial abuse. Longer sexual abuse duration was significantly

Table 3: Bivariate Correlations Among Predictor and Outcomes Variables

Variable	1	2	3	4	5	6	7	8	9	10	11	12
1. Post-Traumatic Symptoms	-											
2. Self-Compassion	-.51**	-										
3. Sexual Abuse Age of Onset	-.03	.02	-									
4. Sexual Abuse Severity	.05	.05	-.03	-								
5. Sexual Abuse Duration	.25**	-.09	-.22**	.20**	-							
6. Relationship to Perpetrator	.07	.03	-.28**	.16*	.28**	-						
7. Emotional Closeness to Perpetrator	-.02	.05	-.05	.15*	.26**	.20**	-					
8. Threat/Violence from Perpetrator	.17*	-.03	-.07	.17*	.16*	.03	.01	-				
9. Disclosure of Sexual Abuse	.15*	-.08	.02	.09	.06	.08	-.07	.14*	-			
10. Physical Abuse	.19**	-.14*	-.05	.25**	.03	.11	.05	.11	.18**	-		
11. Emotional Abuse	.30**	-.14*	-.03	.14	.13	.20**	-.04	.06	.20**	.60**	-	
12. Neglect	.26**	-.14*	-.01	.14*	.10	.01	-.07	.10	.20**	.49**	.51**	-
13. Exposures to IPV	-.06	.03	.14	-.01	-.04	.05	-.10	.05	.03	.22**	.24**	.24**

Note: IPV = Intimate Partner Violence * $p < .05$ ** $p < .01$ *** $p < .001$

associated with more severe abuse, intrafamilial abuse, the presence of threat/violence on the part of the perpetrator, and greater perceived emotional closeness to the perpetrator. This latter variable was also significantly associated with greater abuse severity and intrafamilial abuse. Finally, the presence of threat/violence was significantly associated with more severe abuse and disclosure of the victimization.

Table 4: Predictors of Post-Traumatic Stress Symptoms

Variable	Model 1		Model 2		Model 3	
	β	SE	β	SE	β	SE
Sexual Abuse Age of Onset	.11	.38	.22	.37	.23	.33
Sexual Abuse Severity	-.30	1.54	-1.25	1.52	-.40	1.35
Relationship to Sexual Abuse Perpetrator	.84	1.49	.66	1.48	1.09	1.31
Emotional Closeness to Sexual Abuse Perpetrator	-.26	.93	-.17	.91	.15	.80
Threat/Violence from Sexual Abuse Perpetrator	4.97	2.57	5.12*	2.49	4.18	2.20
Duration of Childhood Sexual Abuse	2.47*	.97	2.22*	.95	1.59	.84
Disclosure of Childhood Sexual Abuse	6.16	3.64	2.65	3.61	.79	3.20
Physical Abuse			1.19	3.34	-.48	2.96
Emotional Abuse			6.98*	3.30	6.02*	2.92
Neglect			4.91	3.05	4.06	2.70
Exposure to IPV			-6.48*	3.00	-4.75	2.66
Self-Compassion					-.77***	.11
R^2	.09		.18		.36	
ΔR^2	.09		.09**		.18***	

Note: β = Unstandardized Estimate; SE = Standard Error; IPV = Intimate Partner Violence * $p < .05$ ** $p < .01$ *** $< .001$

Interestingly, self-compassion was not significantly associated with any of the sexual abuse characteristics. However, greater self-compassion was significantly associated with the absence of physical abuse, emotional abuse, and neglect. Finally, Table 3 shows a number of significant associations among the various types of maltreatment.

Predictors of Post-Traumatic Stress Symptoms

Table 4 indicates that, for the first model which included childhood sexual abuse characteristics, longer abuse duration predicted greater self-reported post-traumatic stress ($\beta = 2.47$, SE = .97, $p < .05$). There was also a statistical trend for the use of threat/violence by the perpetrator to predict post-traumatic stress symptoms ($\beta = 4.97$, SE = 2.57, $p = .06$). When other types of maltreatment were placed into the regression (Model 2), the use of perpetrator threat/violence and longer duration of males' childhood sexual abuse significantly predicted greater post-traumatic stress symptoms ($\beta = 5.12$, SE = 2.49, $p < .05$ and $\beta = 2.22$, SE = .95, $p < .05$, respectively). The presence of emotional abuse also significantly predicted greater post-traumatic stress symptoms ($\beta = 6.98$, SE = 3.30, $p < .05$). Model 2 also indicated that the presence of exposure to IPV was predictive of less post-traumatic stress ($\beta = -6.48$, SE = 3.00, $p < .05$). Finally, to examine the potential influence of self-compassion, it was included in Model 3 along with all other childhood maltreatment variables. This final model was statistically significant (F (12,175) = 8.25, $p < .001$) and indicated that greater self-compassion predicted fewer post-traumatic stress symptoms, even after controlling for all other variables in the model ($\beta = -.77$, SE = .11, $p < .001$). With the inclusion of self-compassion, perpetrator threat/violence and sexual abuse duration were no longer statistically significant, although they showed a statistical trend ($p = .06$). However, the presence of emotional abuse continued to predict greater post-traumatic stress ($\beta = 6.02$, SE = 2.92, $p < .05$).

Model 1, which included sexual abuse characteristics, explained 9% of the variance in post-traumatic stress. Model 2, which included other childhood maltreatment experiences, significantly added to the prediction of post-traumatic stress by explaining an additional 9% of the variance in the model ($\Delta R^2 = .09$, F change (4, 176) = 4.47, $p < .01$). Finally, the addition of self-compassion to Model 3 resulted in an approximate two-fold increase in R2 and this variable alone explained an additional 18% of the variance in the model ($\Delta R^2 = .18$, F change (1, 175) = 50.46, $p < .001$).

Discussion

The objective of this study was to examine the contribution of childhood sexual abuse characteristics, other maltreatment types, and self-compassion on adult males' self-reported post-traumatic stress symptomatology. This study contributed to advancing knowledge in the field of childhood sexual abuse in several ways. First, we focused on adult males with sexual abuse histories. This population has received relatively little attention, which is unfortunate given that they experience rates of sexual abuse that are concerning. In addition, there are unique circumstances for males (e.g., differences in the sexual abuse characteristics, gender socialization assumptions) so one cannot assume that the experiences of females with sexual abuse histories can be generalized to those of males. Second, we focused on a range of sexual abuse characteristics to better understand the way they are associated with mental health outcomes, in particular post-traumatic stress symptoms. Sexual abuse represents a highly heterogeneous experience so it would seem important to tease apart the factors within that experience that may be making a particularly strong contribution to mental health functioning. Third, we examined the impact of sexual abuse characteristics alongside other experiences of childhood maltreatment. This is critical as there is a growing body of recent research showing that victimization experiences rarely occur in isolation of one another. By including multiple forms of maltreatment, one can develop a more comprehensive understanding of maltreatment impacts while also not over-emphasizing the potential impact of any single type of victimization (Hamby & Grych, 2013). Finally, self-compassion is a relatively new area of study and one which has received virtually no attention among adult males who have experienced childhood sexual abuse.

Our first hypothesis that childhood sexual abuse characteristics would significantly predict greater post-traumatic stress symptoms, even after the inclusion of other variables, was partially supported. Specifically, longer sexual abuse duration was significantly linked with greater post-traumatic stress even after other maltreatment types were considered (but not when self-compassion was included in the model). This variable was significantly correlated with a number of other childhood sexual abuse characteristics, namely earlier age of onset, greater severity, intrafamilial abuse, the presence of threat/violence, and greater perceived emotional closeness to the perpetrator. From an applied point of view, this finding suggests that inquiring about the duration of childhood sexual abuse is particularly important for purposes of assessing maltreatment-related impacts (in this case post-traumatic stress) because it is related to other abuse characteristics that are indicative of a more severe experience. This makes intuitive sense because sexual abuse that lasts longer typically begins earlier in the life of the child and is more likely to occur with a close family member since such an individual (e.g., primary caregiver, sibling) is more likely to have access to a young child (Trickett, Reiffman, Horowitz, & Putnam, 1997). Finally, if the sexual abuse occurs over a longer period of time, it is more likely to evolve to include more intrusive sexual acts that would more likely include the use of force or threat of force (Yancey, Naufel, & Hansen, 2013). Longer sexual abuse duration also would be related with greater maltreatment-related impairments because key developmental processes such as attachment, emotion regulation, sense of agency, and self-identity would be disrupted in a child who experiences sexual abuse over a number of years (Blaustein & Kinniburg, 2010). In terms of the presence of physical threat/violence, its significant link with post-traumatic stress symptoms can also be understood by way of its co-occurrence with longer sexual abuse duration and more severe sexual acts. In addition, literature reviews have found that the use of physical force is particularly predictive of the developmental of post-traumatic stress symptomatology (e.g., Kendall-Tackett et al., 1993; Tyler, 2002).

Our second hypothesis that self-compassion would be a significant predictor of post-traumatic stress, even after controlling for maltreatment experiences, was supported. Findings indicated that males who reported greater self-compassion also indicated fewer post-traumatic stress symptoms. Moreover, self-compassion contributed to 18% of the variance in post-traumatic stress. This finding is in line with previous research which has found greater self-compassion to be associated with better outcomes across various domains

of functioning (Miron et al., 2014; Tanaka et al., 2011; Vettese et al., 2011). However, these past studies did not include adult males with childhood sexual abuse histories and did not examine post-traumatic stress. As such, findings from the current study are important in expanding current knowledge about the important positive influence that self-compassion can have on maltreatment-related outcomes.

Limitations and Implications

The current study had several limitations. First, data were cross-sectional in nature so we cannot make any firm conclusions about the temporal ordering of variables or about causality. Second, data were based on self-report questionnaires so there may have been issues with recall bias which could affect data accuracy. Third, data were derived from convenience sampling so it would seem important to gather data from a more representative sample of adult males with histories of childhood sexual abuse to test for the generalizability of findings.

There are several preliminary implications based on the study's findings. In terms of research on childhood sexual abuse, one needs to consider characteristics of the sexual abuse experience (in particular the duration of the abuse and whether physical threat/violence was involved) because they can have differential impacts on such outcomes as post-traumatic stress. Similarly, other forms of maltreatment need to be taken into account because the reality is that, among children with victimization histories, most have experienced more than one form of maltreatment. This was evidenced in the current study, which showed a number of significant correlations among maltreatment types as well as between maltreatment types and sexual abuse characteristics. In particular, emotional abuse appeared to be a particularly salient predictor of post-traumatic stress.

With regard to self-compassion, one of its features is that of common humanity, which refers to our ability to relate to others and recognize our suffering as part of the human experience. Given that children who experience sexual abuse are often isolated from family members and/or friends by their perpetrators, they may grow up having difficulty relating to others and may feel that they are intrinsically different. Moreover, research has shown that children often blame themselves for their sexual abuse experience (Romano & De Luca, 2014). As such, males may continue to blame themselves for the abuse and/or other subsequent victimizations. The development of self-compassion may help individuals view their childhood sexual abuse experiences through a more helpful perspective, which may then facilitate the development of greater self-kindness and less negative self-perception and ultimately better mental health functioning. Clinicians may consider incorporating self-compassion into trauma-focused interventions for adults with maltreatment-related distress. Specific techniques include self-compassion breaks (Neff & Germer, 2013) in which individuals are encouraged to breathe deeply and slowly repeat mantras that highlight mindfulness (e.g., "This is a moment of suffering") and self-kindness (e.g., "May I be kind to myself") when they are experiencing trauma-related distress. Likewise, when practiced over time, self-compassion meditation (Neff, 2011), can help individuals with trauma histories feel safe in the presence of trauma symptoms (Germer & Neff, 2013). Finally, individuals may benefit from structured programs that directly or indirectly teach self-compassion, such as mindful self-compassion training (Germer & Neff, 2013) and mindfulness-based stress reduction (Kabat-Zinn, 1991).

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Paediatric Medical Trauma and Resilience: A Scoping Review

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Abstract:

Objectives: The purpose of this scoping review was to explore current literature describing resilience in children who have experienced paediatric medical trauma (PMT), or the physical and psychological effects of accidental injuries, pain, illness, and/or other dysfunction as well as the corresponding experiences of hospitalization, medical treatments, and other procedures. This review is grounded by a social-ecological framework and was designed to inform social work practice, as well as other medical and allied health professions.

Method: A systematic search was conducted utilizing methodical keywords from several databases.

Results: Nine peer-reviewed studies and several chapters within one book were located and reviewed: four articles focused mainly on building theories and models within PMT, three examined interventions, and two examined risk and protective factors, with some overlap.

Conclusion: Resilience in children experiencing medical trauma is high overall. Key findings included the use of child-centered perspectives, given the bias that knowledge and experience can impose on adults' judgements. The field suffers from inconsistencies, and includes some populations that have been determined to be special cases within medical trauma (i.e. acquired brain injuries), thus, further study is required to distinguish this topic. Risk and protective factors remain somewhat elusive, though exhibited importance within the social-ecological model.

Implication: The review justifies a child-centered model to support resilience in children experiencing medical trauma. A trauma-informed approach that seeks to build on a child's strengths while simultaneously scaffolding support from significant sources (i.e. parents and peers) is critical for improving outcomes.

Keywords:

Trauma and resilience

Introduction

Approximately one-third of children have experienced traumatic injuries and illnesses (Copeland, Keeler, Angold, & Costello, 2007). Medically ill and injured children are exposed to circumstances before, during, and after hospitalization that can be considered traumatic. These events can include shocking accidents, scary rescues, invasive procedures, separation from parents, intensive rehabilitation, or lasting physical scars, impairments, or disabilities. This type of trauma is called paediatric medical trauma (PMT). Behavioural paediatrician Joan Lovett (2009) described PMT as, "any overwhelming experience that is related to illness, injury, or medical treatment" (p. 60). This definition fits as a type of childhood trauma, which is defined as an event (or series of events) in which a minor experiences or perceives a threat to their own or a loved one's "sense of self, safety, or survival" (Schwartz et al., 2011, p. 3). Trauma overwhelms a child's ability to cope, and often produces a 'fight, flight, or freeze' response (van der Kolk and Courtois, 2005). Over time, PMT can cause a range of reactions in affected children, from post-traumatic stress symptoms to post-traumatic stress disorder, depression, anxiety, and other mental health concerns (Webb, 2009). Despite the high risk that PMT presents children at this vulnerable stage of development, meta-analyses have demonstrated that children are remarkably resilient overall, but risk and protective factors remain somewhat elusive (Webb, 2009).

Within this topic, it is important to distinguish between unintentional and intentional injuries, or to differentiate between the perceived causation of injuries. Unintentional injuries are perceived to be accidental and can include motor vehicle accidents, poisoning, falls, fires, burns, or drowning (World Health Organization [WHO], 2008). It is notable that the use of the term 'accident' is discouraged, based on the concept that both intentional and unintentional injuries are not random and can be prevented (WHO, 2008). Intentional injuries are inflicted based on a purposeful motive, and can include exposure to interpersonal abuse, neglect, community violence, or war (WHO, 2008). Intentional injuries can also be self-inflicted, as in self-harm or suicide attempts.

In Canada, approximately 418 out of every 1,000 children were hospitalized in 2008 (Public Health Agency of Canada, 2012). The majority of these hospitalizations are unintentional (i.e. 333 out of 1,000 children), with falls making up nearly half of this figure (Public Health Agency of Canada, 2012). Intentional injuries occurred less often, but remain a significant proportion of Canada's children and youth. Approximately 78 out of 1,000 children sustained intentional injuries; of these 78 injuries, 44 were self-harming, and 34 were assaults from others (Public Health Agency of Canada, 2012). In the same year, the rate of substantiated child maltreatment was approximately 16 children of 1,000 children in Canada (Public Health Agency of Canada, 2010).

Rates of substantiated abuse in other developed countries vary widely (given the conceptualization of maltreatment and injury), and begin to draw connections between the trauma of maltreatment and PMT. A recent study from Australia suggests 3-5% of injuries presented in metropolitan hospitals are related to physical abuse and neglect (Raman, Maiese, Hurley, & Greenfield, 2014). In contrast, estimates of maltreatment injuries in hospitals are around 10% in the United States (Benger & Pearce, 2002). Children who have been maltreated and require medical intervention are at greater risk for adverse outcomes, within and beyond hospitalization, given the accumulation of traumatic exposure (Klinic Community Health Centre, 2013). The complexities of maltreatment necessitate distinction in traumatology literature, and though this is a critically important topic, it remains beyond the scope of the current review. This paper will focus on children who have experienced PMT from unintentional causes. Despite the high prevalence of unintentional injury and illness in Canada, the effects have been documented in traumatology literature to a far lesser degree than maltreatment (Schwartz et al., 2011).

The purpose of the following report is to review the current literature describing resilience in children who have experienced PMT. The theoretical background of both PMT as well as resilience theory will be introduced, followed by a description of the scoping strategy, which is a five-step process developed by Arksey and O'Malley (2005). From a social-ecological framework, the literature review will examine and critically review resilience models in PMT, finding common ground between approaches. The review justifies a child-centered model, and will explore individual and environmental levels of risk and protective factors. Finally, this report will conclude by examining areas for social work interventions within this population, as well as areas for future research.

Paediatric Medical Trauma. According to the National Child Traumatic Stress Network (n.d.), a leading agency disseminating knowledge to both families and the medical community, PMT can include the physical and psychological effects of injuries, pain, and illness, as well as the experience of hospitalization, medical treatments, and other procedures. Within the scope of this paper, the term medical challenge will be used synonymously with paediatric medical trauma. Webb (2009) noted that this terminology acknowledges difficulty, but also suggests that as a challenge, it can be overcome. Though there is distinction in paediatrics between medicine and surgery, both will be used synonymously under the umbrella term of PMT. Further, the term 'injury' will refer to any bodily harm inflicted on a person, as opposed to the term 'trauma', as is common in the medical literature.

Trauma can occur as a single event, series of events, or as a chronic condition, which can produce varied responses as exposure to trauma accumulates. Bronfman, Campis, and Koocher (1998) differentiate between two types of PMT: event-related trauma, referring to the actual event and potential rescue process (i.e. car accidents); and iatrogenic trauma, which is derived from medical procedures following an injury or illness (i.e. emergency surgery). Bronfman and colleagues (1998) further elaborated on event-related trauma and iatrogenic trauma – conceptualizations that can be compared to Terr's (1991) seminal work on childhood trauma, which roughly distinguished two types - Type I and Type II. Type I is defined as occurring suddenly, is acute and unforeseen, while Type II is repetitive in nature, occurs over time, and is chronic (Terr, 1991). Single events causing physical injury or illness may be reflective of Type I trauma, while permanent physical changes, such as disability or disfigurement, may reflect the lasting symptoms of Type II trauma (Terr, 1991). Terr (1991) also discussed 'complex trauma' in which children demonstrate a combination of the two types, often seen in accidents or sudden-onset illnesses or viruses that cause lasting damage or chronic pain.

Paediatric Medical Trauma and Related Psychopathology. PMT is associated with acute medical traumatic stress, which could last for up to four weeks following the incident (National Child Traumatic Stress Network, n.d.). It is normal for children to experience some symptoms of arousal (i.e. jumpiness or feelings of being 'on edge'), re-experience the traumatic event, and exhibit avoidance of reminders or triggers to the accident (National Child Traumatic Stress Network, n.d; Smyth, 2008). If symptoms persist for over four weeks and become disruptive to functioning, a diagnosis of post-traumatic stress disorder may be appropriate according to the Diagnostic and Statistical Manual, 5th edition (American Psychiatric Association, 2013). Other childhood mental health issues including anxiety, depression (Smyth, 2008), conduct disorder, borderline personality disorder, phobic disorder, panic disorder, and others may be better explained by responses to trauma than by psychopathology (Terr, 1991). Given the vulnerability of children at this stage, and the potential long-term challenges they may face, it is important to carefully examine trauma as it is thought to be the root cause of many mental health issues (Terr, 1991). The following section will explore the concepts related to resilience in further detail and its theoretical foundations.

Theoretical Frameworks of Resilience. Resilience represents a shift in how researchers and practitioners approach issues related to trauma and other adversities, drawing upon influences from positive psychology and prevention science (Greene, 2008). Resilience was first conceptualized by Rutter (1987) as uniquely successful adaptations to adversity that moved beyond mere surviving to thriving. Later, Borden (1992) introduced the personal narrative to resilience, where resilient individuals were those who were able to maintain their personal narrative over their life course. Masten (1994) classically defined resilience as 'ordinary magic', where children and adolescents have an almost supernatural ability to cope with stressors. Traditional theorists viewed resilience as an individual-level trait that manifests in a variety of ways (Greene, 2007).

The more contemporary view of resilience shifts the scope of resilience from a sole micro perspective to also exploring the role of the mezzo and macro systems. Michael Ungar (2011, 2013) has further drawn upon the seminal work of Urie Bronfenbrenner's (1979) Ecological Systems Theory to investigate how systems like families, schools, teams, cultures, and communities can help or hinder adaptive responses. Ungar (2013) stated that "this resistance to the effects of exposure, also termed resilience, is less a reflection of the individual's capacity to overcome life challenges as the child's informal and formal social networks to facilitate positive development under stress" (p. 255). Therefore, supportive and connected environments are more requisite to successful adaptation to challenges than an inborn genetic trait or characteristic (Ungar, 2011). The-social ecological perspective posits

a critical person-in-environment stance, which aligns with the intent of this paper, as health professionals and organizations shift to more client-centred models (Ungar, 2011; 2013). Therefore, social ecology will be used as the guiding framework for critically analyzing the intersection of resilience and PMT.

Methods

Given that the intersection between PMT and resilience is very new, it was anticipated that limited literature would exist in this area. As a result, a scoping review was determined to be more appropriate than a systematic review. The purpose of a scoping review is to create a map of the existing literature (Arksey & O'Malley, 2005; Pham et al., 2014). In undertaking the objectives of this scoping review, a specific method of searching was followed in order to ensure sufficient saturation and unbiased investigation of the topic. This paper follows the iterative scoping review process described by Arksey and O'Malley (2005), which necessitates five stages: (1) creating a research question, (2) identifying appropriate studies, (3) selecting studies, (4) charting data, and (5) organizing and reporting the results. The research question that guided this investigation was: What is known from the existing literature about the resilience of children ages 0-18 who have experienced medical trauma? From this research question, limitations were placed on the search in order to locate and select appropriate studies.

In the second stage of scoping reviews, a methodical approach to inclusion and exclusion criteria for identifying appropriate studies is required (Arksey & O'Malley, 2005; Pham et al., 2014). The limitations placed upon the methods of scoping in this review include the keywords, date range, and databases selected, which will be described in further detail. The keywords used in this literature review were important in capturing the right type of trauma, population, and framework. Three main domains were included in the search strategy. The first refers to the type of trauma – paediatric medical trauma. This term was inconsistent across databases and therefore derivatives of the following terms were used to correctly capture PMT: paediatric trauma, paediatric trauma, physical trauma, medical trauma, medical traumatic stress, accident, injury, and illness. Note alternative spellings were included to ensure comprehensiveness. The second group of keywords focused on the population, which were children aged 0-12 years old. The keyword used was child*, the asterisk allowing multiple endings (i.e. child, children, childhood, etc.). Using this strategy was found to be effective throughout the search and was therefore maintained across databases. Finally, resilien* (i.e. resilience, resiliency, resilient) or emotional adjustment was found to be effective when searching databases. The date range was capped as far back as 2008, unless the work was seminal or critical to the understanding of the topic. Similarly, the search strategy sought to collect only peer-reviewed journal articles, however, book chapters that examined empirical studies and incorporated practice wisdom were also included, if relevant and critical to understanding of topic.

Ultimately, four types of searches were conducted to ensure a comprehensive database search. The first was a catalogue search to obtain an overall picture of the journals, books, and other publications that existed on the topic. This was followed by database searches.

Given the social work intent of this paper, top social work databases were searched (Social Services Abstracts, Social Work Abstracts, ASSIA, Social Sciences Abstracts, The Campbell Collaboration, The Cochrane Library, HealthStar/ OVID HealthStar, PsychINFO, Social Sciences Citation Index, Sociological Abstracts, Encyclopaedia of Social Work). The third strategy involved entering the search terms into the institutional library's articles tab to ensure a thorough search. Finally, Google Scholar was used to cross-reference with the institution's materials and other online sources.

The third stage of scoping reviews requires the author to select appropriate studies (Arksey & O'Malley, 2005; Pham et al., 2014). Many of the articles examined specific types of medical trauma as opposed to PMT as a whole. Therefore, the author methodically selected those that fit within the definition of PMT as including a significant element of trauma as defined by Lovett (2009) as an "overwhelming experience" for a child (e.g. eczema was excluded, but cancer was included). Furthermore, children must have been the focus of the model, study, or intervention, in maintaining consistency with the social-ecological perspective of resilience. Finally, resilience theory must have been used in a way that was determined by the author to be significant. Resilience is an increasingly popular area of study, with varying approaches and applications. Thus, the presence of the keyword resilience within the article or abstract was insufficient to qualify; resilience must have been used as a model from which to frame the study. The following section discusses the final selections that are explored in detail, after all of the scoping limitations were applied.

Results

Together, the search yielded nine studies and several chapters within one book, which collectively informed the remainder of this report. Generally speaking, four of the articles focused on building theories and models within PMT, three examined intervention strategies, and two examined risk and protective factors, though there is overlap between the topics. As part of the fourth stage described by Arksey and O'Malley (2005), the selected studies were then summarized into a chart. The chart, which can be found as Appendix A, includes more detailed information about the purpose, methodology, main findings, and application of each journal article. The final stage of a scoping review requires organizing and reporting the results of the review (Arksey & O'Malley; Pham et al., 2014). The following section seeks to provide an overview of the results and generate some coherence among the wide scope of articles collected.

Discussion

Defining Resilience in Paediatric Medical Trauma. The purpose of this literature review is to examine resilience within the context of paediatric medical trauma. The articles located in the systematic search yielded a limited number of academic publications covering a wide scope of types of trauma, approaches to resilience, methodologies, and findings. Resilience was determined to be relatively high overall in the populations examined in the studies, with rates ranging from 57%-84% (DeYoung, Kenardy, Cobham, & Kimble, 2012; Fee & Hinton, 2011; Kim & Yoo, 2010; Le Brocque, Hendrikz, & Kenardy, 2010; Phipps et al.,

2012). Many authors noted a lack of coherence in the field of resilience in general - especially in the context of the relatively new field of PMT - but support continued use of the model under further investigation (Beer & Bronner, 2010; Boles, 2013; Castellano-Tejedor, Blasco-Blasco, Perez-Campdepadros, & Capdevilla, 2014; DeYoung et al., 2012; Fee & Hinton, 2011; Kim & Yoo, 2010; Le Brocque et al., 2010; Tonks et al., 2011). Similarly, each of the studies noted a significant area of novelty in their research, thus highlighting the gaps that exist within this field (Beer & Bronner, 2010; Boles, 2013; Castellano-Tejedor et al., 2014; DeYoung et al., 2012; Fee & Hinton, 2011; Kim & Yoo, 2010; Le Brocque et al., 2010; Phipps et al., 2012; Tonks et al., 2011). The following section will analyze the ways in which resilience was studied in the articles and examine their fit with the social-ecological lens used in this article.

Castellano-Tejedor and colleagues (2014) discussed the many differences in approaches to resilience in their literature review of children with cancer (and application to PMT in general) and determined that unifying elements exist across approaches. Resilience is not only the absence of negative adaptations but also the presence of positive adaptations, personally and environmentally, with the goal of restoring balance in the lives of children, or returning to a state of homeostasis (Castellano-Tejedor et al., 2014). Across studies included, this restoration of balance or return to baseline appeared to be the general measure of resilience. Thus, using a measure of post-traumatic stress symptoms, authors charted distress over time to determine trajectories of resilience (DeYoung et al., 2012; Le Brocque et al., 2010) and to evaluate resilience-based interventions (Fee & Hinton, 2011; Phipps et al., 2012). Other studies used healthy controls to compare children experiencing PMT to an average or baseline (Tonks et al., 2011). Thus, despite differences in approaches there is a unifying theme of balance or restoration among concepts of resilience and their application to various populations of children experiencing PMT.

In contrast to this attention to balance, Castellano-Tejedor and colleagues (2014) defined two other related, but independent constructs: post-traumatic growth and benefit finding. Though both terms are often used interchangeably with resilience, they move beyond the central concept of restoring balance to suggest that a child ends up better than before the adversity, as in post-traumatic growth (Castellano-Tejedor et al., 2014). An example of post-traumatic growth could be a deeper appreciation for life after cancer. Similarly, benefit finding is an adaptive strategy identifying positive aspects associated with negative events (e.g. a child may point out that they made a new friend in the hospital that they otherwise would not have met) (Castellano-Tejedor et al., 2014). The difference between post-traumatic growth and benefit finding was discovered during the systematic search of articles and intentionally not used as a search term or as synonymous with resilience.

Trajectories of Resilience in Paediatric Medical Trauma. In keeping with a broad definition of resilience, the next section will examine the general trajectories noted in groups of children who have experienced medical trauma. Le Brocque, Hendrikz, and Kenardy (2010) used a model derived from Bonnano, Layne, and their respective colleagues to examine resilience trajectories in children who had unintentional traumatic injuries. It is based on measuring four patterns of posttraumatic stress symptoms (PTSS) over time: resilient, recovery, chronic, and delayed (Le Brocque et al., 2010). The resilient pathway, which was demonstrated in 57% of children, began with slightly elevated PTSS but returned to low or no distress within four to six weeks and was maintained at six months. 33% of children were in the recovery trajectory, where PTSS began as high but slowly declined to normal within six months. Chronically high levels of PTSS were demonstrated in 10% of children and remained stable over two years post-injury. There was no evidence for delayed symptomology in this group, as proposed by the original theorists to show low starting PTSS with increasing symptoms over time (Le Brocque et al., 2010).

DeYoung et al. (2012) used the same methodology as the previous researchers, applying it instead to resilience pathways for young children who sustained unintentional burns. Similar to previous results, the majority of children were resilient (72%), many recovered (18%) only a small proportion of children's distress levels remained chronic (8%) over six months and none followed the delayed pattern (DeYoung et al., 2012). This not only provided evidence of the efficacy of the resilience model in this population, but also demonstrated that acute stress symptoms are normative and not an accurate predictor of children at risk for PTSD (DeYoung et al., 2012; Le Brocque et al., 2010).

The Importance of Child-Centred Perspectives. A major distinction that was found between articles was the measurement of resilience from either the child or parent's perspective. Kim and Yoo (2010) critique the major limitation of previous studies examining resilience in PMT as the use of parent perspectives, when a resilience framework requires the child to be the focus of intervention. Parent and child self-reports have not demonstrated consistency (Rende & Plomin, 1991, as cited in Kim & Yoo, 2010). Phipps et al. (2012) found differences in reporting between children and parents on measures of posttraumatic stress, where more children than parents rated the child themself as above threshold for PTSD diagnosis at baseline and after treatment (21.0% to 7.1% in patient reports and 14.5% to 6.2% in parent reports). This suggests that children are capable of self-identifying concerns, perhaps better than their parents (Phipps et al., 2012). It is important therefore, to include the child perspective to ensure health care professionals are adequately monitoring the psychological health of children.

In contrast, children also considered themselves more resilient than perceived by parents. Fee and Hinton (2011) found that despite the chronic and pervasive difficulties caused by Douchenne Muscular Dystrophy, the boys in their sample were highly resilient, with individual qualities of disease progression and severity being statistically unrelated to resilience. The authors suggested "the quantifiable nature of the adversity may be less important to the child than the positive adaptation to it" (Fee & Hinton, 2011, p. 649). In other words, though parents, teachers, or researchers may be able to provide estimates of a child's perceived issues and efficacy in overcoming them, they impose their own values and beliefs in this process that may not be similar to the child's. As was the case of the 1-6 year old children sampled in DeYoung and colleagues (2012) study, it is not always possible or developmentally appropriate for children to articulate the issues as they see them, but every effort should be made to keep the child's perspective the focus of the intervention. The following section will use a child-centered focus within the social-ecological model to examine the risk and protective factors of paediatric medical trauma.

Risk and Protective Factors. Resilience literature often refers to risk factors and protective factors (Greene, 2008). Trauma, and more specifically, paediatric medical trauma, would be considered a risk factor, as it increases the likelihood of event-related stress and adverse outcomes (Webb, 2009). Cumulative risk is another key phrase used to quantify the relative number of contributing risks to one case (Greene, 2008). Ungar (2013) asserted that uniquely intersecting marginalities, such as culture, family dynamics, and poverty will affect a child's capacity for resilience and also negates a one-size-fits-all approach to responding to trauma. Protective factors also exist to mitigate the effects of cumulative risk and promote the balanced state that characterizes resilience (Greene, 2008). The following sections will use the social-ecological model to frame risk and protective factors that exist at the individual as well as the social environment level with parents, peers and teachers.

Individual factors. According to Kim & Yoo (2010), resilience models seek to build upon the strengths of children and use their existing resources to solve problems as they see them, which increases the intrapersonal protective factors of self-esteem and self-worth. In contrast, a problem-based model views the sick child as the problem, which then requires external resources and interventions to fix (Castellano-Tejedor et al., 2014; Kim & Yoo, 2010; Webb, 2009). Webb (2009) notes that in a problem-centred model, a child's identity can be in a state of crisis, potentially shifting their self-image from a 'child with a sickness' to a 'sick child'. This negative self-image can become pervasive and children increasingly doubt themselves, their abilities, and begin to pull away from who they once were (Webb, 2009).

Meta-analyses have demonstrated that specific sociodemographic variables are not predictive of PTSS as studies have shown contradictory findings (Camisasca, 2011). Similarly inconclusive findings were described in a literature review of resilience in paediatric oncology patients (Castellano-Tejedor et al., 2014). A child-centered study conducted by Kim and Yoo (2010) found no significant differences associated with age, gender, religion, existence of siblings, mother's age, academic performance, duration of illness or type of cancer and resilience outcomes. Similarly, Phipps et al. (2012) found very high overall resilience in children with cancer undergoing stem cell transplantation regardless of gender, socioeconomic status, resident parent, site, type of transplant, or diagnostic group.

Outside of paediatric oncology, Fee and Hinton's (2011) study of boys with Deuchenne muscular dystrophy found no significant correlation between resilience and the individual factors of intellectual functioning and physical ability. In children with unintentional injuries, severity of injuries had an impact: those with fractures, dislocations, and lacerations in comparison to burns, internal and multiple injuries, were more resilient (Le Brocque et al., 2010). Younger children were more resilient than older children with unintentional injuries (Le Brocque et al., 2010), though De Young and colleagues (2012) dispelled the myth that young children are always resilient (8% of the burn victims studied had chronic PTSD symptoms after six months). Finally, behaviours were shown to have an impact, where children with fewer internalizing and externalizing issues were more resilient overall (Fee & Hinton, 2011; Le Brocque et al., 2010).

Tonks and colleagues (2012) note that children with acquired brain injuries present a special case in PMT where primary and secondary traumas may impact a child's ability to access intrapersonal as well as interpersonal skills. Executive functioning damage in the brain may impair a child's ability to access the personal resources or protective factors that are characteristic of resilience (Tonks et al., 2012). The authors found that children with ABIs were less resilient, demonstrating lower levels of mastery and resourcefulness, as well as higher levels of emotional reactivity and vulnerability, and consequently were more depressed and anxious than matched peers. Resilience risk factors (i.e. lack of resourcefulness and increased vulnerability) were correlated with depression and anxiety for both ABI and control groups. The authors suggested that children experiencing medical challenges in general may be less resilient because (a) they are less able to mentally access personal resources in the context of greater vulnerability both socially and emotionally, or (b) children experiencing PMT may have greater emotional distress overall which impacts their strategies for resilience. Thus, it appears that children who have suffered from brain injuries present a special case in PMT and should be distinguished when making generalizations about PMT as a whole.

Taken together, there are many individual factors that can influence the experience of PMT and resilience. Given the infinite number of confounding variables, it may not be possible to make generalizations about individuals' capacity for resilience based on their individual characteristics. This fits within the social-ecological model of resilience, which seeks to recognize an individual's experience within their unique social location (Ungar, 2013), which will be discussed in the next section.

Social environment. According to Webb (2009), an ecological perspective is not only an important consideration but is foundational to working with medically challenged children. In the context of this literature review, environmental level risk and protective factors have demonstrated greater impact than individual level factors (Fee & Hinton, 2011; Kim & Yoo, 2012; Tonks et al., 2011). According to Fee and Hinton (2011), a child's perceived quality of support, degree of social embeddedness, and enacted support are aspects of overall social support. The authors define social embeddedness as "the relationships children have with others including family, friends, and the community" (Fee & Hinton, 2011, p. 649). Enacted support is defined as "positive feedback, guidance, and the emotional support received" (Fee & Hinton, 2011, p. 649). Children have less access to their social support network in hospital settings, in comparison to their parents, siblings, or typically developing peers (Boles, 2013). Parents, peers, and teachers form three important aspects of children's social environments and will be considered in the following sections. Though many other aspects of social environments could be included, and should be addressed in future research, the scope of the current literature review only covered these sources of social support as significant contributors to PMT and resilience.

Including parents. Including parents when considering social support is critical because parents are the primary attachment to children and generally form the most important relationship in early development (Webb, 2009). It is important to take the person-in-environment perspective given the impact that neuroscience is beginning to demonstrate in relation to trauma and resilience. Starting with the ontogenic view of the child at the center of their ecology, a child's secure attachment with caregivers has the capacity to mitigate effects of trauma, especially when parents regulate their emotions effectively and can model this

regulatory behaviour appropriately for their children (Schore & Schore, 2008). Given this newly expanding realm of knowledge, it is important for parents (as well as teachers, and other important figures in a child's life), to model resilient behaviours and build supportive environments (Smyth, 2008; Ungar, 2013), especially for younger children who have fewer independent skills and strengths to draw from (De Young et al., 2012). Fee and Hinton (2011) found that social support was the greatest contributor to resilience in boys with a chronic neuromuscular disorder and that parents with less stress were found to have sons with more positive behaviours. These inter-personal factors have a strong bearing on the process of resilience that is as important as the environmental and contextual factors impeding or promoting resilience.

Nancy Boyd Webb (2009), an American clinical social worker and scholar in the field of paediatric medical trauma, notes that in her extensive experience, parents are an impossibly linked component of children's resilience. Though children are the locus of the environmental model, it is often parents who must adjust the other systems around the child to ensure they will accommodate the many ways in which medical illnesses affect children (Webb, 2009). Kim & Yoo (2010) note that children are increasingly receiving care within the home, necessitating a whole-family approach, as there is more demand and stress on caregivers. For this reason, parents are often the focus of PMT resilience interventions (Boles, 2013). Parent attitudes, therefore, have a significant effect on the child and must be a focus for health care professionals, but not to the exclusion of children themselves (Castellano-Tejedor, et al., 2014; Kim & Yoo, 2012).

Including peers. School-age children require development of cognitive skills, co-operative social interactions with peers, and building self-esteem through such interactions and friendships (Ball, Bindler, & Cowan, 2008). Siblings and classmates are two particularly important sources of social support for young children (Webb, 2009). Social support in the form of social embeddedness is a strong protective factor for children with medical challenges (Fee & Hinton, 2011; Kim & Yoo, 2012). Chronic illnesses can present a variety of stress factors for children, including changes in appearance, differential treatment, or disruption to typical development (Kim & Yoo, 2012). Even while away from their friends and in a hospital or other medical setting, providing times for social interaction through age-appropriate play can provide an outlet for connecting to others, making sense of one's diagnosis, relieving stress and anxiety, easing pain, and building on skills to achieve mastery, self-esteem, and provide children with a sense of control over an otherwise overwhelming situation (Boles, 2013; Webb, 2009).

Boles (2013) suggests that children stand to benefit from returning to an environment (i.e. classroom) where peers have been educated and prepared for changes, needs, and desires of the returning student. Children are naturally curious and should be given the opportunity to ask questions in a safe environment, in order to avoid excessive questioning directed to the child upon return, who may already be anxious about the process (Kim & Yoo, 2012). Thus, it is important to educate peers and friends on the illness of the child, as they may be misinformed and could be a source of teasing and bullying, which, would be an accumulating risk factor as opposed to a protective factor.

Including teachers. In studies of resilience factors in children with paediatric cancer, relationship with teachers was statistically significant in bivariate analyses but no longer in multivariate analyses (Kim & Yoo, 2012). The researchers suggested that within the context of their study, this finding could mean that teacher's attitudes toward sick children had an indirect effect on the ways in which peers and friends view the child, which was shown to be more statistically significant at multivariate level (Kim & Yoo, 2012). Given the previously stated importance of peers for children with medical challenges, teachers can be a very effective ally for preparing classmates and creating an inclusive environment. Resilience research that has focused on social and environmental relationships has demonstrated that one attentive adult has the protective capacity to mitigate many cumulative risk factors as a mentor (Ungar, 2011). Thus, though often forgotten in literature, it is important to include teachers and other significant role models in a child's environment to promote resilience.

Interventions. Interventions that directly address the needs of children experiencing medical challenges were included in this literature review, thus three studies will be described, as well as chapters from a handbook on the topic. Firstly, Beer and Bronner (2010) have suggested that Eye Movement Desensitization and Reprocessing (EMDR) has gathered a sufficient evidence-base in adult trauma literature to be applied to children experiencing PMT. EMDR is designed for children (as well as parents) and requires the client to recall and focus on such disturbing events while completing external tasks simultaneously (i.e. following therapist's finger with a pen or listening to specific sounds on headphones) until the stress level decreases to normal (Beer & Bronner, 2010). Further investigation is required to explore the effectiveness of this intervention in child samples.

Phipps and colleagues (2012) found that despite assignment to interventions (weekly massages and humour therapy) given to children, children and parents, or neither, no significant differences were found in resilience outcomes. Overall, researchers in top teaching hospitals across Canada and the United States found very high rates of resilience in patients, which they partly attributed to benefit finding across groups (Phipps et al., 2012). At admission, overall, children's self-reported depression was only one standard deviation below average for matched healthy children, thus it would be difficult to improve on this finding (Phipps et al., 2012). The remarkable outcomes of children across interventions in the Phipps and colleagues (2012) study was further hypothesized to be the result of attention to psychosocial outcomes by professionals such as social workers and child life specialists within the hospital. Further, though post-traumatic stress was significantly higher than in matched healthy children at intake, by the end of the intervention, post-traumatic stress returned to normative levels, suggesting that a resilience model is a better fit than a trauma model for children with cancer undergoing stem cell transplantations (Phipps et al., 2012).

Similarly to the previous study, DeYoung and colleagues (2012) found that young children with unintentional burn injuries had relatively minor injuries, yet surprisingly high rates of psychological disorders (35%). In contrast to literature that had demonstrated children with severe burns as more resilient, the authors suggested the cause of this difference could have been their designation as outpatients and therefore, their more limited access to psychosocial interventions by health care staff, including clinical social workers (De Young et al., 2012).

Boles (2013) as well as Phipps and colleagues (2012) have noted a lack of specific strategies to foster resilience in children experiencing medical trauma to foster resilience. Boles (2013) described the importance of educational opportunities about a child's diagnosis, preparation for medical procedures, play-based therapies, and discharge and transition support (Boles, 2013). As a therapeutic intervention, the benefits of play with paediatric patients can be summarized as a familiar, child-centred method of working through issues; as well as potentially alleviating pain and distress, offering peer-support, and providing children with mastery and control in an overwhelming environment (Boles, 2013). Just as parents wish to be informed of the details of an upcoming procedure, it is important to provide the same education to children, appropriate to their developmental level, to ease anxiety (Boles, 2013). Medical play using multisensorial techniques can educate children on procedures that they will personally experience in a developmentally appropriate way (Boles, 2013).

In recognizing the importance of parents in fostering resilience of children experiencing PMT, clinical social workers can help support parents and families in a variety of ways. Social workers can help parents to navigate the health care system in general, as a variety of factors may prevent parents from fully accessing resources for their children including language barriers, financial strain, or unfamiliarity with systems as a newcomer, immigrant, refugee, or individual with precarious status. Stress and anxiety can prevent parents from retaining and understanding information, thus a social worker could attend meetings with parents to take notes for parents, and review them at a more appropriate time (Webb, 2009). Webb (2009) noted that parents can also feel intimidated by medical professionals, and that social workers can help families determine which questions to ask physicians or other healthcare professionals, or facilitate conversations between families and other staff (Webb, 2009). Social workers can provide resource counselling and make referrals, or offer psychoeducation and support groups (Webb, 2009). Given appropriate consent, social workers can advocate for clients and families in school meetings, mentor teachers on how to support children with PMT in the classroom, and educate a child's peers (Webb, 2009). It is important that interventions are interdisciplinary and social workers are well positioned, especially in health care settings, to fill the role of case management between various professions.

Implications

Taken together, the social-ecological model of resilience fits well within the context of PMT. This child-centered approach also aligns with social work's practice principles of starting where the client is, perceiving problems from the client's perspective, and working at the client's pace. These foundational social work approaches are increasingly borrowed in other medical and allied health professions and organizations. In the medical sciences, problem-focused models are understandable to some degree given the realities of health and disease. However, it is the responsibility of health workers to look at the whole client – to see past them as a patient and see instead a child seeking well-being and possessing skills, talents, and positivity. As health workers empowering change, there is real value in drawing out strengths and empowering clients to make changes within their own lives, no matter how young or old (Botta, 2009). In a society that often silences the voice of children, especially those who are at risk, this critically-informed perspective is of even greater importance.

Biopsychosocial assessments are common in health care professions including doctors, nurses, psychologists, social workers, child life specialists, and so on. Therefore, using the social-ecological lens to view children with medical challenges is not only appropriate, but intuitive. A variety of methods can be employed to provide information to children, support their healthy development, and use therapeutic intervention to build on their current skills and promote resilience. Thus, though the child always maintains focus as the client, social workers should recognize the need to include other elements of a child's system, such as parents, peers, and teachers, intervening as necessary with these stakeholders.

The scope of the current literature review was not intended to address the potential effects of cumulative risk in PMT. However, this approach is warranted for future reviews. Most studies did not adequately account for such risk factors, though those that did suggested that the characteristics explored (i.e. age, gender, religion, previous traumatic experiences) are not as strongly related as perceived social support (Fee & Hinton, 2011; Kim & Yoo, 2012; Le Brocque et al., 2010). Ungar (2013) has demonstrated how intersecting marginalities based on the social location of an individual (such as culture, family dynamics, and poverty) may present cumulative risk factors and may affect a child's capacity for resilience. In accordance with the interventions presented, recognition of cumulative risk factors negates a one-size-fits-all approach to PMT. Social workers can recognize cumulative effects of risk and help clients recruit personal strengths, as well as use external resources (if required) to mitigate such risks and build resilience.

These strategies form the basis of a trauma-informed approach. Trauma-informed approaches suggest a change in the culture of an organization, which recognizes the prevalence, importance, and impact of trauma (Substance Abuse and Mental Health Services

The Core Principles of Trauma-Informed Spaces

The principles of trauma-informed services may vary based on the population being served, but best practices necessitate the following:

- Understanding the effects of trauma (Elliott, Bjelajac, Fallot, Markoff, & Reed, 2005; Harris & Fallot, 2001; Klinic Community Health Centre, 2013)
- Safety: Avoiding re-triggering (Elliott et al., 2005; Klinic Community Health Centre, 2013; SAMHSA, 2014; van der Kolk & Courtois, 2005)
- Collaborative, trusting, and healing relationship with provider (Elliott et al., 2005; Klinic Community Health Centre, 2013; SAMSHA, 2014; van der Kolk & Courtois, 2005)
- Promoting client autonomy and empowerment (Elliott et al., 2005; Klinic Community Health Centre, 2013; SAMSHA, 2014; van der Kolk & Courtois, 2005)
- Recognizing the influence of systems (Elliott et al., 2005; SAMHSA, 2014) strengths-based (Elliott et al., 2005; Klinic Community Health Centre, 2013)

Administration [SAMHSA], 2014). In contrast, trauma-specific strategies are used to address the effects of trauma (SAMHSA, 2014). Current models promote trauma-specific strategies in hospitals, which are important. Some of these supports include social workers, child life specialists, psychologists, and psychiatrists, who understand the effects of trauma, can recognize the ways in which PMT affect clients, and use evidence-based strategies to provide biopsychosocial support (Boles, 2013). The findings of this scoping review demonstrate that these strategies are critical, but that given the pervasiveness and potential effects of PMT, improvements can be made by adopting a trauma-informed culture within hospitals, where all professionals can support children's resilience. For a more detailed description of the core principles of trauma-informed spaces, see the textbox.

Given the consistently resilient nature of children demonstrated in the studies examined within this literature review, further study is required to investigate the factors that contribute to resilience from a child's perspective, using developmentally appropriate measures. Collecting qualitative data could be useful in determining factors that may be lost using limited quantitative methods (Phipps et al., 2012). Greater coherence is required in this young, segmented, and inconsistent field. Thus, scoping reviews of current literature continue to hold value and will continue to be required as the gaps in current PMT and resilience theories are filled and the scope of this multidisciplinary field widens.

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Appendix A: Summary Table of Selected Articles

Source	Purpose of Study	Participants	Recruitment	Research Design	Findings	Strengths and Limitations
Beer, R. & Bronner, M. B. (2010). EMDR in paediatrics and rehabilitation: An effective tool for reduction of stress reactions? Developmental Neurorehabilitation, 13(5), 307-309.	Proposed Eye Movement Desensitization and Reprocessing (EMDR) as an effective intervention for children experiencing PMT stressors	N/A	N/A	Research Summary	Meta-analyses have demonstrated EMDR is effective for groups of adults, can be applied to paediatric medical stress and/or trauma	Research has supported EMDR in different stage of life. Though plausible, is not yet supported empirically for children; requires experimentation and replication
Boles, J. (2013). When everything changes: Supporting resilience in children with acquired brain injuries. Paediatric Nursing, 39(6), 314-316.	Overview of techniques that could be used interprofessionally in a clinical setting to support resilience in children with acquired brain injuries (ABIs)	N/A	N/A	Review	Outlining main areas of resilience in children with ABIs, specific strategies at each level	Using play strategies as a method of coping and developing mastery age-appropriately; involving peers and families to support resilience. Lacked empirical evidence but supported theoretically and in practice. Question of generalizability from ABIs to PMT
Castellano-Tejedor, C., Blasco-Blasco, T., Pérez-Campdepadrós, M., & Capdevila, L. (2014). Making sense of resilience: A review from the field of paediatric psycho-oncology and a proposal of a model for its study. Anales De Psicologia, 30(3), 865-877.	Applied the concept of resilience from the scope of paediatric psycho-oncology	N/A	N/A	Theoretical Model	Overview of definitions of resilience, differences from other terms (i.e. posttraumatic growth, benefit finding); A model of resilience can be applied to experiences of paediatric cancer	Lacks empirical and theoretical evidence; further study required to strengthen model. Question of generalizability from childhood oncology to PMT
De Young, A. C., Kenarfy, J. A., Cobham, V. E., & Kimble, R. (2012). Prevalence, comorbidity and course of trauma reactions in young burn-injured children. Journal of Child Psychology and Psychiatry, 53(1), 56–63.	The prevalence, comorbidity, and course of trauma reactions in young burn-injured children were investigated. Trauma reactions were based off the trajectories used by Le Brocque et al. (2010) (see below)	Parents of 130 children aged 1-6 (mean=2.4)	Convenience sampling from a specialist burn centre in Australia. Approximately 39.5% of those eligible participated. Attrition rate = 23%	Parents were interviewed over the telephone using the Diagnostic Infant Preschool Assessment (capable of diagnosing children using DSM-IV-TR criteria) at 1 and 6 months post injury.	The majority of children were resilient (72%). Many recovered (18%) and a small proportion of children's distress levels remained chronic (8%) over six months. No significant differences were found for child gender, parent age, parent employment status or burn size. 35% were diagnosed with at least one psychological disorder within the six month post injury period (most commonly PTSD, ODD, or SAD) despite relatively minor injuries overall.	Age group is significantly younger than others included in this literature review. Lack of control group, thus distress may be more age-related than trauma-related. Researchers were not blind to initial PTSD status, which may have impacted interview and subsequent classification. Lost a substantial number of participants, though mostly because families were (understandably) too busy

Fee, R. J., & Hinton, V. (2011). Resilience in children diagnosed with a chronic neuromuscular disorder. Journal of Developmental Behaviour Paediatrics, 32, 644-650.	Examined factors associated with resilience of boys with a chronic neuromuscular disorder (Deuchenne muscular dystrophy, DMD)	146 boys with DMD from 6-14 (mean=9.0) years old	Subjects were participants in an ongoing study examining cognitive skills in boys with muscular dystrophy; Convenience sampling through Dystrophy Association clinics in NYC.	Parent reported questionnaire of son's behaviours (Child Behaviour Checklist), social support (CBCL), and familial support (Parenting Stress Index). Also, child's intellectual functioning (Peabody Vocabulary Test) measured	84% were considered resilient and not at risk for psychosocial issues. Individual factors (i.e. intellectual functioning and physical ability) were not significantly associated with adjustment or behaviour, suggesting a child's perception may be more relevant than measures of proposed risk and protective factors of resilience. Social support was most important to adjustment and demonstrated an inverse relationship with problem behaviours. Similarly, parents with less stress were found to have sons with more positive behaviours.	Use of only parent reported measure affect the quality of data, as the authors conceded that child and parent perceptions can differ. Measures were questionably sensitive to the constructs, but were justified by the authors. This article examines a specific type of chronic disease unique to boys and therefore, determining generalizability to PMT is difficult but contributes some understandings.
Kim, D. H., & Yoo, I. Y. (2010). Factors associated with resilience of school age children with cancer. Journal of Paediatrics and Child Health, 46(7-8), 431-436.	Identified factors associated with resilience of children with cancer	74 children, aged 10-15 (mean= 13.1) from a paediatric oncology unit in a university-affiliated hospital	Convenience sampling: All children who fit criteria and visited the hospital from July-September 2004 asked to complete the survey while waiting for their doctor. Approximately 27% of visiting children qualified and completed	Self-report questionnaires (resilience, Family Adaptability and Cohesion Evaluation Scale III, relationship with friends and teachers); some information verified by caregivers	Resilience overall average = 98.5 (possible range= 32-128); Greater family functioning and support from friends demonstrated higher incidence of resilience; No significant differences associated with age, gender, religion, existence of siblings, mother's age, academic performance, duration of illness or type of cancer	From perspective of child, as opposed to parent report; Some of these children are older than the cut off of 12 (average age of 13.1); Study took place in Korea; Convenience sampling; Lack of normative data for measures; Range of scores on measures wide, suggesting some children are much more vulnerable than others and necessitates individualized strategies; generalized can be lost in averages – All limit generalizability.
Le Brocque, R. M., Hendrikz, J., & Kenardy, J. A. (2009). The course of posttraumatic stress in children: Examination of recovery trajectories following traumatic injury. Journal of Paediatric Psychology, 35(6), 637–645.	Using a previously studied model, examined 4 types of recovery trajectories following traumatic injury: resilient (low symptoms of sub-threshold PTSD throughout), recovery (high acute symptoms and decreasing over time), delayed (low acute symptoms but increasing over time), and chronic (high acute and lasting symptoms)	190 Children aged 6-16 (mean=10.7) admitted to paediatric units following accidental injury (no violence or head injuries) who stayed for at least one night, and one primary caregiver	All children admitted to a general or intensive care unit in three tertiary hospitals in Brisbane, Australia	Self-report measures of the effects of trauma (Child Impact of Event Scale), parent reported child mental health (Child Behaviour Checklist) over 3 time points: within one week, 2-6 months, and 2 years post injury. Home interviews were conducted at follow-ups	Overall, PTSS showed a decline over time. 57% of children were resilient, with slightly elevated to low distress within 4-6 weeks. 33% of children were in the recovery trajectory, where distress declined to average within 6 months. 10% of children were chronic in that they had high levels of distress that remained stable over 2 years post-injury. There was no evidence for delayed symptoms in this group. Younger children, those with fractures, dislocations, lacerations, etc. (compared to burns, internal and multiple injuries), and those with less internalizing and externalizing issues were more resilient overall. Acute stress disorder was determined to not be an accurate predictor of PTSD.	Information could not be garnered about participation rates, therefore difficult to generalize to other traumatic injuries and PMT as a whole. Average age fit within childhood, therefore this study was included, but may not be generalizable to 6-12 year olds. Measures and interviewers were not qualified to diagnose but should have adequately screened for PTSS.
Phipps, S., Peasant, C., Barrera, M., Alderfer, M. A., Huang, M. S., & Vannatta, K. (2012). Resilience in children undergoing stem cell transplantation: Results of a complementary intervention trial. Paediatrics, 129(3), e762-770.	Efficacy of resilience interventions with children undergoing Stem Cell Transplantation (STC)	171 patients (age 6-18) undergoing STC, staying at the hospital for over 3 weeks, along with at least one on-site caregiver	4 sites offering STC: 3 in U.S. and Hospital for Sick Children (Toronto); All qualifying families (242) were asked to participate during child's treatment	Randomized control trial over 24 weeks of treatment. Intervention (weekly massage and humour therapy) given to child only, child and parent, or neither.	No significant differences were found between groups, even when considering gender, socioeconomic status, resident parent, site, type of transplant, or diagnostic group. Depression, post-traumatic stress decreased over time for all groups. Could be due to the high overall resilience that children demonstrated, high standard of interprofessional care existing in hospitals. Benefit finding was important for this population.	Strong research design; Confusion of terms (i.e. benefit finding); Age range 6-18 but divided 6-12 and >12 and found no significant difference across treatments. Attrition rates yielded power to detect only medium to large between-group differences, perhaps explaining lack of significant differences. However, similarities in participants may negate some of the effects of high attrition.
Tonks, J., Yates, P., Frampton, I., Williams, W. H., Harris, D., & Slater, A. (2011). Peer-relationship difficulties in children with brain injuries: comparisons with children in mental health services and healthy controls. Brain Injury, 25(9), 870-881.	Examined the role of executive functioning (EF) in the brain and accessing 'resilient' resources following an acquired brain injury (ABI)	21 children ages 9-15 (mean = 12.6) with ABI and 70 matched healthy children based on parent education (deemed more appropriate than SES)	Children with ABI were recruited from a variety of community agencies in the UK, healthy children were recruited from nearby two schools	Self-report measures of resilience (Resilience scales for children and adolescents), depression (Beck Depression Inventory for Youth), anxiety (Beck Anxiety Inventory for Youth); Parent-reported measures of psychological adjustment (Strengths and Difficulties Questionnaire), and problems with emotion, personality, motivation, behaviour and cognition (The Dysexecutive Questionnaire for Children)	Children with ABI were less resilient (lower levels of mastery and resourcefulness, higher emotional reactivity and vulnerability, no difference in emotional relatedness); more depressed and anxious than matched peers. Resilience risk factors were correlated with depression (i.e. lack of resourcefulness and increased vulnerability) and anxiety (i.e. increased vulnerability) across both groups. EF in the brain was found to mediate the relationship between resilience and social-emotional behaviour, as children with ABIs could no longer access and use such skills as effectively	Relatively small sample size; heterogeneous features across population may limit generalizability across ABI studies and especially PMT more generally. Results were parent reported which may not be highly reliable. The authors suggested that children with ABIs may be less resilient because they are less able to find and use personal resources, which is combined with greater vulnerability both socially and emotionally, or children with ABIs may have greater emotional distress overall which impacts their strategies for resilience

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Examining the Response to Different Types of Exposure to Intimate Partner Violence

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Abstract:

Objectives: The objective of this study is to examine the differences and similarities in child, family, and case characteristics between different types of exposure to intimate partner violence (IPV), and to determine if type of exposure to IPV influences the decision to provide ongoing child protection services.

Methods: Using data from the 2008 Ontario Incidence Study of Reported Child Abuse and Neglect (OIS-2008), cases were selected if the investigation was substantiated for exposure to IPV, either as the primary or secondary maltreatment type, resulting in an estimated 17,006 cases. First, bivariate analyses were conducted to compare six different combinations of exposure to IPV and differences in child, family, household, and case characteristics. A logistic regression was used to determine whether the type of exposure was predictive of case opening when controlling for child, parent, and case characteristics.

Results: There were significant differences in child and family characteristics between types of exposure to IPV. For cases where exposure to IPV co-occurred with at least one other form of maltreatment, workers noted higher proportions of child and caregiver risk factors than exposure to IPV alone.

Conclusions: Cases involving children exposed to emotional violence and another form of maltreatment were most likely to result in case opening, when controlling for all other factors.

Implications: The results indicate several important differences in clinical characteristics between types of exposure to IPV in child maltreatment cases. These differences in child, family, and case characteristics can be used to tailor service responses to better help these families.

Keywords:

intimate partner violence; child exposure to intimate partner violence; child abuse; child maltreatment

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Introduction

Intimate partner violence (IPV) is a term that has been used interchangeably with woman battering, spousal or wife abuse, domestic violence, and family violence (Pyles & Postmus, 2004), and refers to emotional, financial, psychological, physical, or sexual harm towards a partner (McLeod, Hays, & Chang, 2010). In Canada, self-report data from the General Social Survey indicate that 6% of women have experienced IPV victimization in the past five years (Sinha, 2013). In the United States, the National Intimate Partner and Sexual Violence Survey found that 31.1% of women report having experienced physical violence from a partner or ex-partner at some point in their lives, and 4% have experienced it in the past year (Breiding, et al., 2014). Psychological aggression by an intimate partner or ex-partner was experienced by 47.1% of women in their lifetime, with 14.2% having experienced it in the past year (Breiding et al., 2014).

A US study estimates that almost half of domestic violence incidents occur in households with children, and of those children, 95% were either directly or indirectly exposed to the abuse (Fusco & Fantuzzo, 2009). In Canada, statistics from the National Longitudinal Survey of Children and Youth indicate that approximately 17% of children between the ages of 6 and 11 witnessed violence in their homes during their lives (Hotton, 2003). Due to potential risk of harm to children who are exposed to IPV (Holden, 2003; Moylan et al., 2010; Wolfe, Crooks, Lee, McIntyre-Smith, & Jaffe, 2003), child protection services (CPS) become involved with families dealing with IPV.

While IPV is explicitly included in the child protection legislation of 23 US states and six Canadian provinces (Petersen, Joseph, & Feit, 2014; Weaver-Dunlop, Nixon, Tutty, Walsh, & Ogden, 2006), it is also interpreted as falling within existing definitions of harm and is included in child maltreatment assessment instruments (for an example, see Ontario Eligibility Spectrum, Ontario Association of Children's Aid Societies, 2003).

The CPS response to allegations of exposure to IPV is often varied, and has not always been consistently defined in the literature. As a result, it has been particularly difficult to understand the CPS response to IPV. This paper examines data from the 2008 Ontario Incidence Study of Reported Child Abuse and Neglect (OIS-2008), looking specifically at varying characteristics related to different types of exposure to IPV, as well as predictors of ongoing service provision. Based on these findings, this paper will discuss service alternatives for future CPS responses to IPV.

Literature Review

Intimate Partner Violence and Child Protection Services

In the United States, over 650,000 children each year will have some contact with child welfare (U.S. Department of Health and Human Service, 2012). In Canada, there are an estimated 235,000 CPS investigations each year and 34% of these cases are for exposure to IPV (Trocmé et al., 2010). Research suggests that substantiated investigations involving IPV are less likely to result in a placement than other forms of maltreatment (Black, Trocmé, Fallon, & MacLaurin, 2008). However, CPS investigations for exposure to IPV have been increasing in Ontario. The fifth cycle of the Ontario Incidence Study of Reported Child Abuse and Neglect (OIS-2013) found that exposure to IPV accounts for 48% of all substantiated maltreatment investigations or 8.7 cases per 1,000 children (Fallon et al., 2015). In comparison, in the OIS-2008, exposure to IPV accounted for 39% of substantiated investigations or 6.33 investigations per 1,000 children (Fallon et al., 2010).

Impact of Exposure to Intimate Partner Violence

For decades, research has shown that IPV and child maltreatment frequently co-occur within child welfare cases (Hamby, Finkelhor, Turner, & Ormrod, 2010; Kohl, Edleson, English, & Barth, 2005; Parke, Appel, & Holden, 1998). Kohl and colleagues (2005) suggest that children who are exposed to IPV are at a greater risk of being maltreated. In the literature, the term exposure is often used interchangeably with witnessed or observed to describe the experiences of children who are directly or indirectly impacted by physical and emotional violence (Carpenter & Stacks, 2009). However, multiple definitions and different types of exposure influence how exposure is understood in the literature. Conflicting terminology can also vary the scope and prevalence of this issue (Holden, 2003). Broadly defined, exposure is generally understood as being "within sight or sound of the violence" (Edleson et al., 2007, p. 963). Holden's (2003) seminal work on the taxonomy of exposure to IPV outlines ten distinct types of exposure to IPV: exposed prenatally, intervened, victimized, participated, eyewitness, overheard, observed the initial effects, experienced the aftermath, heard about it, and ostensibly unaware. From these ten types, the Canadian Incidence Study (CIS) developed a three broader types of exposure: direct witness to physical violence, indirect exposure to physical violence, and exposure to emotional abuse. This simplified typology was needed as the CIS is filled out by child protection workers who might not have sufficient information to determine the exact type exposure – the simplified categories require workers to determine only whether there was physical violence versus emotional violence, and whether the child was directly or indirectly exposed.

Children exposed to IPV can be at risk of experiencing short and long-term detrimental effects. Immediate effects can be seen as early as infancy: infants exposed to severe IPV have been found to exhibit trauma symptoms (Bogat, DeJonghe, Levendosky, Davidson, & von Eye, 2006). Children and adolescents exposed to IPV can exhibit more internalizing and externalizing problems than non-exposed comparison groups (Sternberg, Lamb, Guterman, & Abbott, 2006). Long-term detrimental effects can also be seen when children enter adulthood, with children exposed to IPV having higher risk of violence victimization and perpetration as adolescents and adults (Moylan et al., 2010; Schewe, Riger, Howard, Staggs, & Mason, 2006; Sousa et al., 2011; Wolfe et al., 2003). Recent studies have also found links between exposure to IPV and adolescent delinquency, depression, alcoholism and posttraumatic stress disorder (Cisler et al., 2012; Mirick, 2014).

The impact of exposure to IPV is influenced by several factors, including the exact type of exposure, such as direct or indirect exposure, the length of exposure, and the severity and type of IPV. In Bogat and colleagues' (2006) study, only infants exposed to severe physical IPV exhibited trauma symptoms, while infants exposed to emotional IPV did not exhibit such symptoms, when controlling for other factors. However, exposure during infancy does not necessarily mean that children will exhibit behavioral issues as they age. The length of exposure has been found to have a greater impact on internalizing and externalizing behaviors than the age of initial exposure, meaning that if the exposure is of short duration, the risk of problematic behaviors significantly decreases (Graham-Bermann & Perkins, 2010).

Examined within the ecological framework, the possible negative impacts of exposure to IPV are mediated by child, family, and community characteristics (Gewirtz & Edleson, 2007). For instance, girls exposed to IPV are more likely to exhibit internalizing and externalizing behaviors than boys, particularly if exposed to physical IPV (Baldry, 2003; Sternberg et al., 2006). Boys are more likely to experience physical and emotional harm, especially if they attempt to intervene in physical altercations between intimate partners, and are more likely to show a higher incidence of post-traumatic stress symptoms (Bayarri, Expeleta, & Granero, 2011; Reynolds, Wallace, Hill, Weist, & Nabors, 2001). However, when controlling for family and community-level risk factors, such as caregiver mental health, parenting skills, poverty and community violence, the impact of exposure to IPV on children's behavioral issues can be mediated or lose significance (Huang, Wang, & Warrener, 2010; Moylan et al., 2010). Furthermore, while each of the developmental domains (cognitive, social, emotional, language, and physical) can be impacted by exposure to IPV, the short and long-term effects can be mediated by early intervention, strong interpersonal relationships and attachments, and the child's own coping strategies and resilience (Carpenter & Stacks, 2009; Holt, Buckley, & Whelan, 2008; Howell, 2011).

The issue of exposure to IPV is further complicated by the co-occurrence of IPV and child maltreatment. A Canadian study reported that while 31% of substantiated child maltreatment investigations are solely for exposure to IPV, another 10% are substantiated for both exposure to IPV and another co-occurring form of maltreatment (Lefebvre, Van Wert, Black, Fallon, & Trocmé, 2013). However, some researchers have found that the

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impact of exposure to IPV exists even when controlling for other family violence, with children exposed to IPV exhibiting higher levels of depressive symptoms than those who were not exposed to IPV (Russell, Springer, & Greenfield, 2010). Other researchers have found that the risk of developing internalizing and externalizing behaviors is significantly higher for children facing both child maltreatment and exposure to IPV, indicating a possible interaction between the two (Moylan et al., 2010).

Study Rationale and Research Questions

While there is a significant amount of literature on the impacts of exposure to IPV on children, few studies have examined the role of CPS in responding to this form of child maltreatment, and even fewer studies have considered how CPS responds to the different types of exposure. The literature review revealed that the potential negative impacts of exposure to IPV for children are influenced by a number of factors, including the type of exposure, the co-occurrence of other forms of child maltreatment, and the characteristics of the child, family, and community. Given that previous literature grounded in the ecological framework indicates that the type of exposure has a differential impact on children, we would expect that the child, family, and case characteristics will differ between types of exposure, and that child protection workers investigating cases of exposure to IPV will make different decisions based on the characteristics of each case. Unfortunately, due to the limitations of the data we are unable to control for the length of exposure and the age at first exposure, only the age when the child was referred to CPS. As a result, the two research questions of this paper are:

1) What are the differences and similarities in child, family, and case characteristics between different types of exposure to IPV?

2) How does the type of exposure influence the decision to provide ongoing child protection services?

As this is an exploratory study into the different types of exposure, no hypotheses are made into how the types of exposure will differ in terms of risk factors or how they will influence workers' decision making.

Methods

The data used in this paper were drawn from the Ontario Incidence Study of Reported Child Abuse and Neglect – 2008 (OIS-2008; Fallon et al., 2010). The OIS is part of the national Canadian Incidence Study of Reported Child Abuse and Neglect – 2008 (CIS-2008; Trocmé et al., 2010). The purpose of the OIS is to look at the characteristics of reports of child maltreatment and the service decisions made by child protection services (Trocmé et al., 2010). The subsequent cycle of the study, OIS-2013, was not available for analysis at the time of writing this report. The ethics for the Ontario Incidence Study's data collection were approved by the University of Toronto's ethics review committee. The data for OIS-2008 were collected between October 1, 2008 and December 31, 2008 using a multi-stage sampling design which selected first a representative number of agencies in Ontario (n = 23), and second a representative number of cases within each agency. Investigating workers were asked to complete a data collection form for each selected case and to indicate the primary form of maltreatment being investigated and, if applicable, up to two co-occurring maltreatments forms. The final sample consisted of 7,471 investigated children from 4,415 families in Ontario. This sample was weighted using a composite regionalization and annualization weight to estimate the annual incidence of referrals and investigations within Ontario (OIS-2008; Fallon et al., 2010). Only those cases that are substantiated for exposure to IPV, whether exposure to IPV is the only concern or it co-occurs with another form of child maltreatment, were used in this analysis. The final sample consisted of a weighted sample size of 17,006 estimated investigations substantiated for exposure to IPV, as Black and colleagues (2008) found that most IPV investigations are substantiated.

Six types of exposure were considered for this analysis: direct witness to physical violence (IPV-DW), indirect witness to physical violence (IPV-IE), exposure to emotional violence (IPV-EV), IPV-DW co-occurring with at least one other type of maltreatment, IPV-IE co-occurring with at least one other type of maltreatment, and IPV-EV co-occurring with at least one other type of maltreatment. IPV-DW included witnessing or intervening in physically violent episodes between caregivers, IPV-IE included seeing the aftermath or consequences of a physical altercation, or hearing it from another room, and IPV-EV included directly or indirectly hearing emotionally abusive altercations between caregivers. All analyses used SPSS version 22 for Windows (SPSS Inc., Chicago, IL, USA). Chi-square analyses were used to compare the differences between these six different types of exposure to IPV in terms of child, family, household, and case characteristics (see Table 1 for list of variables used). Sampling weights were used for all chi-square analyses to maintain the influence of the final OIS weight while reducing the actual number of reports to the original sample size to avoid inflating the significance of statistics as a result of the high number of reports. These weights were used to correct for possible errors in the sample that might lead to bias and other departures between the sample and the child population. As well, to further reduce the likelihood of Type I error, a conservative p-value of $p < .001$ was used to interpret the significance of associations based on the Bonferroni correction (Dunn, 1961). Estimates of less than 100 investigations were not shown in the figures as they are not reliable.

A logistic regression was used with the unweighted sample to determine which of the child, parent, and case characteristics were predictive of whether the case was opened for ongoing services or not. The initial model featured theoretically relevant predictors entered into blocks based on the ecological model (Bronfenbrenner, 1979) which features the child in the centre. As a result, first the child-level variables were entered, followed by the family and household-level variables, then the clinical case characteristics, including the type of maltreatment. The cut point for the outcome variable (whether the case opened) was 0.30, which reflects the rate of transfer to ongoing services in the provincial sample. Regressions were then re-run using only the statistically significant variables in order to develop a parsimonious model. This final model is presented in this paper.

Table 1: Study Variables of Child Welfare Cases in Ontario in 2008

Variable	Operationalization
Cases will stay open for ongoing child welfare services	Workers were asked whether the case would stay open for ongoing child welfare services or not. Dichotomous: yes/no.
Type of Maltreatment	Workers were asked to indicate up to three forms of maltreatment. The original categorical variable had 32 options that fell under five categories: physical abuse, sexual abuse, neglect, emotional maltreatment, and exposure to IPV (direct witness to physical violence; indirect exposure to physical violence; exposure to emotional abuse). For the purposes of this study, the variable was recoded into six levels: direct witness to physical violence (IPV-DW), indirect exposure to physical violence (IPV-IE), exposure to emotional violence (IPV-EV), IPV-DW co-occurring with at least one other form of maltreatment, IPV-IE co-occurring with at least one other form of maltreatment, and IPV-EV co-occurring with at least one other form of maltreatment.
Placement during investigation	Whether the child was placed in out of the home during the investigation was collapsed into two categories: not placed or placed.
Age	Child age, categorical variable of less than one, one to three, four to seven, eight to eleven, twelve to fifteen.
Child functioning (e.g., depression/anxiety/withdrawal, ADHD)	Workers were asked to rate the child's level of functioning using the 17 child functioning issues listed. Each was then collapsed into a dichotomous variable of noted or not noted.
Emotional harm	Workers were asked to determine whether the child was showing signs of mental or emotional harm (e.g., nightmares, bedwetting, or social withdrawal) following the maltreatment incident(s). Dichotomous: yes/no.
Caregiver functioning (e.g., alcohol abuse, few social supports, maltreated as a child)	Workers were asked to rate the primary caregiver on 9 risk factors. Each variable was then collapsed into a dichotomous variable of noted or not noted.
Previous case opening	Workers were asked to indicate of the family had a previous case opening with child welfare. Categorical: Never, once, two to three, more than three times.
At least one household hazard	Workers were asked to indicate if any unsafe housing conditions were evident. Variable was collapsed into a dichotomous variable of yes or no.
Number of moves	Workers were asked to indicate the number of times the family moved within the past year. Categorical: never, once, two or more, unknown
Household regularly runs out of money for basic necessities	Workers were asked to determine if the household regularly runs out of money for basic necessities (e.g., food, clothing). The variable was collapsed into a dichotomous variable of yes or no.
Home overcrowded	Workers were asked to indicate if the household was overcrowded. Categorical: yes/no/unknown.
Housing	Workers were asked to indicate the housing type of the family. Categorical: own home, public housing, rental band housing, hotel/shelter, unknown, other.

Results

In 2008, Ontario had an estimated 38,571 substantiated investigations, of which 50.6% involved investigating children exposed to IPV. The most common form of exposure was IPV-EV, representing 32.6 % of substantiated cases. This was closely followed by IPV-DW, which represents 30.4% of substantiated cases, IPV-IE with 20.2%, and exposure co-occurring with at least one other form of maltreatment with 16.7% (see Table 2).

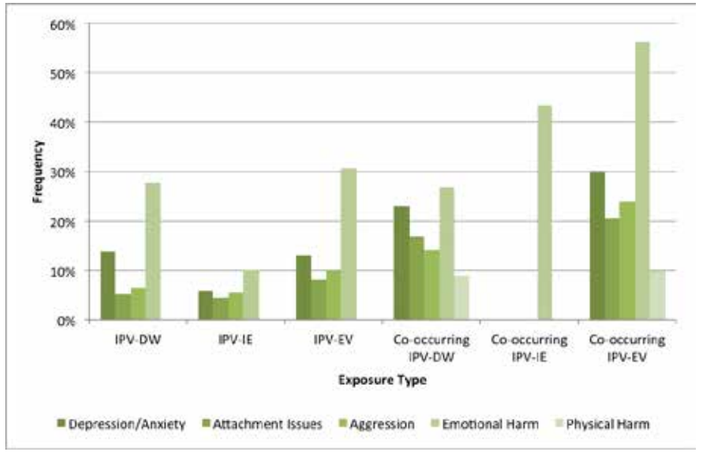
Table 2: Estimated frequencies of substantiated exposure to IPV by type in Ontario in 2008

Variable	Frequency	Percent
Direct witness to physical violence (IPV-DW)	5,175	30.4
Indirect exposure to physical violence (IPV-IE)	3,435	20.2
Exposure to emotional violence (IPV-EV)	5,549	326
Co-occurring IPV-DW	1,180	6.9
Co-occuring IPV-IE	524	3.1
Co-occuring IPV-EV	1,143	6.7
Total Investigations	17,006	100

Based on a sample of 1,013 unweighted matreatment investigations. Columns are not additive.

In terms of child characteristics (see Figure 1), children experiencing co-occurring IPV-EV were noted to have negative outcomes more often than children in the other exposure categories. Depression/anxiety was noted most often in children substantiated for co-occurring IPV-EV (29.9%) and co-occurring IPV-DW (23%), proportions 2 to 4 times higher than children whose sole form of maltreatment was exposure to IPV ($\chi2 = 38.068$, $p < .001$). As well, these two investigation types had percentages 2 to 4 times higher of noted attachment issues than exposure only cases ($\chi2 = 32.739$, $p < .001$). Aggression was also 1.5 to 4 times more common in these two exposure types, with 24% of co-occurring IPV-EV cases and 14.2% of co-occurring IPV-DW cases having noted aggression issues ($\chi2 = 30.186$, $p < .001$). Child characteristics such as ADD/ADHD, intellectual/developmental disabilities, academic difficulties, and failure to meet developmental milestones were relatively lower in percentages between all exposure types.

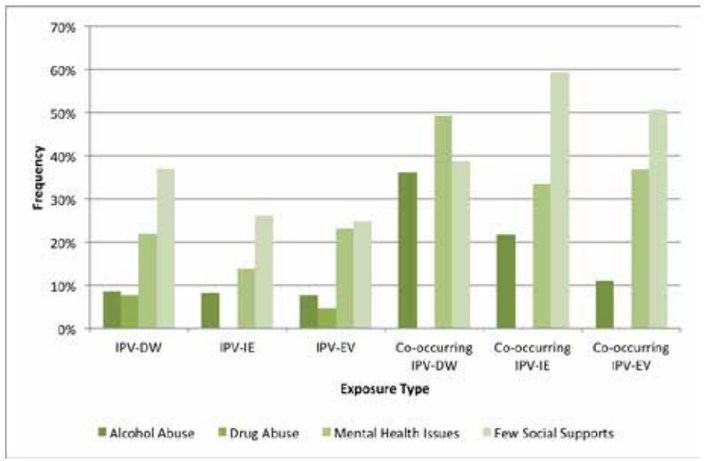
Figure 1: Child characteristics by type of exposure to IPV



Estimates of less than 100 investigations are not shown as they might be overestimated due to their small unweighted size.

Caregiver characteristics (Figure 2), like child characteristics, also featured some important differences between exposure types. For instance, 36% of co-occurring IPV-DW investigations noted caregiver alcohol issues; 1.5 to 4 times more frequently than all other types of exposure ($\chi2 = 69.302$, $p < .001$). Co-occurring IPV-IE investigations noted caregiver drug abuse issues in 40.2% of cases, or 2 to 8 times more frequently than all other types of exposure ($\chi2 = 64.788$, $p < .001$). The primary caregiver had proportions 3 to 10 times higher of cognitive impairment in cases of co-occurring indirect exposure compared to other exposure types ($\chi2 = 25.057$, $p < .001$). Caregiver mental health issues were most noted among co-occurring IPV-DW (49.2%) and co-occurring IPV-EV (36.7%, $\chi2 = 50.018$, $p < .001$). Lastly, the primary caregiver was noted to have few social supports most often in the co-occurring indirect exposure (59.2%) and the co-occurring emotional violence exposure (50.6%, $\chi2 = 41.794$, $p < .001$). Caregiver physical health issues appear to be similarly low across all exposure types.

Figure 2: Caregiver characteristics by type of exposure to IPV



Estimates of less than 100 investigations are not shown as they might be overestimated due to their small unweighted size.

Exposure only cases tended to have less housing problems and financial difficulties than cases investigated for co-occurring forms of maltreatment involving IPV. Cases of co-occurring IPV-IE were noted to rent housing ($\chi2 = 135.395$, $p < .001$) and change residences ($\chi2 = 58.277$, $p < .001$) more frequently compared to other exposure types. Similarly, regularly running out of money occurred 1.5 to 3 times more frequently in cases of co-occurring IPV-DW and co-occurring IPV-EV ($\chi2 = 39.871$, $p < .001$) than in exposure only cases.

Regarding the clinical case characteristics, co-occurring exposure investigations were more likely to note emotional and physical harm to the child. Evidence of mental

Table 3: Logistic regression predicting whether or not a case will proceed to ongoing child welfare services

Predictor	β	SE	Adjusted Odds Ratio
Block 1			
Child age	-0.054	0.017	0.947**
Child depression/anxiety/withdrawal (reference: not noted)	0.712	0.24	2.038**
Child agression (reference: not noted)	0.499	0.279	1.648
Block 2			
Caregiver drug use (reference: noted noted)	1.232	0.276	3.429***
Caregiver cognitive issues (reference: not noted)	0.864	0.513	2.373
Caregiver mental health issues (reference: not noted)	0.688	0.182	1.990***
Caregiver physical health issues (reference: not noted)	1.452	0.324	4.272***
Caregiver few social supports (reference: not noted)	0.516	0.156	1.676**
Home overcrowded (reference: not overcrowded)			
Yes	1.597	0.392	4.939***
Unknown	-3.102	1.044	0.045
Block 3			
Exposure type (reference: IPV-DW)			
IPV-IE	-0.217	0.203	0.805
IPV-EV	-0.217	0.183	0.813
Co-occurring IPV-DW	0.577	0.335	1.780
Co-occurring IPV-IE	0.139	0.441	1.149
Co-occuring IPV-EV	1.095	0.313	2.990***
	Block 1	**Block 2**	**Block 3**
-2LL(Constant)-2LL Model	1324.789	1152.173	1128.834
Model X^2	46.618	219.234	242.572
Df	3	10	15
Nagelkerke R^2	0.061	0.263	0.287
Correct Classification Rate	45.3%	66.1%	65.9%
Correct classification of cases to remain open	93.1	79.3	79.3

* $p < .05$ ** $p < .01$ *** $p < .001$
Basedd on a sample of 1,013 unweighted maltreatment investigations

or emotional harm was present in 56% of co-occurring IPV-EV, followed by 43% of co-occurring IPV-IE investigations ($\chi2 = 73.332$, $p < .001$). Physical harm was present in 8 to 10% of co-occurring exposure investigations ($\chi2 = 64.191$, $p < .001$). These findings were reflective of the decision to open the case, as co-occurring exposure investigations were twice as frequently opened for ongoing child protection services compared to exposure only investigations ($\chi2 = 69.280$, $p < .001$). However, investigations for co-occurring IPV-DW were noted to result in the child being placed outside the home three times more frequently, with 15% of children in this exposure category receiving placement, compared to all other types of investigations ($\chi2 = 49.613$, $p < .001$). Lastly, case histories indicated that co-occurring IPV-IE were most likely to have been opened before, only 12.8% of investigations were new cases,

and that 76% of cases had been opened more than 3 times in the past. Thirty-five to 44% of cases of all other exposure types had never been opened before ($\chi 2 = 120.164$, $p < .001$).

The logistic regression model was effective at predicting whether a case was opened for ongoing services, explaining almost 29% of the variance. The model accurately predicted nearly 80% of cases that stayed open. Significant predictors of case opening at the child level were child age, and child depression, with child aggression approaching significance (see Table 3). Cases with younger children were more likely to be opened for ongoing services, as were cases with children who exhibited depression/anxiety (though both of these variables were only approaching significance, given our strict p-value of .001). Significant predictors of case opening at the caregiver level were drug use, mental health issues, and physical health issues. Caregiver few social supports was approaching significance ($p < .01$) as a predictor. Cases with caregivers noted to have any one of these issues were 1.6 to 4.2 times more likely to be opened for ongoing services. The only statistically significant household level predictor was home overcrowding, where investigations of families in overcrowded residences were almost 5 times more likely to be opened for ongoing services ($\beta = 1.597$, $p < .001$). Only IPV-EV co-occurring with another form of maltreatment was more likely to be opened for services ($\beta = 1.095$, $p < .001$) which was in line with the bivariate findings that this type of co-occurring exposure had more child, caregiver, and household risk factors. One possible reason that there was a lack of significance for other co-occurring exposure types was the small number of unweighted investigations that fall into these exposure categories (less than a hundred). It is important to note that the addition of caregiver and household risk factors accounted for 20% of the variance in the model. Once controlling for all client, case, and family characteristics, exposure type added less than 3% to the variance explained by the model (see Table 3). These findings indicate that workers placed more weight on caregiver risk factors than the type of exposure when determining if the case should be opened for ongoing services.

Discussion

The results indicate that there are several important differences in characteristics between types of exposure to IPV. Most notably, child, caregiver, and household issues tend to be more frequent in cases of IPV exposure co-occurring with at least one other form of child maltreatment. Children in these cases exhibit more internalizing and externalizing behaviors, their caregivers tend to have more addictions and mental health problems, and their housing tends to be less financially stable and secure. As a result, it is not surprising that cases of co-occurring IPV-EV are more likely to be opened for ongoing child protection services than cases of exposure to IPV only. However, the fact that there is little difference between exposure to physical violence and exposure to emotional violence in terms of child, family, and case characteristics is potentially important. While we would expect from previous literature that direct exposure to physical violence would have more impact on child functioning than exposure to emotional abuse (Holt et al., 2008), this was not the case in our study. The limitations discussed below outline possible reasons as to why this is the case.

Our findings relating to co-occurrence are in line with a meta-analysis by Wolfe, Crooks, Lee, McIntyre-Smith, and Jaffe (2003). The study by Wolfe and colleagues (2003) found that when children's exposure to IPV co-occurred with child maltreatment (e.g. physical abuse, sexual abuse, neglect), children had increased levels of emotional and behavioral problems, compared to exposure to IPV alone. Thus, it is important to consider how children who experience co-occurring exposure to IPV have higher risk factors, and to consider how CPS can then best respond to these increased needs.

An important result of our study was that many of these investigations involving exposure to IPV, whether co-occurring or not, have been opened before, often multiple times. High levels for re-reports of children exposed to IPV have also been found in the US, with children exposed to IPV being twice as likely to be re-referred to CPS as children experiencing other forms of maltreatment (Casanueva, Martin, & Runyan, 2009). These findings indicate that families might not be receiving all the support they need in order to prevent further incidents of exposure to IPV. The high level of cases being reopened suggests that the ongoing needs of these families are not being met by the current system.

Families have different needs based on the type of exposure, mainly based on whether the exposure co-occurred with another form of maltreatment, and the relevant child and family characteristics. This information is useful in considering how CPS can tailor differential service responses to IPV, based on the differing needs of families. Over the last 15 years, some child welfare organizations in Canada and the United States have integrated differential service response models for child welfare cases (Godsoe, 2013; Marshall, Charles, Kendrick, Pakalniskiene, 2010). The models emphasize the individual needs of the family and tailor the intervention and services provided based on the specific needs of the family. The most common model features two streams, one for high risk families and one for low risk cases (Trocmé, Knott, & Knoke, 2003). Low risk cases are provided with less intrusive, more community-based services, while high risk cases tend to receive traditional child protection services. As seen in our results, different exposure types are associated with different child and caregiver risk factors, with co-occurring exposure, particularly co-occurring IPV-EV, noting the greatest proportions of risk factors.

Benefits of differential service responses have been seen in programs such as anti-poverty services for families that have resulted in less foster care placements and recidivism (Trocmé et al., 2003). Studies have found that integrating differential response has long term positive effects for CPS organizations and the families they serve, namely reducing case re-opening and out of home placements (Loman & Siegel, 2012; Marshall et al., 2010; Pennell & Burford, 2000). Furthermore, results show that the subsequent decrease in re-referrals was more cost effective in the long term despite the initial costs of setting up alternative response streams (Loman & Siegel, 2014; Pennell & Burford, 2000). This is particularly relevant in view of our results that over 75% of co-occurring IPV-IE cases have been referred more than three times in the past. Since the OIS data is limited to the investigation stage only, it is not possible to know if these cases are returning due to the same concerns or due to new concerns; however, what is known is that these families have ongoing needs that are not necessarily being addressed.

The findings of a recent systematic review by Wood and Sommers (2011) also reflect

the need for differential responses by CPS. The review found that interventions for children exposed to IPV need to take into account socioeconomic status, social support, as well as mental and physical health (Wood & Sommers, 2011). All of these factors also emerged as significant variables in our analyses. A differential service response would allow for flexibility, permitting CPS to intervene in ways that acknowledge the mediating impacts of early intervention and positive relationships and attachments on both short and long-term effects of IPV (Carpenter & Stacks, 2009; Holt et al., 2008).

In order for CPS to operate with the best interest of the child in mind, the full context of the family situation must be considered in order to make decisions around services, custody arrangements and appropriate interventions. Some suggestions include updating family assessment tools to reflect type of exposure and enhancing coordination between community organizations and CPS in order to more effectively strengthen families.

Limitations

A concrete definition of exposure to IPV in child welfare continues to be a challenge for the field, making the construct difficult to measure. As well, direct measurement of child exposure is not always possible and workers must infer the exposure from others' testimony. As such, it's possible that some types of exposure are underestimated by workers. Similarly, the emotional impacts on children might also be underestimated. For many children, the emotional distress can become evident months or even years after exposure which is outside the scope of the data. Child and caregiver functioning issues might not be fully known to the worker at the time of data collection. Moreover, the data set is based on cases of child maltreatment reported to CPS. Cases reported only to police, unreported cases, and cases screened out by the child welfare authority are not included. As a result, our findings likely underestimate the extent of the impact of IPV on children. As well, worker completion of the data collection instrument was not independently verified. It is possible that workers complete the data collection instrument in a way that justifies their judgments regarding the investigation (Fallon et al., 2012). Additionally, excluding estimates of less than 100 investigations resulted in missing data for some variables. Lastly, we were unable to account for community-level risk factors (such as poverty or community violence) as they were not included in the data collection instrument and we were unable to account for age of first exposure to IPV and length of exposure, variables which can influence the impact of exposure on children.

Conclusions

Despite a growing body of literature on impacts of exposure to IPV on children, there are few studies that specifically examine how CPS responds to different types of exposure. For the first time, data from the Ontario Incidence Study of Reported Child Abuse and Neglect – 2008 (OIS) allowed for an examination of the child, family, and case characteristics for different types of exposure to IPV, as well as an examination of how the type of exposure influences the decision to provide ongoing child protection services.

Key findings from the study show important differences in characteristics between types of exposure to IPV, and that child, caregiver, and household issues tend to be more frequent in cases of exposure to IPV co-occurring with at least one other form of child maltreatment. The results indicate that children in these co-occurring cases are reported to have more internalizing and externalizing behaviors, their caregivers have more issues with mental health and addictions, and their housing is often less secure. The results also indicate that cases of co-occurring IPV-EV and IPV-IE are more likely to be opened for ongoing services than cases of exposure to IPV only, and that many of these cases have been opened previously, suggesting that these families might not be receiving all the support they need to prevent further incidents of exposure to IPV.

These findings reiterate how essential it is that CPS consider different forms of intervention for families coping with IPV. Given that all families dealing with IPV are not the same, families may benefit from services and supports individually tailored to their differing needs. By employing a differential service response, CPS would have the flexibility to respond accordingly to families dealing with IPV, potentially preventing future need for reopening and re-referral to CPS.

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The Stability of Residential and Family Foster Care in Quebec, Canada: A Propensity Weighted Analysis

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Abstract:

Objectives: This province-wide analysis examined factors most associated with changing out-of-home placements for 15,518 youth aged 10 to 17 at initial placement. This analysis allows the stability of residential and family foster care to be more precisely examined.

Methods: This analysis draws clinical administrative data from all of Quebec's child protection agencies and the 2006 Canadian Census. Applying a method of quasi-randomization using propensity weights that control for differences in the needs of youth placed in residential and family foster care at initial placement, multivariate logistic regression models were used to examine the risk of changing placements.

Results: At initial placement, youth manifesting severe behavioral problems are 431% more likely to be admitted to residential care and 113% more likely if they committed a crime prior to initial placement. While the analysis was weighted using propensity estimates, those placed in residential care are 15% more likely to experience a total of one placement change, 72% more likely to experience a total of two placement changes, and 87% more likely to experience at least three placement changes compared to their counterparts in family foster care. In addition, the risk of disruption increases in magnitude for those with multiple investigations, longer spells of out-of-home care, and who manifest high risk behaviors including youth criminality. Combined, these factors make these youth the most likely to experience placement disruption than any other youth placed in out-of-home care.

Implications: Given its' inherent instability, residential care should be used only when other alternatives, such as family foster care or in home services, are not possible.

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Keywords:

Out-of-home placement, placement stability, clinical-administrative data, census data, propensity analysis.

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Introduction

Residential care is a measure of last resort and can provide the safety, structure and stability needed when there is no family willing or able to care for the troubled youth. While it is assumed that family foster care is a more stable placement, it remains unclear as to what extent youth in residential care, compared to youth in family foster care, can successfully experience the stability needed to support their developmental needs. The association between initial placement type and later stability is difficult to understand primarily because of issues that disqualify the use of randomised control trials between placement types. As such, there is limited information controlling for the differences between youth entering residential care compared to those entering family foster care, and the effectiveness of the placement type in ensuring later stability (Barth 2002; Souverein, Van der Helm & Stams 2013; De Swart et al. 2011; 2012).

This paper builds on the longitudinal work of Esposito and colleagues (2014), which reports that close to one third (29.8%) of youth aged 10 to 17 years at initial placement in Quebec experience multiple placement disruptions. Esposito et al. (2014) reported that the increased risk of placement changes for these youth was primarily explained by a combination of multiple child protection investigations, behavioral problems, school difficulties, residential care, youth criminality, and socioeconomic disadvantages (Esposito et al. 2014). This paper builds on this analysis by examining the extent to which these factors continue to impact the likelihood of placement disruption after applying a method of quasi-randomization using propensity weights, which control for differences in the needs of youth placed in residential and family foster care at initial placement.

Background

Connell and associates (2006) note some inconsistency in the scholarly literature regarding factors leading to placement disruption due to variation in the types of out-of-home care studied. In their longitudinal study attempting to clarify some of these inconsistencies, Connell et al. (2006) examined all types of out-of-home care settings and

factors leading to placement disruption. The results of this study were more or less consistent with the literature suggesting that older age is the primary factor associated with disruption. Findings from Connell et al. (2006) differed somewhat from other scholarship centred on the unanticipated results that youth with identified behavioral difficulties are at no greater risk for placement disruption than youth experiencing neglect. However, Connell et al. (2006) later confirms in a post-hoc analysis that youth with behavioral problems have higher rates of placement change. Connell et al (2006) further suggested that youth placed in residential care are two-and-a-half to nine times - depending on degree of restrictiveness - more likely to experience placement changes when compared to children in relative foster homes. Lastly, the authors found that while one previous move had minimal effect on later stability, two or more removals significantly decreased the odds of placement stability; a finding that is also described elsewhere (Farmer et al., 2008, Park & Ryan 2009).

Leathers' (2006) study focused specifically on family foster care and the associations between a youth's externalized behavioral problems while in care and later stability, finding that behavioral problems was a strong predictor of future negative outcomes (residential treatment, imprisonment and runaway status). Leathers, (2006) suggested behavioral problems in youth leading to disruption and negative outcomes could be mitigated by good foster home integration. Although relevant to the present study, Leathers' study is limited in that the stability of the sample is not compared to the stability of youth in residential care.

Focusing on factors leading to placement in family foster care to more restrictive residential care, Farmer and associates (2008) found that a youth's difficulties at the time of placement influenced the restrictiveness of the placement. The study measured youth behavior using the Child Behavior Checklist (CBCL), and reported that youth with the highest CBCL scores were more likely to be placed in restrictive placement settings. Farmer et al. (2008) reported that on average, youth placed in more restrictive settings also experienced more placement disruption than those placed in less restrictive settings; findings in line with an earlier published meta-analysis by Oosterman and associates (2007), who reported a significant effect (r = .18) of placement in residential care with placement disruption. Factors leading to placement were also explored in Park and Ryan's (2009) study, which examined the stability of youth in both residential and non-residential care settings. The finding was that youth with a history of inpatient mental health treatments were more likely to experience residential care as a first out-of-home placement, be older, be frequently moved, and run away from out-of-home care. The study also indicated that there is an association between an increasing length of time youth were in out-of-home care and decreasing odds of placement stability.

In a more detailed examination of children placed in residential care, James and associates (2006) report that older males with clinically significant behavior problems were more likely to be placed in residential care settings. However, unlike Farmer et al. (2008) and Park & Ryan's (2009) study, James and associates found that youth who were placed in restrictive settings at first placement had less placement disruption. James and associates (2006) also report that multiple placements, irrespective of placement setting is a significant predictor of further disruption.

While these studies contribute to our understanding of factors associated to placement disruption, they do not lend themselves methodologically to understanding the effects of placement type on later stability. This is primarily because placement studies do not methodologically address differences in severity of behavioral difficulties and other associated vulnerabilities between those placed in residential and family foster care at initial placement, which together results in selection bias and confounds the associations often made on the effectiveness of placement type or primary factors leading to later disruption. The objective of this paper, therefore, is to understand the effect of out-of-home placement type on later stability and factors associated with disruption using propensity weighted models that more rigorously adjust for selection bias at initial placement.

Method

This study uses a multivariate research design and propensity weights to control for pre-placement differences between youth placed in residential care and youth placed in foster care. The study draws data from two sources: (1) clinical administrative data from Quebec's child protection agencies; and, (2) 2006 Canadian Census data. The first data source consists of anonymized longitudinal clinical administrative child protection data from all mandated child protection regions across the province of Quebec. These data were drawn from a common provincial information system used by every mandated child protection agency in Quebec and contain data on approximately 450,000 children dating back to 1989 (Esposito et al. 2015). All covariates used in this study – except for neighborhood socioeconomic disadvantages – were constructed using these clinical administrative data. The second data source is provincial data extracted from the 2006 Canadian Census public archive at McGill University, used to create a neighborhood socioeconomic disadvantage composite index.

Out-of-home placement changes includes moves in: (1) a formal subsidized placement in family-based care; and, (2) a formal subsidized placement in a structured group living setting or a therapeutic residential treatment facility. Each model is divided into two discrete groups: (1) youth who do not change placements; and, (2) youth who change placements a total of one time, two times, or at least three times. However, categorizing placement change sequences in distinct groups assumes that all the children in the cohort had completed their placement spells. While this is the case for the vast majority of children, the full history of placement changes is not accounted for some youth whose initial placement occurred at the tail end of the data coverage period (September 2011). To ensure that these cases did not bias our models, we reduced the cohort from 18,468 youth, 10-17 years of age, placed for the first time between April 2002 and September 2011 to 15,518 youth of the same age who exited their last placement and child protection services before June 2011.

Covariates

Covariates examined in this study include age at initial placement, gender, the reason for investigation at initial placement, the number of investigations, the source of referral at initial placement, request for youth criminal justice services, and the neighborhood socioeconomic disadvantages. These covariates were used in several multivariate logistic

regression models with propensity weights, in order to obtain the independent effect of each covariate on the risk of experiencing an out-of-home placement change.

Age at initial placement is a nominal variable with youth aged 10 to 13 acting as a reference group for 14 to 17 year olds. Gender is a nominal variable with female acting as the reference group for male. Reason for investigation prior to initial placement includes the following dichotomous constructs: (1) psychological and emotional abuse, which includes rejection, denigration, exposure to intimate partner violence and exploitation; (2) physical, material, and health neglect, which includes physical neglect, medical neglect and material deprivation; (3) parents' high risk lifestyle resulting in a failure to supervise or protect the youth, including substance use, abandonment due to parental absence, refusal to assure care, and risk of neglect; (4) school truancy and school neglect, which includes failure to attend school or failure to ensure the youth attends school; (5) risk of, or actual physical abuse — reference category; (6) risk of, or actual sexual abuse; and, (7) behavioral problems such as harming behavior, violence towards self and others, youth substance abuse, running away and destruction of property. Youth criminal justice service request is a nominal variable measuring whether youth received a request for services under the Quebec Youth Criminal Justice Act (LSPJA — Loi sur la justice pénale des adolescents) prior to the first placement change. Number of investigations is a continuous variable calculated by examining the number of times youth are investigated by child protection prior to the placement change or case closure. Source of referral at initial placement includes the following nominal variables: (1) community health and social services clinic (CLSC); (2) child protection agency—includes investigations by the same agency resulting from new allegations; (3) extended family and neighbors—reference category; (4) school staff; (5) police; (6) hospital staff; (7) other professional institutions; and, (8) unknown. Initial placement type is a nominal variable measured at initial placement with family foster care acting as the reference group for residential or group care. Given that the clinical-administrative data used in this study does not allow us to differentiate between residential placement settings or between relative and non-relative care, residential care includes youth initially placed in either a structured group living setting or a therapeutic residential facility and, family foster care refers to those initially placed in a subsidized relative or non-relative family. Cumulative time in out-of-home care represents the sum of all out-of-home care spells for the clinical population studied.

Poverty plays a particularly important role in the stress experienced by youth. The stress of living in high poverty environments create additional psychological demands that aggravate the challenges these troubled youth face, and affects their decision making abilities. As such, it is particularly important to control for neighborhood socioeconomic vulnerabilities in predicting the propensity to initial placement type. A neighborhood socioeconomic index was created using six socioeconomic indicators for each census dissemination area in Quebec. They are: (1) total population 15 years and over who are unemployed or not in the labor force; (2) median income in 2005 for the population 15 years and over; (3) total persons in private households living alone; (4) total population 15 years and over who were separated, divorced or widowed; (5) family median income in 2005; and, (6) median household income in 2005. A principal components analysis with varimax rotation was performed on all the transformed and normalized census-based indicators in order to construct a single index representing the socioeconomic neighborhood disadvantages for each dissemination area. This composite index was then merged with the child protection clinical-administrative data matched by children's postal codes at initial investigation. The index has a minimum score of –3.37 representing the lowest socioeconomic risk and a maximum score of 3.51 representing the highest socioeconomic risk.

Analytic model

The analysis is composed of several steps. First, descriptive analyses were performed between all independent covariates and number of placement changes (see Table 1). Ordinary least squares linear regression was conducted in order to determine the variance inflation factor (VIF), which ensures that there is no linearity among independent covariates. If the values of VIF exceed 5, they are regarded as indicating multi-collinearity (O'Brien, 2007).

Table 1: Descriptive Factors

Individual Factors	Youth in out-of-home care 10-17 (N=15,518)	Youth in family foster care 10-17 (N=6,401)	Youth in residential care 10-17 (N=9,117)
Age at initial placements:			
10-13	25.8%	36.0%	18.6%
14-17	74.2%	64.0%	81.4%
Gender:			
Male	51.3%	41.0%	58.7%
Female	48.6%	49.0%	41.3%
Reason for initial placement:			
Psychological & emotional abuse	4.2%	7.3%	2.0%
Physical, material & health neglect	1.6%	2.3%	1.0%
Parent high risk lifestyle	16.6%	27.2%	9.2%
School truancy & neglect	3.1%	3.1%	3.2%
Risk of or sexual abuse	4.0%	6.4%	2.4%
Behavioural problems	58.6%	33.1%	76.4%
Risk of or physical abuse	11.9%	20.7%	5.8%
Source of referral at initial placement:			
CLSC	9.4%	10.6%	8.6%
Youth protection agency	9.1%	9.7%	8.5%
Police	23.8%	21.4%	25.4%
Other professional institutions	4.5%	4.6%	4.4%
School	16.3%	18.9%	14.5%
Hospital staff	4.7%	3.5%	5.5%
Unidentified	2.1%	2.9%	1.5%
Family	30.1%	28.2%	31.4%
Request for youth criminal justice services:	21.4%	11.0%	28.7%
	Mean (S.D.)	**Mean (S.D.)**	**Mean (S.D.)**
Number of placement changes	2.08(2.74)	1.91(2.66)	2.19(2.79)
Cumulative time in out-home care	447(503)	504(574)	407(442)
Number of investigations	1.61(.95)	1.67(1.02)	1.56(.90)
Socioeconomic disadantage	.22(93)	.34(.90)	.15(.95)

The VIF estimates ranged from a low of approximately 1.026 to a high of 2.891, indicating no issues of linearity between covariates. Next, a multivariate logistic regression model was used to reduce conceptually related indicators representing possible differences between youth in residential and family foster care (age at initial placement, gender, behavioral problems, youth criminal justice service request prior to placement, number of investigations prior to placement, and socioeconomic disadvantages) to a predicted propensity score of residential placement (see Table 2). The propensity score is defined as the probability of placement in residential care based on the measured covariates listed above. Based on the explanation given by Thoemmes, F. (2012), the propensity score is specified as:

$$\hat{e}(x) = P(Z=1 \mid X)$$

where ê(x) is the notation for propensity score, P a probability, Z=1 is the placement type with values 0 for family foster care and 1 for residential care, conditional on "|" the covariates used to compute the propensity (X). Therefore the propensity score expresses the probability that a youth is to be placed in residential care. Propensity weights were then developed based on the propensity score. As suggested by Guo & Fraser (2010), the propensity weight for youth in residential care is 1/ê(x) and the propensity weight for youth in family foster care is [1/ (1-ê(x))], inflating the propensity weight to predict placement changes for youth in family foster care. The inverse propensity weight is then normalized to sum to the clinical population studied. The normalized propensity weight is equal to the ratio of the size of the clinical population studied to the sum of the inverse propensity weights.

Multivariate logistic regressions with propensity weights were then used to examine the risk of changing placements. The multivariate models reported in Table 3 present the odds ratio adjusted using inverse propensity weights and Wald statistic which allows us to quickly consider whether the null hypothesis that the true coefficients equals zero. The dataset was constructed and analyzed using SPSS version 22 and statistical tests were conducted at 95% level of confidence.

Results

The data revealed that of the 15,518 youth aged 10 to 17 years at initial placement, 58.8% (N = 9,117) were placed in residential care and 41% were placed family foster care (N = 6,401). Of the youth initially placed in family foster care, 21.7% are placed in residential care at some point in their placement spell, while 7.7% of youth initially admitted to residential care change to family foster care. While it is assumed in this study that any placement change – except family reunification – is potentially harmful from a developmental perspective, moving from residential care to family foster care was considered to be a potentially positive move. As such, propensity weights and multivariate models excluding youth initially placed in residential care who moved to family foster care (N = 698) were used to examine the sensitivity to changes in predictors of placement changes – the significance and direction of estimates collate fully with those reported in tables 2 & 3.

The average cumulative placement duration for youth in foster family care was 504 days, while the average cumulative placement duration for youth in residential care was 407

Table 2: Logistic model predicting generalized propensity to placement in residential care (N=15,518)

Individual Factors	Beta	S.E.	Wald	Exp(b)
Age at initial placement	.111	.012	93.59	1.118***
Male (female ref)	.468	.038	153.1	1.597***
Behavioral problems	1.670	.044	1909.2	5.313***
Police	.009	.057	.045	1.009
Request for youth criminal justice prior to placement	.756	.023	173.2	2.130***
Number of intestigations prior to placement	.012	.020	.255	1.012
Socioeconomic disadvantage	-.142	.169	49.98	.868***
Cox and Snell (R^2)	**.208**			

* p < .05 ** p < .01 *** p < .001

days. A third of youth did not experience a placement change (33%), while 24% changed placements a total of one time, 14% a total of two times, and 29% changed placements 3 or more times. As shown in Table 1, the majority of youth were aged 14 to 17 years at initial placement, with a higher proportion of that cohort placed in residential care at initial placement. There is a relatively equal proportion of male and female youth placed out-of-home; however female youth were more likely to be placed in family foster care), whereas male youth were more likely to be placed in residential care. Close to two-thirds of youth placed in out-of-home care were investigated for severe behavioral problems (58.6%), followed by 16.6% investigated because of parents' high risk lifestyle. Among youth placed in family foster care, 33.1% were investigated for behavioral problems, 27.2% for parents' high risk lifestyle, and 20.7% investigated for physical abuse. For youth placed in residential care, 76.4% were investigated for severe behavioral problems, 9.2% for parents' high risk lifestyle and less than 6% for physical abuse; a notable difference compared to youth placed in family foster care.

Overall, the highest proportions of placed youth were reported by a family member (30.1%), followed by the police (23.8%), and then school staff (16.3%); figures that represent an overall tendency that remains consistent for youth placed in family foster care and residential care. However, there is a higher proportion of youth placed in residential care reported by the police. Close to one in five youth placed out-of-home had a request for youth criminal justice services prior to placement; a rate that drops for youth placed in family foster care, but increases for youth placed in residential care. The average number of placement changes for all youth, irrespective of placement setting is 2.08 (std. 2.74), an average that decreases for youth in family foster care but increases to 2.19 (std. 2.79) for youth in residential care. The average count of child protection investigations is 1.61 (std. 95) per youth, an average which increases slightly for youth placed in family foster care and decreases slightly for youth placed in residential care. Similarly, the average cumulative time spent in out-of-home care was 447 (std. 503) days, an average that increases for youth placed in family

Table 3: Multivariate logistic regression with inverse propensity weights predicting placement for youth aged 10 to 17 years.

A total of 1 placement change			
Total	Event	No Move	%Event
8,792	3,720	5,072	42.3%
A total of 2 placement changes			
Total	Event	No Move	%Event
7,304	2,232	5,072	30.5%
3 or more placement changes			
Total	Event	No Move	%Event
9,566	4,494	5,072	46.9%

	A total of 1 move			A total of 2 moves			3 or more moves		
Individual Factors	**Exp(B)**	**(95% CI)**	**Wald**	**Exp(B)**	**(95% CI)**	**Wald**	**Exp(B)**	**(95% CI)**	**Wald**
Age at initial placements:									
14-17 (10-13 ref)	1.085	(.961, 1.123)	1.74	1,307**	(1.107, 1.544)	9.95	1.702***	(1,405, 2.062)	29.5
Gender:									
Male (female ref)	1.030	(.935, 1.134)	.359	.929	(.817, 1,057)	1.24	1.052	(.817, 1,057)	.480
Reason for initial placement:									
Psychological & emotional abuse	1.052	(.807, 1,372)	.140	1.063	(.740, 1.527)	.110	.703	(.448, 1.103)	2.35
Physical, material & health neglect	.626*	(.431, .909)	6.04	.233***	(.119, .455)	18.2	.291***	(.153, .552)	14.2
Parent high risk lifestyle	.789*	(.660, .945)	6.66	.696**	(.540, .896)	7.88	.505***	(.376, .679)	20.6
School truancy & neglect	1.230	(.945, 1.601)	2.37	1.139	(.794, 1.633)	.498	.821	(.535, 1.260)	.814
Risk of or sexual abuse	.961	(.740, 1.248)	.090	.775	(.534, 1.124)	1.80	.734	(.479, 1.125)	2.01
Behavioural problems	1.176*	(1.010, 1.370)	4.33	1.308*	(1.057, 1.619)	6.07	1.532***	(1.203, 1.951)	11.9
Risk of or physical abuse (ref)									
Source of referral at initial placement:									
CLSC	.889	(.749, 1.055)	1.80	.878	(.698, 1.104)	1.24	.776	(.599, 1.004)	3.72
Youth protection agency	1.181	(.985, 1.415)	3.24	1.102	(.867, 1.401)	.628	1.133	(.866, 1.481)	.830
Police	1.064	(.940, 1.204)	.975	1.104	(.936, 1.301)	1.38	1.308**	(1.097, 1.560)	8.91
Other professional institutions	.933	(.743, 1.172)	.356	.685*	(.493, .951)	5.11	.807	(.571, 1.142)	1.46
School	1.050	(.908, 1.215)	.433	.908	(.741, 1.112)	.875	.863	(.689, 1.081)	1.64
Hospital staff	.972	(.784, 1.206)	.066	.797	(.591, 1.074)	2.22	.507***	(.353, .729)	13.4
Unidentified	.702	(.478, 1.031)	3.25	1.122	(.728, 1.729)	.272	.923	(.559, 1.523)	.099
Family (ref)									
Time in out-of-home care	1.003***	(1.002, 1.003)	694	1.005***	(1.004, 1.005)	1216	1.007***	(1.006, 1.007)	2306
Initial placement in residential care (family foster care ref)	1.154**	(1.053, 1.265)	9.46	1.723***	(1.522, 1.951)	73.6	1.872***	(1.632, 2.148)	79.9
Request for youth criminal justice services	1.378***	(1.225, 1.551)	28.3	1.490***	(1.277, 1.738)	25.6	1.457***	(1.233, 1.722)	19.5
Number of investigations	1.157***	(1.096, 1.222)	27.5	1.293***	(1.207, 1.384)	54.2	1.341***	(1.245, 1.444)	59.7
Socioeconomic disadvantages	.990	(.943, 1.040)	.148	1.017	(.952, 1.086)	.256	.963	(.897, 1.035)	1.05
Cox and Snell (R^2)	**.126**			**.280**			**.549**		

* p < .05 ** p < .01 *** p < .001

foster care versus those placed in residential care. The composite index of socioeconomic disadvantages for youth placed in out-of-home care is .22 (std. 93), an estimate that increases in socioeconomic disadvantages for youth placed in family foster care compared to those placed in residential care.

Given the noted differences in youth placed in residential care compared to those placed in family foster care, a propensity model was estimated using covariates, which are conceptually and methodologically most related to differences for youth placed in residential care versus family foster care (See Table 2). Table 2 presents the results of the multivariate logistic regression model used to predict the propensity weights to residential care at initial placement. Findings from the multivariate logistic model reflect those reported in part by Farmer and associates (2008) and Park & Ryan (2009), showing significant positive differences between increased age at initial placement, male gender, severe behavioral problems, and youth crime. The multivariate propensity model produced a Cox and Snell R2 of .208, indicating that close to 21% of the variance in placement in residential care is explained by the combination of age, male gender, behavioral problems and youth crime. In Quebec, youth manifesting severe behavioral problems are 431% more likely to be admitted to residential care and 113% more likely if they committed a crime prior to initial placement. Propensity findings also revealed that socioeconomic disadvantages statistically decreased youth chances to placement in residential care. In other words, the more socioeconomically disadvantaged the youth, the more likely they are to be placed in family foster care. This is primarily because the increased risk of initial placement in foster family care is explained by parent and family difficulties for which socioeconomic vulnerabilities plays a key role. These estimates were saved for each youth and propensity weights were then computed.

Using propensity scoring as model weights, three multivariate models were constructed to examine to the influence of covariates on placement changes. The results of the three multivariate logistic models are reported in Table 3. An adjusted odds ratio of more than 1 indicates increased chances of changing placements a total of one time, two times, or at least three times from initial placement. Accounting for differences in youth placed in family foster and residential care, the increased likelihood of changing placements was statistically explained by a combination of: older age; behavioral problems; police reporting; longer time in out-of-home care; increased number of investigations; youth criminality; and, residential care. While 14 to 17 year olds were statistically more at risk of experiencing 2 or more placement chances, age was not a significant predictor of changing placements once. Similarly, police reporting predicted 3 or more placement changes, but not less. All other mentioned covariates predict placement changes for older youth, from the first to last placement change. Aside from a request for youth criminal justice services whose magnitude of influence decreases with each placement change, all other mentioned covariates increase in magnitude of influence as the number of placement changes increase. Also, factors associated to neglect; specifically parents' high risk lifestyle and physical, material, and health neglect decreases the changes of experiencing multiple placement changes. Lastly, in predicting

multiple placement changes, the final multivariate model produced a Cox and Snell R2 of .549 indicating that close to 55% of the variance in multiple placement changes is explained by the model; a R2 increase from .126 for the multivariate model predicting a total of one placement change to .549 for the model predicting 3 or more placement changes.

Discussion

Using propensity weights to control for pre-placement differences between youth placed in residential care and youth placed in foster care, this study found that residential care is a significantly less stable placement setting than family foster care; youth in residential care are close 87% more likely to experience three or more placement changes compared to their counterparts in family foster care. While previous studies have found a similar association between residential care and placement instability, youth placed in residential were considered to be inherently at greater risk of placement breakdown because of their behavioural profile. Propensity score matching provides a level of statistical control similar to random assignment, such that the greater likelihood of placement disruption in this study can be attributed to the placement rather than to pre-placement differences.

Also, consistent with factors reported in Esposito et al (2014), and to a lesser degree Farmer et al. (2008), Park & Ryan (2009), Connell et al. (2006), and Ossterman et al. (2007), and contrary to those reported by James et al. (2004), this study finds that older youth admitted to out-of-home care with behavioral problems, youth criminality, increased number of investigations, and placed in residential care are the most likely to experience multiple placement changes. Contrary to Esposito et al. (2014), controlling for differences in the profile of youth placed in residential care versus family foster care, socioeconomic disadvantages did not significantly explain placement changes. In line with James et al. (2006), this study also found that the longer youth are placed the more chances they have to experience a change of placement. Together in a cumulative fashion, youth aged 14 to 17 years old (odds, 1.702), admitted to residential care (odds, 1.872), placed because of severe behavioral problems (odds, 1.532), reported by the police (odds, 1.308), and with a confirmed act of delinquency (odds, 1.457), are the most likely to experience placement disruption than any other youth in out-of-home care.

Practice implication

Residential care is the default out-of-home placement option for older youth placed in child protection care in Quebec; close to 80% of older youth who enter out-of-home care in Quebec are placed in residential care or end up being moving to residential care from family foster care. While for some youth residential care may in fact be the best placement option, findings from this study show that youth experience far less instability when placed in family foster care. The analytic methods used in this study show that the greater stability of family foster care could not simply be attributed to differences in the youth placed in foster care compared to residential care. In fact, many of the youth placed in residential care have similar pre-placement profiles to youth entering family foster care. In light of these results, far more efforts should be made to develop family foster care alternatives for older youth being placed in care in Quebec.

Limitations

While the methodology is unique in allowing for a quasi-randomization treatment of residential and family foster care, it is not without limitations. One such limitation is that the clinical-administrative data underestimates the prevalence of placement changes as youth informal placement with kin are not captured here. Second, the study did not adjust for correlations that may exist because of siblings, nor is it able to unduplicated cases across child protection jurisdictions. A longitudinal replication balancing the data based on the propensity scores in order to match youth placed in residential care to family foster care – reducing the clinical population studied by an estimated 60% - may help confirm the strength and directions of estimates reported in this analysis. Also following the work of Ryan and Park (2008), further analysis will examine whether placement settings itself influences later youth crime using a propensity matched clinical population of youth admitted to family foster and residential care in Quebec.

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Promoting First Nations, Metis, and Inuit Youth Wellbeing through Culturally-Relevant Programming: The Role of Cultural Connectedness and Identity

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Abstract:

Objectives: Although culturally relevant programming has been identified as a promising practice for promoting resiliency among First Nations, Métis, and Inuit (FNMI) youth, the specific ways in which these programs contribute to wellbeing are unclear. The Fourth R: Uniting Our Nations programs include an array of strengths-based culturally relevant programs for FNMI youth that have been found to increase wellbeing. The purpose of this study was to explore how culturally relevant programming provides a forum for intrapersonal and interpersonal growth.

Methods: In-depth interviews were conducted with 12 adult FNMI community and education stakeholders who have had extensive involvement with the programs. Interviews were transcribed and analyzed with an inductive approach through the use of open-coding.

Results: Two themes emerged to clarify the relationships between culturally relevant programming and youth wellbeing. The two interconnected themes were the importance of identity and belonging, and the role of cultural connectedness in promoting wellbeing among FNMI youth.

Conclusion: Culturally relevant programming provides a powerful opportunity for youth to develop their personal sense of positive cultural identity and feelings of belonging. In addition, the sense of connection to culture was seen to have a direct positive impact on youth, partly through combatting shame.

Implication: Culturally relevant programs such as those described in this article have the potential to increase youth wellbeing and resiliency by increasing sense of identity, belonging, and connection to culture. These opportunities may be particularly important in the school setting, where historically cultural identity was suppressed, leading to experiences of shame.

Keywords:

Aboriginal youth, wellbeing, violence prevention, program evaluation, cultural connectedness, identity, relationships, partnerships.

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Introduction

In Canada, the federal and provincial/territorial governments as well as First Nations, Métis, and Inuit (FNMI) governments and communities have called for strengths-based, culturally relevant programming for FNMI youth that fosters identity development and engages FNMI worldviews to promote wellbeing (Assembly of First Nations, 2012; Auditor General of Canada, 2000; Canadian Council on Learning, 2009). To address this need, the Fourth R team has enhanced its evidence-based programming over the past decade to meet the needs of FNMI youth. The Fourth R is an evidence-based violence prevention program that was developed by a team of educators and researchers (Wolfe et al., 2009). The primary objectives of the original Fourth R program are the promotion of healthy relationships and the prevention of violence and risk related behaviors among adolescents. The Fourth R has been shown to decrease dating violence and increase condom use (Wolfe et al., 2009), increase peer resistance skills (Wolfe, Crooks, Chiodo, Hughes, & Ellis, 2012), and decrease peer violence among maltreated youth (Crooks, Scott, Ellis, & Wolfe, 2011). The healthy relationships and skills focus of Fourth R programming are strong foundations for all youth; however, many enhancements were needed to make it more culturally relevant for FNMI youth. The resulting programs, known as Fourth R: Uniting Our Nations[1] programs for FNMI youth, include: a cultural leadership and healthy relationship courses, a cultural leadership camp, transition conferences, two mentoring programs, and an FNMI student advisory committee (see Appendix A for a Description of the Fourth R: Uniting Our Nations program components).

[1] For brevity, the "Fourth R: Uniting Our Nations" for FNMI youth will henceforth be referred to as the "Fourth R". The "original Fourth R" will be used to distinguish the general Fourth R program from that which is FNMI specific.

The Fourth R: Uniting Our Nations program applies an FNMI-informed framework to the original Fourth R program's best practices. Specifically, it expanded the original classroom-based curriculum by engaging FNMI Elders and community members as resources in the program, utilizing culturally relevant teaching methods (such as storytelling and the use of a talking circle), and interweaving local traditional teachings about wellness and relationships to promote positive youth development. Furthermore, the programs are explicitly contextualized to identify the negative impacts of colonialism (for example, highlighting how the intergenerational trauma caused by residential schools has contributed to high rates of substance misuse in some communities). In addition to developing culturally relevant versions of school-based curricula, the team has developed additional mentoring and culture camp programs specific to FNMI youth. All of the programs were developed in partnership with FNMI educators, community partners, and youth, and have been revised based on systematically gathered feedback from stakeholders.

A strengths-based approach is increasingly recognized as integral to FNMI youth programming, consistent with the holistic view of wellness prevalent among many FNMI cultures. A strengths-based approach also nuances violence, mental health concerns, social inequities, and poverty within a colonial discourse that acknowledges the role of individual resiliency in coping with historical trauma (Greenwood & DeLeeuw, 2012; Mussell, Cardiff, & White, 2004). Ultimately, it makes historical trauma and ongoing inequities visible, encourages a broader conceptualization of youth adjustment and mental health, and moves programming toward an understanding of resiliency and protective factors rather than adversity and risk factors.

Consistent with a strength-based approach, cultural connectedness is considered a key protective factor in FNMI youth mental health (Goldston, et al., 2008; Smokowski, Evans, Cotter, & Webber, 2013; Whitbeck, Hoyt, Stubben, & LaFromboise, 2001) and wellbeing. Specifically, it has been identified as a unique protective factor for preventing violence among Native American youth (Pridemore, 2004) and is associated with several indicators of wellbeing (Snowshoe et al., 2014). A sense of culture, history, and identity are particularly important for FNMI youth because of issues associated with colonization and historical loss (Wexler, 2009). The term "cultural resilience" is frequently used to denote the role that culture may play as a resource for resilience in the individual (Fleming & Ledogar, 2008). However, culture as strength has also been conceptualized as a community-level resilience factor, notably in the prevention of suicide (Chandler & Lalonde, 1998; Lalonde, 2005). The Fourth R programs foster cultural connectedness through localized and place-based curriculum that engages local community members, including Elders, to centralize Indigenous knowledge and promote FNMI cultural identity development.

A multi-method, multi-stakeholder evaluation of Fourth R programming for FNMI youth found that participants experienced a number of benefits including improved relationships and an increased sense of belonging, increased leadership skills and confidence, and improved student success (Crooks et al., 2015). This same study highlighted the importance of the culture-based aspects of programming. In addition, longitudinal research has demonstrated that compared to youth not involved in mentoring, participants

demonstrated greater emotional wellbeing and sense of cultural identity, following the transition to secondary school (Crooks, Exner-Cortens, Lapointe, Burm, & Chiodo, 2015). The purpose of this article is to further explore how the Fourth R promotes a positive sense of identity and cultural connectedness and, in turn, promotes wellbeing among FNMI youth. First, this article provides the program's background, including the partnership process. Second, it provides an overview of the case study methodology, results, and discussion. Third, it concludes with a summary of the findings, implications, and areas for future research.

Program background and partnership process

In 2004, a large school board approached the Fourth R team to discuss developing programming specifically for FNMI youth. The school board has a mixed rural/urban/First Nations catchment area. Its FNMI population includes urban students as well as students who transition from federally funded schools in their communities after grade 6 or grade 8. The Fourth R began working with the board and the three local First Nations communities to develop and evaluate school-based, culturally relevant, relationship-focused programming for FNMI youth.

The Fourth R team's first project, developed in collaboration with an advisory committee of educators and community members, for this FNMI specific program enhancement was a video highlighting positive relationship skills and responses to peer pressure developed for and by FNMI youth. The advisory committee highlighted the transition from elementary school to secondary school (which occurred between grade 8 and 9) as a particularly difficult transition for many FNMI youth, and indicated a need for programming on either side of that transition. The team has since co-developed, implemented, and evaluated a range of program components for FNMI youth in Ontario between grades 7 and 12. The programming referred to in this case study includes two components for senior elementary students (i.e., elementary mentoring program and grade 8 transition conferences) and three for secondary students (i.e., peer mentoring, cultural leadership course, and culture leadership camp). These program components are described briefly in Appendix A. More information about programs is available at www.youthrelationships.org.

Although these programs vary by format and focus, they share important features in that they utilize culturally appropriate teaching methods; promote cultural connectedness and identity, emphasize community inclusion; prioritize mentoring approaches; and, include cultural, historical, and contemporary content, as described below.

Culturally appropriate teaching methods

All of the programs utilize more culturally relevant teaching strategies than the original Fourth R. For example, students begin the Elementary Mentoring Program, by learning the Creation Story, as shared by a local storyteller. Within the Aboriginal Perspectives Fourth R course a narrative called Jana's Story follows the challenges and resiliency of a young girl facing family, school, and systemic challenges. The story is broken into mini-chapters with discussion questions focused on the choices and challenges Jana faces at each step. In addition to written format, the story is available in an audio track dictated by a First Nations Research Assistant to accommodate the importance of oral histories. Teaching methods have been adapted to include the use of sharing circles, which provide a culturally relevant means to facilitate discussion.

Community inclusion

The inclusion of community members who share their teachings and experience in culturally relevant ways is another format change that has enriched the program. Community members are invited into the Aboriginal Perspectives (Grade 9) course, and Elders, community leaders, and academic experts are invited to share traditional and contemporary teachings at the Cultural Leadership Camp. Previous guests have spoken to students attending the cultural leadership camp about traditional medicines, discussed personal cultural identity, shared traditional drum making, and lead a drum waking ceremony.

Mentoring

Another format change has been the overarching emphasis on mentoring. Mentoring is a culturally appropriate and effective way to support healthy relationship development for FNMI youth, particularly when mentors share a cultural background with mentees (Klinck et al., 2005). Although peer and adult mentors may play different roles, both are recognized as protective influences in the lives of youth (LaFromboise, Hoyt, Oliver, & Whitbeck, 2006; Pridemore, 2004). In addition to the two mentoring programs, mentoring is built into the Cultural Leadership Course, and opportunities for mentors to teach younger students in other contexts are offered through the transition conferences, where mentors can facilitate sessions.

Cultural, historical, and contemporary content

Content adaptations include the addition of locally relevant cultural teachings, traditions, historical contexts, and content that reflect FNMI realities. The Elementary Mentoring Program is now based upon the local founding teachings of the Medicine Wheel, Great Law of Peace, and Seven Grandfathers. In the Aboriginal Perspectives Fourth R curriculum, psycho-historical, socio-economic, and health related trends among FNMI peoples are explained in the context of colonial history. For example, the risk behaviors observed in many FNMI communities are explained as a result of intergenerational trauma due to residential schools experience. Moreover, the focus on programming for grade 7 and 8 students to smooth the transition from elementary to high school was strategically chosen because this time remains a particular challenge for many FNMI students, especially those students moving from an elementary school on the reserve to an urban secondary school.

The present study focuses on examining the role of cultural identity and connectedness in the programs specifically, and broadens the perspective beyond youth to include other stakeholders at the community and school level, including FNMI counselors, teachers, Elders, program facilitators, and community members involved in program development and implementation.

Methods

This qualitative case study utilized semi-structured interviews with adults with deep knowledge about cultural identity, FNMI youth, and the Fourth R programs. Consistent with an inductive approach to qualitative inquiry, the focus remained on exploration, understanding, and discovery. This research focuses on participant voices and program experiences rather than a particular theoretical position (Patton, 2002). The Research Ethics Board at the Centre for Addiction and Mental Health (CAMH) approved this study.

Participants

The researchers used purposeful sampling to identify and recruit stakeholders for this study who had close partnerships with the program, including: Elders, teachers, First Nation counselors, school board staff members, and community members. Many participants held a combination of these roles and had been extensively involved with the local FNMI community and school board for numerous years. All of the individuals invited to contribute to this project participated in interviews. In total, interviews were conducted with 12 participants (3 male and 9 female). Five participants were employed as educators, FNMI counsellors, and/or advisors by the school board (collectively identity as educators in results). Two participants were program facilitators (identified as such in results). The remaining five participants were community members (including Elders, nurses, social workers, and mentors) who contributed to program development and implementation in different capacities (identified as community partners in the results section). Participants were given a $25 gift card as an honorarium for their time and contribution. The interviews ranged in duration from one to two and a half hours. A researcher who had not been directly involved with the programming conducted all interviews in order to foster an interview environment conducive to open and authentic participant feedback and input.

Procedure

A researcher conducted and audio recorded semi-structured interviews (Creswell, 2003; Stake, 1995) using a general interview guide (See Appendix B). The interview protocol included a number of general questions that addressed issues of program involvement, partnership experiences, and program perceptions as well as program specific questions about strengths, areas of improvement, challenges, and limitations. The interviewer used a flexible approach that allowed the dialogue to emerge from the setting, context, and individuals involved (Patton, 2002). This allowed the interviewer to capture in-context data and accommodate the various roles, responsibilities, and levels of involvement of the research participants. The interview process included two stages of member checking. Interview participants were provided with electronic copies of their transcribed audio-recorded interviews to add, remove, or amend their responses. In addition, once the specific quotes were selected for the paper, they were given a second opportunity to approve the inclusion of these passages.

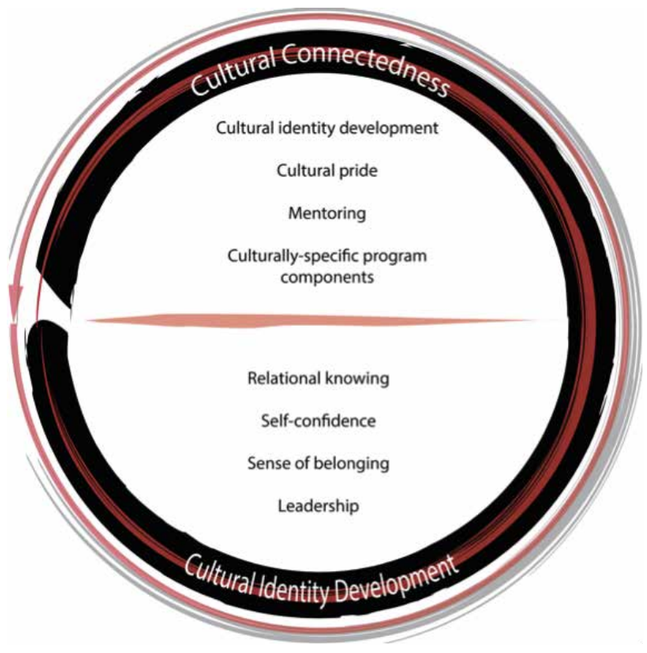
Data analysis

Consistent with a qualitative case study approach, the researchers utilized an inductive approach to data analysis that maintains focus on patterns, categories, and themes in the data (Patton, 2002). Specifically, the research team used thematic content analysis to systematically capture nuance in rich data (Creswell, 2003; Stemler, 2001) by open-coding transcribed interviews. Open-coding involved recognizing and coding themes as they emerge as opposed to imposing preconceived categories (Patton, 2002).

Results

Three themes emerged from the 12 interviews; one theme addressed the nature of the partnerships among stakeholders and partners and will be explored in another article. The other two interconnected themes that are the focus of this article, include the role of: 1) identity and belonging, and 2) cultural connectedness in promoting wellbeing among FNMI youth (see Figure 1). These themes will be discussed by highlighting participant voices to emphasize their perceptions and understandings of the program.

Figure 1. Interconnections between cultural connectedness and cultural identity development. Graphic by Jamie Duncan, 2014.



Cultural identity development

The researchers identified the theme of cultural identity in participant interviews as student relational knowing of oneself, confidence, sense of belonging and engagement, and leadership. Several participants referred to the program's role in helping FNMI youth to 'know themselves' and linked this with improved self-esteem and confidence. For example, community stakeholders identified authenticity of the program as important to fostering a strong and positive sense of identity among FNMI youth. One participant explained that the program allowed students to embrace their cultural identities while learning.

> *I just think that they should be themselves when they are learning. The reason they remember the drum (a culture camp experience) so much is because it's who they are. You know when you're learning curriculum you are learning it as yourself, you are learning it as the person that you are and allowed to be. When you're struggling with your identity and trying to learn, you've got a problem. You're wondering who the heck you are, especially in high school. (Male community partner #2)*

Participants also mentioned that the Fourth R combats the marginalization of FNMI youth within mainstream school settings by providing them with increased comfort and a sense of belonging. Specifically, participants stated that the program makes FNMI students feel "they are a part of the school" (Male community partner #2; female community partner #3; female program facilitator #1) and understand that they do not have to compromise their identities to learn. Another participant explained that the program offered FNMI youth both the space and time to explore their identities.

> *Unfortunately our Aboriginal youth are feeling left out and excluded and are not knowing who they are. So having a program specifically to teach them pride and power is something we need to build on in order to increase their graduation rates and show them that school is a good thing. School will empower them and being proud of who they are is what Fourth R is helping to teach the kids. (Female educator #4)*

Moreover, participants explained that the program increased FNMI students' sense of comfort and belonging. For example, one participant reflected on making hand drums in culture camp with other FNMI students as an opportunity to connect with FNMI peers through a spiritually significant experience that was at one time against the law, along with other ceremonial and cultural practices, under the Indian Act.

> *When I am sitting across from you and I am holding the hoop of your drum while you tie your prayer into it. There is this too, (motions to the space between us) there is all the energy we put into the drum because we are trying to make kind positive energy out of a hide and a tree and your life experiences that make you need this drum so when I sit across from you, you look at me and think you're like me. You're where I am from. When someone is making the drum and they say hey you look and sound and talk like me and you know my creation story and I remember my grandfather telling me this was against the law and look at us. There is nothing more powerful than that. (Male community partner #2)*

Figure 2. Students making hand drums at the cultural leadership camp.

This increased sense of belonging also increased student engagement beyond the programming. That is, the belonging that was nurtured in the programs provided a solid foundation and confidence for further success in the broader school context.

> *When it is just First Nations kids they are more comfortable so having this space for them to come and do mentoring is important. There is just that comfort level and also a lot of the kids are coming into the school and don't know any other kids so they are more comfortable they are doing something with their friends and often it is just getting them set up and then later on they are joining other activities. (Female educator #2)*

> *Attendance certainly has improved. From our mentors that we had over the years we have had strong kids that have won huge awards, we had a valedictorian a senior student that started as a mentor that was the first [First Nations valedictorian] in*

100 years at [school name] and that was huge and we certainly saw that with the kids it was making them feel good about being at school and getting involved with sports and the various opportunities at each of the schools. Our student population has really grown to be more visible in the schools. You know certainly this program has gotten our kids more out of their shells. (Female educator #1)

Participants said that the program fostered leadership opportunities that are central to student identity. Participants reported that prior to the Fourth R, FNMI students were not assuming leadership roles in the school setting. However, Fourth R has encouraged FNMI students to increasingly assume these roles and develop their identities as leaders.

I have seen a lot of positive things come from students who are in Fourth R who are either shy or wouldn't get involved in too many things but they really opened up when Fourth R came into the school and gave them a chance to lead themselves during their Fourth R meetings and that really opened them up to get involved and socialize and make new friends and so it was a positive thing. (Male community partner #4)

Participants who worked directly with students in Fourth R programming as teachers, facilitators, and counselors identified that leadership opportunities that began in the Fourth R often extended into the school community, where students' capacity as leaders transferred into new opportunities beyond the program.

There are students that you saw in grade 9 and Fourth R is the first thing that they ever got involved in at school and then by the time they are in grade 10 they are starting to go out to other clubs and then by grade 11 and 12 they are leaders within the school and not just within the First Nation groups. For example, this year one of our former mentors from Fourth R is the co-president of the school. So it has really been nice to see the kids get involved, they are committed, and that group are leading the way and in the last 2 years we have had the highest graduation numbers for First Nation students in years. (Female educator #2)

Yesterday we had a health fair and students who led the fair weren't our student council president or top leaders in the school. It was Fourth R kids who don't typically get the chance to lead so I can see and correlate that to the Fourth R and how it gives them a chance to take the leadership role. (Female educator #2)

I see kids from Fourth R programming this year in the schools, who have grown and matured and so greatly took pride and ownership in something. The kids identify themselves as mentors and then go to conferences where they can stand in front of an audience and talk where they wouldn't have been able to do that in a large group before Fourth R. The students get really excited about it, which is great to see. They have become true leaders not just among their FNMI peers, but among all of their peers. (Female educator #4)

Participants also noted that the development of leadership skills was a central objective for building community capacity, because this offered students the option to take on leadership positions within their own communities.

Cultural connectedness

The theme of cultural connectedness emerged through interviews to include stakeholders' perceptions of FNMI student identity, pride, and mentoring as well as culturally-specific program components. Cultural connectedness is linked with identity and sense of belonging. Specifically, participant data suggest that cultural connectedness enhances students' sense of identity.

I think… [cultural connectedness of the Fourth R]…gives them the identity that they are searching for. Who am I? Where do I come from? What am I about? I find that they don't feel so lost. They can ground themselves. It is hard to explain. They can ground their spirit. They know who they are. It is not like they are wandering around searching for an identity and then they can expand on that and find the sweat lodges and find the Elders and the teachings. (Female educator #4)

Stakeholders framed FNMI pride as a counter-action to the shame so often expressed in relation to Canada's colonial history, including the residential school experience and other educational assimilative policies (Czyzewski, 2012). One community member explained that FNMI students often struggle with shame associated with colonization and that the Fourth R's cultural activities build cultural pride important to eliminating this shame, "Pride isn't the issue it was shame…Without the opportunity to go to the Fourth R culture camp, that would be one less opportunity that a young person had to experience themselves, to experience their pride". (Male community partner #2).

A school board staff member explained that the historical context the Fourth R provides also allows students to overcome shame and embrace pride.

Residential schools are so important for students to know about. Not just the residential schools but the aftermath and the before part too. It's the whole idea of colonization. When they have an understanding they can stop blaming and they can say I deserve this pride and the shame changes because they can understand it in a context. (Female educator #5)

The cultural pride that the Fourth R encourages in FNMI youth, through fostering cultural connectedness, is also a protective factor for students experiencing racism. One facilitator explained that this is why she became involved with the Fourth R.

So that is why I work with the Fourth R. I want the students to be able to stand up for themselves because I know that racism happens and it will happen so I want them to have the skills, the Fourth R relationships skills but also the background of Native pride and why there shouldn't be racism against Native people. (Female program facilitator #2)

Participants also stated that the program's mentoring components foster cultural connectedness in FNMI youth through relational knowing within and across communities. Specifically, they stated that mentoring relationships provide cultural connection through role modeling and establishing opportunities for students to see themselves as confident in successful leadership positions.

> *… mentoring is this huge piece of the program where you can see kids from your community that are in positions of leadership. That is very powerful because that is sending an example and it's showing you that, 'hey that person is my neighbor and I know where they come from and if I can see them in that role I can see myself in that role.' At the secondary level kids have a lot of influence over other kids so I think mentoring is a huge piece right there. You see some amazing leadership. You see some articulate students at the secondary level, students that are now going off to college with really high aspirations. Through the Fourth R they have cultural models that started when they were in elementary school and they work their way up and it builds confidence and capacity in students. (Female educator #3)*

Participants also linked cultural connectedness with the specific cultural components of the programming. Teachers, community members, and counselors alike identified the valuable cultural opportunities youth have through Fourth R programming.

> *…the Fourth R focus a lot on the Native culture aspect…They focus a lot on the circle aspect which we all do the circle. So they focus on what is common and that might be the smudging. I really like that culture is being brought into the program because some of the schools aren't even doing that themselves. So allowing the kids to get back to their roots and identify who they are as an Aboriginal person is something I think that draws them to that program because the youth get to say, 'hey this is me, I am Aboriginal.' The Fourth R is coming in here to the school and they are reinforcing… pride. (Female educator #4)*

Another participant spoke to the bicultural competency the program fosters in teaching students that they do not have to compromise their culture or educational success.

> *If you're an honours student and you're winning awards, are you going to be seen as selling out? There is that pressure. Having cultural connectedness in schools, we are now seeing students being selected as valedictorian, president of the student council as well as be part of the FNMI Student Advisory Council…All of these students are showing other kids that they can succeed and still be Aboriginal. I think that's the key, showing kids that they don't have to lose who they are in order to be successful in school…Our goal for FNMI students is not assimilation. We don't ask students to give up everything that they are to succeed. We know that you can keep connected to your culture and succeed at the same time. (Female educator, #3)*

Discussion and Implications

The results of this study found that adult stakeholder perspectives of the program are consistent with other student-based research that indicates that the Fourth R's strengths-based, culturally relevant approach promotes a positive sense of identity and cultural connectedness among youth. The inclusion of adult stakeholders' voices who have been engaged in this program and/or with the youth involved in this program added an important perspective to this work. Adult stakeholders tend to have unique insights into program effectiveness from a programming perspective, based on involvement and observation of other programs over a longer time period compared with students. They also lend added insights into the trends observed in programming impacts on students over time. In addition, they can compare the experience of students with whom they are working to their own past experiences as students in schools.

A unique contribution of the adult voices included in this study was the identification of shame as a compelling negative influence in the lives of youth, and the potential for culturally relevant programming to combat shame. It is possible that youth do not identify shame as such because of the internalized nature of the experience, and it is only with the passage of time and distance that adults are able to name it. The opportunity for pride-inducing cultural activities in the school setting is particularly powerful, because it helps to disrupt the negative legacy of colonialism, within which the education system has been a force of systematic cultural annihilation and trauma (Elias et al., 2012). By starting to name and identify the impacts of colonialism, youth may begin the process of externalizing the experience that they could otherwise perceive as shame, and begin to combat the negative impacts of historical loss (Whitbeck, Walls, Johnson, Morrisseau, & McDougall, 2009).

Although adding the perspective of knowledgeable adult informants helps build a more comprehensive understanding of the impacts of our programming, this study was not without limitations. The primary limitation is the potential sample bias, as participants were adults who know the program well and are invested in it. For example, some participants were involved in developing or revising program components and others have facilitated the mentoring program or participated in the cultural leadership camp. The participants are truly partners in the Fourth R rather than arm's length observers. Individuals who question the approach of culture-enhancing activities (versus, for example, anti-oppression work) might see the impact of the programming differently.

This study highlights the importance of both cultural connectedness and cultural identity development as important sources of resiliency for FNMI youth. Furthermore, these are resiliency factors that can be fostered through culturally relevant, strengths-based programming in schools. The Fourth R: Uniting Our Nations program takes a strength-based approach by engaging with and promoting FNMI cultures and encouraging cultural identity formation and pride rather than focusing on deficits. The Fourth R contextualizes deficits (e.g., violence, mental health concerns, social inequities, and poverty) within a colonial discourse that acknowledges FNMI agency and resiliency (Mussell, Cardiff, & White, 2004). Through this strengths-based focus on culture, both individual and community resiliency are fostered. The results of this study demonstrate that cultural connectedness and identity development are inextricably linked to one another through the common aspects they share and reinforce one another. As highlighted by the participants of this study, increasing cultural connectedness through culturally relevant programming is enjoyable for youth; furthermore, it has the potential to transform the way they see themselves as students and leaders, and set the stage for future success.

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Appendix A: Description of *Fourth R: United Our Nations* program components

Component	Description	Grade	*Duration*	Facilitators
Elemenary mentoring program	Groups of students are mentored by two young adult mentors. Structured program includes healthy relationship skills development and cultural activities, situated in the local founding teachings of the Medicine Wheel, and Seven Grandfather teachings.	7/8	Weekly for 18 weeks	Young adult First Nations mentors
Grade 8 Transition conferences	Full day conference to provide grade 8 youth with information and resources to promote a successful transition to high school. Focus on connecting youth to older mentors and resources. Guest speakers share cultural knowledge, support, guidance, and thoughts on identity.	8	Full day; held twice annually	Community mentors; educators; grade 11-12 youth
Peer mentoring program	Pairs or small groups of youth engage in mentoring activities, with a focus of connecting the mentee to an older youth who is a positive role model and who has made a strong commitment to school. Adult community mentors provide occasional teaching activities to the group of mentors and mentees.	9-12	Weekly during lunch for the course of the school year	Grades 10-12 youth; Community mentors
Cultural Leadership Course	Stacked course (i.e., students in the same classroom working on one of two credits) that offers a Peer Leadership credit to older students and a General Study Skills credit to younger students. Mentoring activities are built into the curriculum to enhance relationships among older and younger cohorts.	9 and 11	Regular course schedule for one semester	Teacher; older youth play mentor role
Cultural Leadership Camp	Intensive off-site retreat that brings together FNMI students to engage in cultural teachings (such as drum making), develop leadership skills, and promote healthy relationships	9, 10, 11	Three days intensive	Young adult mentors; community mentors

Appendix B: Interview guide

Clarfying language	As I mentioned, this interview is part of a project looking at the experiences of Aboriginal youth, including First Nations, Métis and Inuit. We know that some people use the term Aboriginal, others use terms such as Native, and others prefer their specific Nation. What term are you most comfortable using? (Whatever term they provide gets used in the interview).
Program expenses and involvement	1. Can you tell me about your experiences and involvement with the Fourth R? 2. How does your position with the school board interact or support the Fourth R?
Program perceptions	3. What are your perceptions of the Fourth R program? 4. What do you think are the strengths of the Fourth R program? 5. What has been the greatest impact of Fourth R for you? 6. Is there anything about the program you think should be changed? 7. Is there anything you think should be added to the program? 8. In your opinion what could the school board do to further support Aboriginal students? 9. Looking forward, what do you think the Fourth R should be doing next? 10. In terms of the facilitators for the Fourth R, what qualities do you think are important for them to have? What makes a great facilitator? 11. What have been your experiences with students who are in the Fourth R program? 12. Do you see any limitations or challenges for Aboriginal students to fully engage with their school experience?
Cultural connectedness	13. What role does or can cultural connectedness play for students in school? 14.How can teachers better support a student's connection to their culture? 15. In your opinion, what other activities, supports or changes would make school experiences more positive for Aboriginal students.
Additional comments	That is the end of my specific questions. Is there anything else you want to add? (NO FURTHER COMMENTS – TURN OFF RECORDER)

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BRIEF REPORT: Wisdom 2 Action Events as a Route for Dissemination and Network Building

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Abstract:

The Children and Youth in Challenging Contexts (CYCC) Network is a Canadian knowledge mobilization network focused on improving the mental and health and well being of the most vulnerable young people by sharing best and promising practices regarding services for young people in an interdisciplinary and cross sectoral context. A major initiative of the CYCC Network has been a series of knowledge sharing events called Wisdom2Action which were held between 2013 and 2015 across Canada. This article examines the rationale for these events as part of meeting the CYCC network mandate, experience to date and future challenges.

Keywords:

Children and youth, knowledge mobilization, knowledge translation.

Introduction

Children and youth growing up in challenging contexts, both in Canada and overseas, face common threats to their mental health. These range from individual problems like depression, to family-based experiences of domestic violence and child abuse, to social exclusion because of poverty or political violence, to discrimination resulting from social stigma (Masten, 2014). Children's experiences may appear to be very different but they share a remarkably common set of underlying challenges such as traumand violence.

The available statistics illustrate the nature and magnitude of the challenges. While between 14 and 25 per cent of Canadian young people experience mental health problems, including violence towards others and self-harming behaviours (our focus) (Ministry of Children and Youth Services Ontario, 2006; Waddell, McEwan, Shepherd, Offord, & Hua, 2005), only one in five receives the professional care they require (Kutcher, 2011).

When untreated, psychological, behavioural and social problems like suicide and gang violence will continue into adulthood, creating long-term need for services. The Mental Health Commission of Canada (2011) reports that more than 70% of adults who have mental health issues developed symptoms during childhood or early adolescence. The return on investment, both financial and social, is enormous when we address children's complex psychological, emotional and behavioural challenges early (Farrington & Koegl, 2014). In Canada, for example, approximately 500 young people commit suicide every year (Kutcher & Szumilas, 2008). In the US, 70% of young people under 18 who are incarcerated have a diagnosed mental health condition; 55% have more than one diagnosed condition (Kutcher & McDougall, 2009). Though the rate of incarceration in Canada is lower, the rate of concurrent disorders, including violence, is likely just as high, with 3.2% of young people reporting both mental health and substance use problems (Cheung, Bennett, Bullock, Soberman, & Kozloff, 2010). Even more troubling, a study of 497 Canadian youth using multiple services and facing a number of social barriers reported the lowest rates of service utilization and the least satisfaction with services when they did access professional help (Ungar et al., 2013).

The Children and Youth in Challenging Contexts (CYCC) Network has worked to improve mental health and wellbeing for vulnerable young people in Canada since 2011 and around the world through the sharing of promising practices from research and practice across the sector. The Network has brought together a dynamic and integrated community of members that includes 78 academics from 34 universities and more than 124 community-based service organizations, policy makers and community groups. The CYCC Network has engaged young people with histories of service use as active participants in all activities, including organizational governance. Further, the CYCC Network has contributed to the development of young academics working on issues related to vulnerable young people by establishing a national forum for graduate students. The Network's overall goal is to improve services and outcomes for young people with complex needs by engaging community-based service providers in the knowledge-to-action cycle to move research into practice (knowledge mobilization-KMb).

In Canada, community-based organizations providing psychological and social services to our most vulnerable young people are, for the most part, not engaging in evidence-based practices (Barwick, Boydell, Stasiulis, Ferguson, Blase, & Fixsen, 2005; Hoagwood & Olin, 2002). There are no existing models of KMb designed specifically for the contexts in which these organizations operate (e.g., poorly resourced community service settings with less formal organizational structures). This has given rise to a divide between some service providers and researchers who develop evidence-based research and practices which is a serious problem given that research shows that marginalized youth are more likely to rely on community-based services rather than formal mental health or social services (Ungar, Liebenberg, Armstrong, Dudding, & van de Vijver, 2012).

Many service providers report having limited capacity to dedicate to engaging with research-based knowledge, even when this knowledge deals with populations to whom they offer services. This is not a reflection of service provider interest in engaging with such evidence. In an internal mixed methods evaluation of the Network's impact conducted with 94 of its members, want credible evidence that supports the most promising programs for children and youth that they can adapt to local contexts. That finding is congruent with research on KMb in this sector (Barwick, Barac, Akrong, Johnson, & Chaban, 2014). The CYCC Network is working to overcome this divide by engaging community-based service providers in activities that help them to engage with best and promising practices as identified by both academics and other service providers, and to adapt these to their service settings.

CYCC Network Knowledge Mobilization

While not mandated to do primary research, the CYCC Network has developed innovative ways to synthesize knowledge in order to meet the needs of community level service providers. CYCC Network programming has helped organizations become both knowledge users and knowledge producers through strategic partnerships between academics and service providers and providing opportunities for sharing lessons learned through community workshops called Wisdom2Action.

When the Network began operations, Network team members learned that –despite whatever technology was available to share promising practices - Network members who were community-based service providerswanted to connect in person with local, credible connections. This realization led to the development of Wisdom2Action (W2A) events which have grown to become a pillar of the CYCC Network's approach to Knowledge Mobilization. Since the W2A event in Toronto, there have been six subsequent one or two-day regionally-focused unilingual and bilingual workshops (in Ottawa, Montreal, Halifax, Surrey, Iqaluit and Calgary).[1]

The goals of each W2A event have been to share case studies of local practices shown to have a positive influence on children's wellbeing, and to engage participants in conversations about how to use academically-produced evidence to inform their work. Community organizations have presented on their own programs and practices and researchers have presented on the work they have done, for instance on gang prevention in British Colombia. The workshops have the additional benefit of strengthening regional networks of community-based service providers and engaging them in all three phases of the knowledge-to-action cycle. For some W2A participants it has been their first encounter with knowledge mobilization theory or practice. In this regard, W2A reflects the principles of implementation science (Raghavan, Bright & Shadoin, 2008) applied to a cross-section of service systems that have not been active in KMb activities.

1 http://www.cyccnetwork.org/en/kmb/wisdom-to-action

W2A events fit within the strategic framework that the CYCC Network has adopted to guide it's activities. The Promoting Action on Research Implementation in Health Services (PARiHS) framework has been adopted to structure these activities. PARiHS is a three-phase approach to KMb that places equal value on each phase of the knowledge-to-action cycle. The phases of this framework are: (1) gather the evidence for effective practice, wherever it can be found (academic sources, grey literature, case studies); (2) understand the differences between the contexts in which evidence is gathered and where it will be used in order to make it easier for service providers to adopt and adapt new practices; and (3) facilitate uptake of best and promising practices in new settings tailored to the particular needs of under-resourced service providers in community settings (Kitson, Harvey, & McCormack, 1998).

Wisdom2Action – Mobilizing knowledge across Canada

In developing W2A, the CYCC Network took steps to ensure that events would be relevant to Network members' needs. A survey of all Network members was undertaken and interested members were engaged to help plan events in their local communities. A national steering committee was established, comprised of Network Board members and key Network partners. This National committee met in October 2013 and agreed on a guiding purpose of "Sharing stories, promising practices and questions so that we can support young people better". The name "Wisdom 2 Action" was chosen for the events, reflecting the Network's convictions that 1) all participants have locally-rooted wisdom to share and that 2) the goal of each event was to move towards action which would improve the services offered to support vulnerable youth.

This national committee identified key principles to guide each W2A event. These principles included 1) engaging with the local context and 2) engaging young people in KMb activities where possible. In pursuing these goals Network staff planned each W2A event in collaboration with a local team organized by Network Partners. This had the outcomes of creating local ambassadors for the CYCC Network and ensuring that each event was reflexive in terms of approach, participants, location, language and other cultural considerations. Efforts to engage young people were based upon the promising practices identified in the knowledge synthesis report Working with Children and Youth in Challenging Contexts to Promote Youth Engagement (Zinck, E., Ungar, M., Whitman, S., Exenberger, S., LeVert-Chaisson, I., Liebenberg,L., Ung, J., & Forshner, A.) which was produced by the CYCC Network in 2013.

The Art of Hosting[2] approach was used at this founding meeting and all subsequent W2A events. This approach to facilitating events is highly participatory and is premised upon the belief that all participants have knowledge to share and that collaborative, interdisciplinary, cross-sectoral discussion and action is required to address complex issues. This approach avoids traditional presentations or panel discussions and instead puts participants in the roles of leading discussions, participating in and recording discussions.

2 http://www.artofhosting.org

The W2A model developed by the Network has been transferred effectively across diverse social and economic contexts. It has been employed in the urban settings of Toronto and Ottawa, in small cities such as Surrey, BC and Halifax, Nova Scotia and in Montreal, Nunavut, Calgary. Each of these cities faces distinct regional challenges. W2A Montreal, for example, sought to bring together French and English language serving sectors in a fully bilingual event. W2A Calgary consisted of a national meeting on the rise of violent extremist movements amongst youth. This event was grounded in research underway at the Resilience Research Centre.

Wisdom2Action Nunavut

The territory of Nunavut has a youth suicide level of 13 times the national average, high incidences of substance abuse and exposure to domestic violence and geographic and financial challenges to providing effective services to young people (Statistics Canada 2010; Kielland & Simeone 2014). Further, the organizations that support young people face enormous challenges because of the distance between communities, a lack of mental health infrastructure and difficulty accessing professional development (Kral 2012).

In 2014, the CYCC Network partnered with the Nunavut government's Department of Child and Family Services, Mental Health Services and Justice (Crime Prevention), along with community-based service providers, to host a two-day Wisdom2Action event that facilitated the exchange between people living in Nunavut of best and promising practices to address youth mental health challenges. Sixty service providers, nurses, psychologists, government officials and young people travelled from across the territory to Iqaluit to both share their work and hear from service leaders and academics about programs that could inform local solutions in remote communities.

Post event interviews with participants told us that for some participants W2A Nunavut was the first time they had shared program ideas in a structured way within the territory, either with academics or other service providers. The event helped forge new connections between service providers and academic supports. For example, the Isaksimagit Inuusirmi Katujjiqaatigiit Embrace Life Council, a suicide prevention coalition, connected with the Halifax-based Resilience Research Centre to conduct a self-evaluation of their program's impact; the territory's only paediatrician developed strategic partnerships with community services for parents and mental health professionals that has led to development of a Fetal Alcohol Spectrum Disorder assessment clinic; the Arctic Child and Youth Foundation met government officials who, after hearing about their work, joined the organization's Advisory Council and are working together to establish a child and youth advocacy centre to provide an evidence-based approach to the investigation and treatment of child sexual abuse. Perhaps most noteworthy is the community of practice that grew out of the event. Mental health workers working in remote communities such as Arviat and Rankin Inlet established a network that now bi-weekly teleconferences to share program ideas across the territory.

Implications on KMb in other sectors

Organizations working in different fields across the country have begun to show

interest in the methods that the CYCC Network has developed for sharing evidence-based and practice-based knowledge. For example, the National Centers of Excellence (NCE) Knowledge Mobilization 2015 conference brought together representatives of NCE-funded organizations from across the country. Representatives from fields as disparate as medicine, science and technology, health care, cyber security and operations management were in attendance. CYCC Network staff led participants in a session based upon the techniques developed through W2A events. This session provided lessons on how to organize an effective knowledge mobilization event and was attended by conference delegates from across the country. Informal feedback from participants suggests that there is interest in porting the W2A model of knowledge mobilization developed by the CYCC Network into new fields and new geographic locations.

Challenges

Several challenges have been encountered during the process of developing the W2A model employed by the Network. One of these challenges has been ensuring that the events are recorded effectively despite their non-traditional format. While participatory events can be productive for those involved, the possibilities of issuing conference proceedings that relate the details of the conference to both participants and non-participants are limited. In response to early experiences where participants' recollections of the day were insufficient to provide detailed reports, the CYCC network has ensured adequate staff and volunteer attention is given to documenting each event. This has led to the production of short videos and reports that document each event.

Perhaps the most significant challenge has sustaining the momentum following each event, an issue raised participants in our network-wide self-evaluation. The CYCC Network recognizes this need and in its second cycle, intends to both strengthen its regional presence through hubs and critical partnerships and in part through this model, support the creation of communities of practice, either subject or place based. Further, in June 2015 the CYCC Network hosted a National Wisdom2Action meeting that will bring together members of W2A planning teams from across the country for a meeting in Halifax. This meeting will provide an opportunity for participants to exchange experiences and develop region specific ways of carrying the momentum of W2A forward.

Conclusion

Engaging community service providers in knowledge mobilization activities such as Wisdom2Action events is one way of supporting an increased use of research in service provision and the exchange of promising practices amongst service providers.

Moving forward, the CYCC Network intends to deepen engagement with a small number of community based service organizations in Canada and support them as they change their organizational cultures and uptake of evidence-informed practices. The Network will build regional capacity and expertise in how to provide coaching to local organizations to help them share and adopt evidence-informed practices.

Within this structure W2A events are best thought of as the initiation of a longer term process rather than as discrete events. While W2A events provide direct benefits to participants, the building of sustainable networks through which participants can exchange innovative program ideas and research and practice-based evidence is more relevant to the long-term future of KM within the sector of community organizations that provides programs and services to vulnerable youth.

Finally, the CYCC Network's success in hosting W2A events in diverse contents and organized around diverse subject matter suggests that other organizations working in other fields may find success in transferring some aspects of the W2A model to their work. Particularly, organizations attempting to build KMb capacity in sectors that span across diverse economic, cultural and geographic contexts may find exploring the adaptation of some aspects of W2A to be productive.

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INVITED PAPER: Provincial Comparisons in the Canadian Incidence Study of Reported Child Abuse and Neglect - 2008: Context for Variation in Findings

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Abstract:

Objectives: This paper compares findings of five provincial incidence studies (British Columbia, Alberta, Saskatchewan, Ontario and Quebec) in order to investigate and explain variations in provincial findings with the hope of promoting future provincial comparisons.

Methods: The provincial incidence study reports were produced as part of the larger CIS-2008. The CIS-2008 is a third national study that captured information about children and their families reported for maltreatment by child protection services.

Results: The findings compared rates per 1, 000 children. Some dimensions measured such as rates of substantiation and transfers to ongoing services and placement were similar across the provinces studied. Others, such as rates of maltreatment-related investigations, the classification of risk investigations, rates of substantiated neglect, emotional maltreatment and intimate partner violence differed more between the five provinces.

Conclusions: Socio-demographic differences, differences in screening and investigation procedures, clinical case practice differences and methodological differences were presented as possible sources of variation in the data across provinces. The results, however, are not evaluative as they do not present data that examine outcomes for children and their families.

Implications: While comparisons between provinces can now be made, further research on the impact of the differences in services to children and their families and the outcome of these services is still needed distinguishable from emotional resilience and dispositional traits. Empirical research on the nature of interpersonal resilience in challenged contexts is warranted. Intervention

Keywords:

Child maltreatment, child abuse, incidence.

Conflict of interest statement:

There are no conflicts of interest to declare.

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Introduction

The CIS-2008 is the third national study to examine the incidence of reported child maltreatment and the characteristics of the children and families investigated by child protection services in Canada. Major findings from the CIS-2008 were made available to the public in the fall of 2010 (Public Health Agency of Canada, 2010) and can be retrieved online at www.cwrp.ca. In the CIS-2008 cycle, five provinces – British Columbia, Alberta, Saskatchewan, Ontario, and Quebec – provided support and funding for enriched samples to allow province-specific estimates. Stakeholders provided funding to support a First Nations CIS-2008 component, including the provinces of British Columbia, Manitoba, and Ontario, Indian and Northern Affairs Canada through the Public Health Agency of Canada, and the Social Sciences and Humanities Research Council of Canada. The Canadian Foundation for Innovation provided a grant to support the development of an integrated CIS database.

Table 1: Summary of Provincial Child Welfare Systems

	British Columbia	Alberta	Saskatchewan	Ontario	Quebec
Population					
Aboriginal child Population in 2006 0-14 years old*	55,250 (8.1%)	58,620 (9.2%)	50,595 (26.9%)	64,325 (2.9%)	27,520 (2.2%)
Non-Aboriginal child Population in 2006 0-14 years old*	624,225 (91.8%)	572,590 (90.7%)	137,020 (73.0%)	2,145,150 (97.0%)	1,223,895 (97.8%)
Total Child Population 2006 0-14 years old*	679,475	631,210	187,615	2,209,475	1,251,415
Poverty Reduction Plan as of 2008†	No	No	No	No	No
Percentage of persons under 18 in low income in 2008‡	15.2%	10.6%	20.2%	15.2%	15.3%
Administration					
Legislation	*Child, Family and Community Services Act*	*Child Youth and Family Enhancement Act*	*Child and Family Services Act*	*Child and Family Services Act*	*Youth Protection Act*
Age Served	Children under 19	Children under 18	Children under 16	Children under 16	Children under 18
Funding Ministry at time of CIS-2008	The Ministry of Children and Family Development, Child Protection Division	The Ministry of Children and Youth Services	The Ministry of Social Services	The Ministry of Children and Youth Services	The Ministère de la Santé et des Services sociaux
Child Welfare Organizations as of 2008	76	55	20	47	19
First Nations / Urban Aboriginal Agencies as of 2008 ‡	9	18	17	6	6
Reporting, Screening & Investigations					
Legal Duty to Report for Professionals	Yes	Yes	Yes	Yes	Yes
Legal Duty to Report for General Public	Yes	Yes	Yes	Yes	Only situations of physical and sexual abuse
Intimate Partner Violence (IPV) Reporting		RCMP reports to CW every time they attend an IPV call	RCMP reports to CW every time they attend an IPV call in which children are involved		
Use of Screening Tool				Ontario Child Welfare Eligibility Spectrum	
Percent of Cases Screened Out					
Risk Investigations Legislated	No	Yes	Yes	Yes	Yes
Length of Initial Investigation		42 days			
Use of Differential Response Model	Yes	Yes		Yes	
Specialized Investigation Units			Specialized Police & Social Services integrated units in Regina & Saskatoon to investigate cases of child sexual abuse		
Services					
Kinship Foster Care Payment	Kinship family may receive payments		Payments to kinship caregivers are less than those given to formal foster parents		

*The total Aboriginal identity population includes the Aboriginal groups (North American Indian, Métis and Inuit), multiple Aboriginal responses and Aboriginal responses not included elsewhere, in 2006. Source: Statistics Canada. Population by age groups, sex and Aboriginal identity groups, 2006 counts for both sexes, for Canada, provinces and territories - 20% sample data. Retrieved from http://www12.statcan.ca/census-recensement/2006/dp-pd/hlt/97- 558/pages/page.cfm?Lang=E&Geo=PR&Code=01&Table=2&Data=Count&Sex=1&Abor=1&StartRec=1&Sort=2&Display=Page.

† Family Service Toronto. (2011). Revisiting family security in insecure times: 2011 report card on child and family poverty in Canada.

‡ Low income measures (LIMs), are relative measures of low income, set at 50% of adjusted median household income. These measures are categorized according to the number of persons present in the household, reflecting the economies of scale inherent in household size. The gap ratio is the difference between the low income threshold and the family (or household) income, expressed as a percentage of the low income threshold. For those with negative income, the gap ratio is set to 100. As a measure of depth of low income, the statistic takes the form of the average or the median of the gap ratio calculated over the population of individuals below the income line. Source: Statistics Canada. Table 202-0802 - Persons in low income families, annual, CANSIM (database).

Background

Findings from the CIS-1998 (Trocmé et al, 2001), CIS-2003 (Trocmé et al., 2005), and CIS-2008 (Public Health Agency of Canada, 2010) have provided much needed information to service providers, policy makers and researchers seeking to better understand the children and families coming into contact with the child welfare system. CIS data also support provincial and territorial efforts to integrate their administrative systems to better learn from the diverse policies and programs that have been developed.

In Canada, most child abuse and neglect statistics are kept on a provincial or territorial basis. Differences among provincial and territorial definitions of maltreatment, and in methods for counting cases, make it impossible to aggregate or compare these statistics. This hinders the ability of governments and social service providers to improve policies and programs that address the needs of maltreated children. Although the CIS-2008 collected standardized information across all provinces and territories, these rates do not provide insight into service effectiveness, and contextual factors may impact each provincial incidence study report.

To contextualize comparisons of provincial and First Nations child welfare statistics, the CIS-2008 research team initiated the CIS-2008 Provincial / First Nations Research Network Workshop, with support from the Social Sciences and Humanities Research Council of Canada. In October 2011, provincial and First Nations representatives were brought together with the research team and several graduate students at the University of Toronto to engage in a full day of comparative discussion surrounding possible explanations for the variation across provinces.

This paper provides an overview of the CIS-2008 research methods, and a presentation of the comparative findings. The discussion of the findings focuses on four possible areas to consider when looking at differences in rates across the oversampling provinces: socio-demographic factors, front end practice differences, clinical practice differences and study methodological differences. Table 1 shows a Summary of Provincial Child Welfare Systems, which presents key information about child welfare system and socio demographic factors for the five provinces under discussion.

Objectives

The specific objectives of this paper are to:

- Present direct comparisons of key findings contained in the five provincial incidence study major findings reports (British Columbia, Alberta, Saskatchewan, Ontario and Quebec);
- Provide context for variations in provincial findings, and generate hypotheses as to reasons for variation;
- Increase knowledge of the challenges and opportunities of potential provincial comparisons.

Methods

The CIS-2008 captured information about children and their families as they came into contact with child welfare sites over a three-month sampling period. A multi- stage sampling design was used, first to select a representative sample of 112 child welfare sites across Canada, and then to sample cases within these sites. Information was collected directly from the investigating workers at the conclusion of the investigation. The CIS-2008 sample of 15,980 investigations was used to derive estimates of the annual rates and characteristics of investigated children in Canada.

Maltreatment-related investigations that met the criteria for inclusion in the CIS included situations where there were concerns that a child may have already been abused or neglected as well as situations where there was no specific concern about past maltreatment but where the risk of future maltreatment was being assessed. The CIS-2008 definition of child maltreatment includes 32 forms of maltreatment subsumed under five categories of maltreatment: physical abuse, sexual abuse, neglect, emotional maltreatment, and exposure to intimate partner violence. The CIS-2008 is able to track up to three categories of maltreatment.

Most child welfare statutes require that professionals working with children and the general public report all situations where they have concerns of child maltreatment. The investigation phase is designed to determine whether the child was maltreated or not. The CIS uses a three-tiered classification system for investigated incidents of maltreatment1, including “substantiated”, “suspected”, and “unfounded”. Due to the organization of information systems in Québec, two-tiered substantiation (substantiated/unfounded) was used in the province. The CIS-2008 also uses a three-tiered classification system for risk of future maltreatment investigations. Workers could respond “yes” if there was a significant risk, “no” there was not a significant risk, or that the risk of future maltreatment was “unknown”. These classifications can be mapped on to the substantiation decisions for maltreatment investigations (substantiated/yes, suspected/unknown, unfounded/no).

Several other service dispositions were measured by the CIS-2008. Workers were asked to indicate whether the case would be transferred to receive ongoing child welfare services at the conclusion of the initial investigation, what referrals were provided to families and children, if an informal or formal out-of-home placement occurred for the child, and if an application to child welfare court was considered or made.

Although every effort was made to make the CIS-2008 estimates as precise and reliable as possible, several methodological limitations inherent to the nature of the data collected must be taken into consideration:

- The CIS only tracks reports investigated by child welfare sites and does not include reports that were screened out, cases that were only investigated by the police and cases that were never reported;
- The study is based on the assessments provided by the investigating child welfare workers that could not be independently verified;

- The CIS tracks information during the first 30 days of case activity, however there are slight provincial and territorial differences in this length of time;
- The annual national counts are weighted estimates, and in some instances, sample sizes are too small to derive publishable estimates;
- The agency size correction included in the weights uses child population as a proxy for agency size; this does not account for variations in per capita investigation rates across agencies in the same strata.
- The annualization weight corrects for seasonal fluctuation in the volume of investigations, but it does not correct for seasonal variations in types of investigations conducted.
- The annualization weight includes cases that were investigated more than once in the year as a result of the case being re-opened following a first investigation completed earlier in the same year. Accordingly, the weighted annual estimates represent the child maltreatment-related investigations, rather than investigated children.

The CIS-2008 data collection and data-handling protocols and procedures were reviewed and approved by McGill University, the University of Toronto, and the University of Calgary Ethics Committees. Written permission for participating in the data collection process was obtained from the Provincial/ Territorial Directors of Child Welfare as well as from each site administrator or directors. Where a participating site had an ethics review process, that site also evaluated the study.

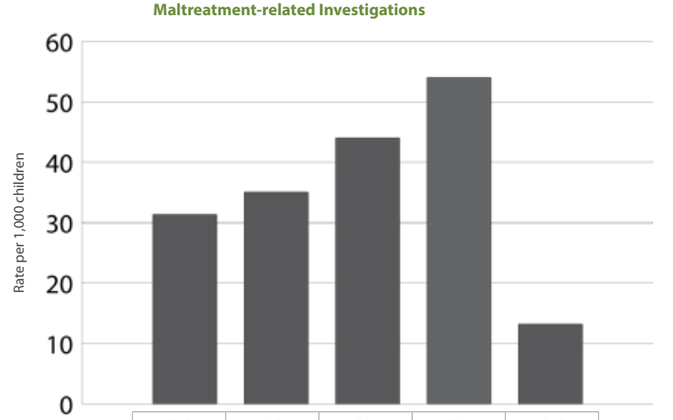
For additional details about study methods and weighting procedures please refer to the detailed Study Methods document (Fallon, Trocmé, MacLaurin, Sinha et al., 2012) available at http://cwrp.ca/sites/default/publications/en/CIS-2008_StudyMethods.pdf. The provincial incidence study reports were produced as part of the larger CIS-2008. During the preparation of these reports, the research team sought support from the Social Sciences and Humanities Research Council of Canada to initiate the CIS-2008 Provincial/ First Nations Research Network Workshop. Provincial and First Nations representatives, most of whom had existing relationships with the CIS-2008 research team, were invited to participate in a full day meeting in which provincial comparisons were presented and possible sources of variation were discussed. This paper was prepared using the written feedback from the representatives as well as the meeting minutes.

Results

The findings are presented in the form of figures, containing rates per 1,000 children[1]. Figures compare the provinces of British Columbia, Alberta, Saskatchewan, Ontario, and Quebec, using the statistics presented in each provincial incidence study report. For Quebec,

[1] Rate calculations based on: Canada. Statistics Canada. Census of Canada, 2006: Age and Sex for Population, for Canada, Provinces, Territories, Census Divisions and Census Subdivisions, 2001. Census – 100% Data [computer file]. Ottawa: Ont.: Statistics Canada [producer and distributor], October 22, 2002 (95F0300XCB01006). Census data quality can be found at http://www.statcan.ca/english/census96/dqindex.html

Figure 1. Rate of Maltreatment-related Investigations (per 1,000 children in the population) in British Columbia, Alberta, Saskatchewan, Ontario & Quebec.



	BC	AB	SK	ON	QC
Maltreatment-related investigations	31.36	35.02	44.03	54.05	13.19

*See Chapter 3 in each provincial incidence study report for these data.
*Based on 1,543 child maltreatment-related investigations involving young people under 19 in British Columbia.
*Based on 2,239 child maltreatment-related investigations involving young people under 18 in Alberta.
*Based on 1,811 child maltreatment-related investigations involving young people under 16 in Saskatchewan.
*Based on 7,471 child maltreatment-related investigations involving young people under 16 in Ontario.
*Based on 2,020 child maltreatment-related investigations involving young people under 18 in Quebec.

we used figures from Chapter 7 of the Quebec Incidence Study, comparing Quebec to the rest of Canada. The Quebec rates exclude investigations for 16 to 17 year olds, investigations on already open cases, and investigations where behavior problems are the only reason for investigation

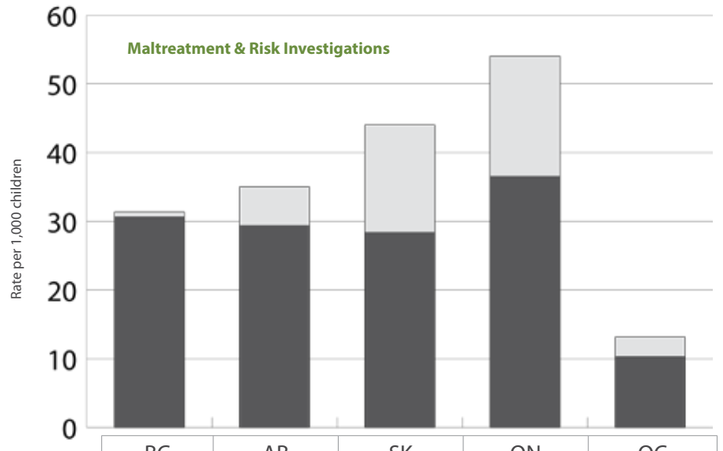
Figure 1 displays the rates of maltreatment-related investigations tracked by the CIS-2008. These rates ranged from a low of 13.19 per 1,000 children in Quebec to a high of 54.05 in Ontario.

Figure 2 displays the rates of maltreatment-related investigations tracked by the CIS-2008, separated by maltreatment and risk of future maltreatment investigations.

Ontario child welfare agencies conducted the most maltreatment investigations (36.53 per 1,000 children), and Quebec agencies conducted the fewest (10.36).

The rate of risk investigations varied a great deal across provinces. Few risk investigations were conducted in British Columbia, with 0.73 per 1,000 children; the highest rate of risk investigation was in Ontario, with 17.52 per 1,000 children. The proportion of

Figure 2. Rate of Maltreatment and Risk Investigations (per 1,000 children in the population) in British Columbia, Alberta, Saskatchewan, Ontario & Quebec.



	BC	AB	SK	ON	QC
Risk Investigations	0.73	5.66	15.64	17.52	2.83
Maltreatment Investigations	30.63	29.36	28.39	36.53	10.36

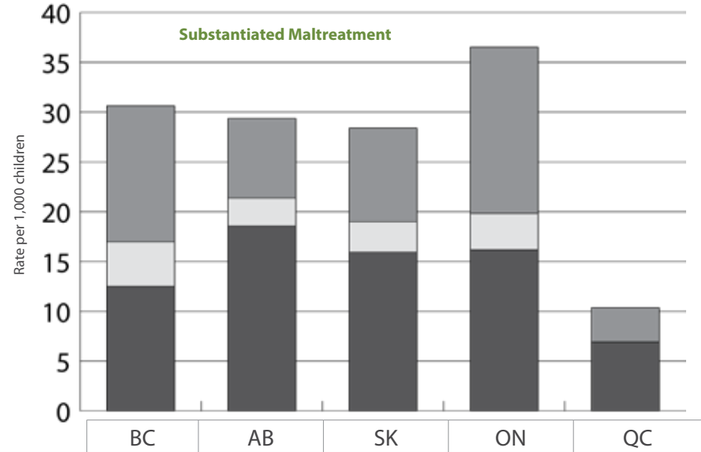
*See Chapter 3 in each provincial incidence study report for these data.
*Based on 1,543 child maltreatment-related investigations involving young people under 19 in British Columbia.
*Based on 2,239 child maltreatment-related investigations involving young people under 18 in Alberta.
*Based on 1,811 child maltreatment-related investigations involving young people under 16 in Saskatchewan.
*Based on 7,471 child maltreatment-related investigations involving young people under 16 in Ontario.
*Based on 2,020 child maltreatment-related investigations involving young people under 18 in Quebec.

risk and maltreatment investigations vary between provinces: 2% of investigations in British Columbia involved assessments of risk versus 98% of investigations focusing on incidents of maltreatment, while approximately one-third of investigations in Ontario (32%) and Saskatchewan (36%) were risk investigations.

Figure 3 presents the substantiation rates for maltreatment investigations in the CIS-2008. The rate of substantiation per 1,000 children varied from a low of 6.93 in Quebec to a high of 18.58 in Alberta. The proportion of substantiated investigations also varied: Quebec and Alberta had higher rates of substantiation (66% and 63% respectively) while Ontario and British Columbia had lower rates of substantiation and 41% respectively).

Rates of suspected maltreatment investigations were similar across British Columbia (4.47), Alberta (2.79), Saskatchewan (3.06), and Ontario (3.63). Rates of unfounded maltreatment investigations varied more, from a low of 3.43 per 1,000 children in Quebec to a high of 16.71 per 1,000 children in Ontario. In Alberta, Saskatchewan, and Quebec, the rate of substantiated investigations was much higher than the rate of unfounded investigations. In British Columbia and Ontario, there were much higher rates of unfounded maltreatment.

Figure 3. Rate of Maltreatment Substantiation (per 1,000 children in the population) in British Columbia, Alberta, Saskatchewan, Ontario & Quebec.



	BC	AB	SK	ON	QC
Unfounded	13.65	8.00	9.40	16.71	3.43
Suspected	4.47	2.79	3.06	3.63	
Substantiated	12.50	18.58	15.93	16.19	6.93

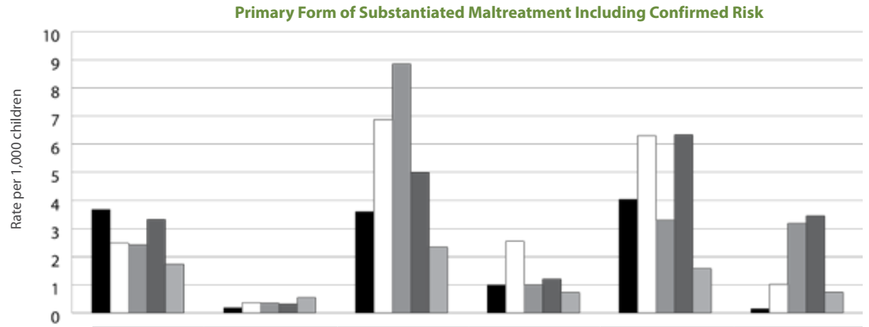
*See Chapter 3 in each provincial incidence study report for these data.
*Based on 1,481 child maltreatment-related investigations involving young people under 19 in British Columbia.
*Based on 1,852 child maltreatment-related investigations involving young people under 18 in Alberta.
*Based on 1,250 child maltreatment-related investigations involving young people under 16 in Saskatchewan.
*Based on 5,054 child maltreatment-related investigations involving young people under 16 in Ontario.
*Based on 1,587 child maltreatment-related investigations involving young people under 18 in Quebec.

Figure 4 presents the rate of substantiated maltreatment-related investigations by primary reason for the investigation. The rate of substantiated physical abuse investigations was similar across provinces, ranging from 1.73 per 1,000 children in Quebec to 3.68 per 1,000 children in British Columbia. The proportion of substantiated physical abuse investigations ranged from 29% of substantiated investigations in British Columbia to 13% of substantiated investigations in Alberta and Saskatchewan.

The rate of substantiated sexual abuse investigations was similar across provinces, ranging from 0.19 per 1,000 children in British Columbia to 0.55 per 1,000 children in Quebec. The proportion of substantiated sexual abuse investigations varied from 7% of substantiated investigations in Quebec to 1% in British Columbia.

The incidence of neglect varied across provinces; whereas 2.34 substantiated neglect investigations occurred per 1,000 children in Quebec, in Saskatchewan, 8.85 substantiated neglect investigations occurred per 1,000 children. The proportion of substantiated

Figure 4. Primary Form of Maltreatment among Substantiated Maltreatment-Related Investigations (rate per 1,000 children in the population) in British Columbia, Alberta, Saskatchewan, Ontario & Quebec.



	Physical Abuse	Sexual Abuse	Neglect	EM	IPV	Risk
BC	3.68	0.19	3.60	0.99	4.04	0.15
AB	2.49	0.37	6.87	2.55	6.30	1.02
SK	2.43	035	8.85	1.00	3.30	3.19
ON	3.33	0.32	4.99	1.21	6.33	3.46
QC	1.73	0.55	2.34	0.73	1.58	0.74

*See Chapter 4 in each provincial incidence study report for these data.
*Based on 683 child maltreatment-related investigations involving young people under 19 in British Columbia.
*Based on 1,205 child maltreatment-related investigations involving young people under 18 in Alberta.
*Based on 864 child maltreatment-related investigations involving young people under 16 in Saskatchewan.
*Based on 2,789 child maltreatment-related investigations involving young people under 16 in Ontario.
*Based on 1,163 child maltreatment-related investigations involving young people under 18 in Quebec.

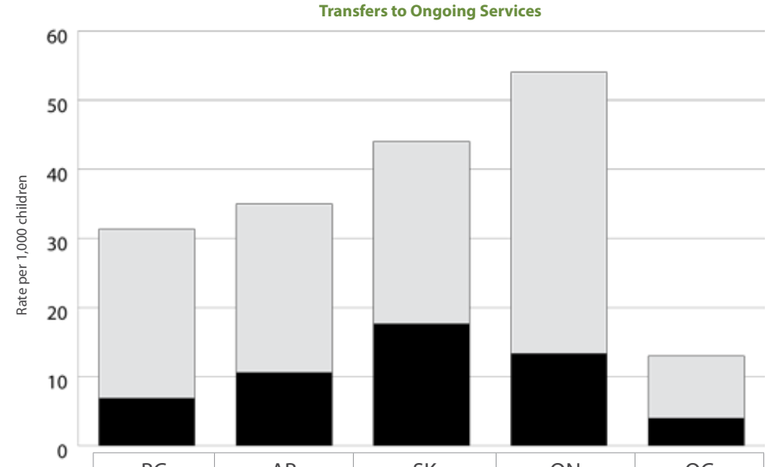
neglect investigations also varied. In Ontario, 25% of substantiated investigations involved substantiated neglect, compared to 46% in Saskatchewan.

The incidence of substantiated emotional maltreatment, exposure to intimate partner violence, and risk of future maltreatment varied across provinces. The rate of substantiated emotional maltreatment was lowest in Quebec (0.73) and highest in Alberta (2.55). The rate of substantiated exposure to intimate partner violence was lowest in Quebec (1.58) and highest in Ontario (6.33) and Alberta (6.30). British Columbia had the lowest rate of substantiated risk of future maltreatment (0.15) and Ontario had the highest (3.46). Proportions for substantiated emotional maltreatment investigations ranged from 5% of substantiated investigations in Saskatchewan to 13% in Alberta.

In British Columbia and Ontario, exposure to intimate partner violence was the most common substantiated concern. In Alberta, Saskatchewan, and Quebec, neglect was the most common substantiated concern.

Figure 5 displays the rates of transfers to ongoing child welfare services. Saskatchewan transferred investigations to ongoing services at the highest rate, 17.65 investigations per

Figure 5. Rate of Transfers to Ongoing Services (per 1,000 children in the population) among Maltreatment-related Investigations in British Columbia, Alberta, Saskatchewan, Ontario and Quebec.



	BC	AB	SK	ON	QC
Closed at Investigation	24.49	24.41	26.38	40.73	9.01
Transferred to Ongoing Services	6.86	10.58	17.65	13.31	3.98

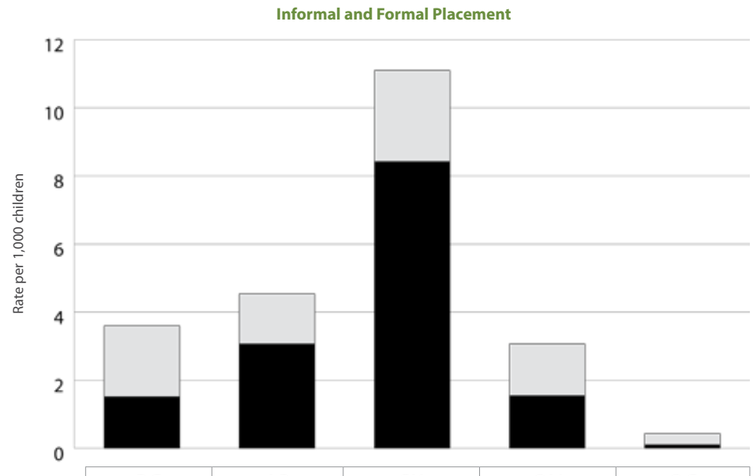
*See Chapter 3 in each provincial incidence study report for these data.
*Based on 1,543 child maltreatment-related investigations involving young people under 19 in British Columbia.
*Based on 2,239 child maltreatment-related investigations involving young people under 18 in Alberta.
*Based on 1,811 child maltreatment-related investigations involving young people under 16 in Saskatchewan.
*Based on 7,471 child maltreatment-related investigations involving young people under 16 in Ontario.
*Based on 2,020 child maltreatment-related investigations involving young people under 18 in Quebec.

1,000 children, while Quebec transferred an estimated 3.98 investigations per 1,000 children to ongoing services. The proportion of cases transferred to ongoing services in each province presents a different picture. In Quebec, 69% of cases were transferred to ongoing services at the end of the initial investigation, compared to 40% of cases in Saskatchewan, 30% in Alberta, 25% in Ontario, and 22% in British Columbia.

Figure 6 displays the rates of informal and formal placements across Canada. Rates were similar across provinces for informal placements, ranging from 0.33 per 1,000 children in Quebec to 2.68 per 1,000 children in Saskatchewan. The rate of formal placement varied, from a low of 0.11 per 1,000 children in Quebec to 8.42 per 1,000 children in Saskatchewan. The proportion of cases in each province in which a placement occurred revealed a similar pattern. In Saskatchewan, 19% of maltreatment- related investigations resulted in a formal placement for the child, and 6% resulted in an informal placement. In Quebec, only 1% of maltreatment-related investigations resulted in a formal placement, and 3% resulted in an informal placement.

Figure 7 displays the history of previous investigations among maltreatment-related investigations across British Columbia, Alberta, Saskatchewan, and Ontario. Comparable

Figure 6. Informal and Formal Placements (rate per 1,000 children in the population) among Maltreatment-related Investigations in British Columbia, Alberta, Saskatchewan, Ontario and Quebec.



	BC	AB	SK	ON	QC
Informal Kin	2.08	1.47	2.68	1.52	0.33
Formal Placement	1.52	3.07	8.42	1.55	0.11

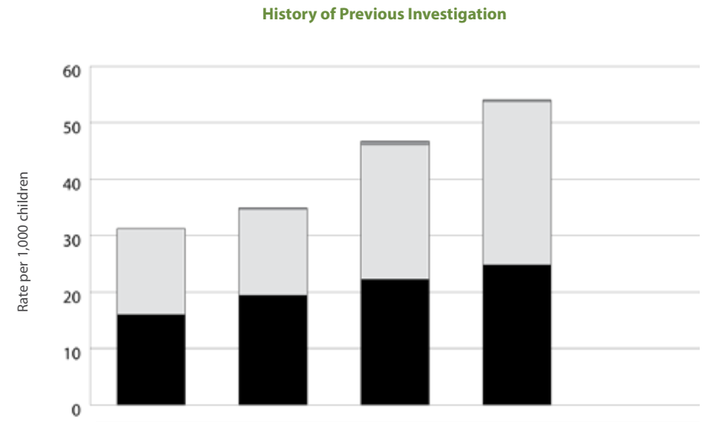
*See Chapter 3 in each provincial incidence study report for these data.
*Based on 1,543 child maltreatment-related investigations involving young people under 19 in British Columbia.
*Based on 2,239 child maltreatment-related investigations involving young people under 18 in Alberta.
*Based on 1,811 child maltreatment-related investigations involving young people under 16 in Saskatchewan.
*Based on 7,471 child maltreatment-related investigations involving young people under 16 in Ontario.
*Based on 2,020 child maltreatment-related investigations involving young people under 18 in Quebec.

rates are not available in the major findings report for the Quebec incidence study. In British Columbia and Alberta, the rate of investigations involving children who had been previously investigated was higher than the rate of investigations involving children who had not been previously investigated. In Saskatchewan and Ontario, the rate of children not previously investigated was higher. When examining the proportion of cases within provinces, there was little variance across the four provinces, differing only from 56% of all maltreatment-related investigations identifying that the child had been previously investigated in Alberta to 46% in Ontario.

Discussion

There is variation in the rate of maltreatment-related investigations across provinces which likely reflects a range of factors, including socio-demographic differences, front-end procedural differences, clinical practice differences and methodological differences These potential contributions to the variation in provincial rates are discussed in the following section.

Figure 7. History of Previous Investigations (rate per 1,000 children in the population) among Maltreatment-related Investigations in British Columbia, Alberta, Saskatchewan, Ontario and Quebec.



	BC	AB	SK	ON	QC
Unknown	0.00	0.27	0.64	0.34	
Child Not Previously Investigated	15.27	15.25	23.82	28.90	
Child Previously Invested	15.99	19.50	22.26	24.79	

*See Chapter 3 in each provincial incidence study report for these data.
*Based on 1,543 child maltreatment-related investigations involving young people under 19 in British Columbia.
*Based on 2,239 child maltreatment-related investigations involving young people under 18 in Alberta.
*Based on 1,811 child maltreatment-related investigations involving young people under 16 in Saskatchewan.
*Based on 7,471 child maltreatment-related investigations involving young people under 16 in Ontario.
*Comparable rates are unavailable in Quebec report.

Socio-Demographic Differences

Socio-demographic differences are risk factors that go beyond the mandate of child welfare including poverty rates and the proportion of Aboriginal families (Aboriginal identity population in Canada includes First Nations people and other groups, e.g., Métis and Inuit people), many of whom live in particularly difficult conditions.

First Nations children and families struggle with poor economic living conditions in Canada, which poses challenges for child welfare agencies (Sinha et al., 2011). Parents with fewer financial resources are faced with greater difficulties in providing safe environments, adequate clothing and nutrition, appropriate childcare, and other assets, all of which foster healthy child development (Sinha et al., 2011). These parents may have more negative life experiences and fewer coping resources than others, and so may be more vulnerable to mental health and substance use issues, which may impact parenting (Kessler & Cleary,

1980; Mcleod & Kessler, 1990; Ross & Roberts, 1999). Research has established strong links between poverty and child maltreatment, particularly for child neglect (Drake & Pandey, 1996; Sedlak & Broadhurst, 1996). For First Nations children and families, the risks associated with poor socioeconomic conditions may also be compounded by the intergenerational impact of colonial policies, which dislocated entire communities, suppressed languages and cultures, disrupted community support systems, and separated generations of children and their families (Sinha et al., 2011). These specific challenges appear to be related to the overrepresentation First Nations children, as they are significantly more likely to be investigated by child welfare authorities than are non- Aboriginal children (Sinha et al., 2011).

In Saskatchewan, Aboriginal children represent 27% of the total child population. In Alberta and British Columbia, Aboriginal children represent 9% and 8% of the respective child populations. Aboriginal children represent a significantly lower proportion of the child populations in Ontario (3%) and Quebec (2%) (see Table 1). The proportion of Aboriginal children living in the province may explain some of the variation across provinces. For instance, the rates of neglect are highest in Saskatchewan and Alberta, and British Columbia and Alberta have higher rates of placement than Ontario and Quebec.

Additionally, the rate of transfers to ongoing services and placement is highest in Saskatchewan. This may be an indication of the need for additional community resources necessary to address the complex issues that First Nations children and families face. Further, there is a higher proportion of persons under 18 living in low income families in Saskatchewan (20.2%) than other oversampling provinces. Alberta has the lowest rate of persons under 18 living in low-income families (10.6%) and Quebec is the only province with a poverty reduction plan (see Table 1). Understanding more about the socio-demographic differences and their impact on child maltreatment and the services provided to families and children are an area of research requiring additional study. While these factors may help to explain differences in rates, one must nevertheless examine the extent to which changes in policies, resources and services are required to address structural issues that go beyond the scope of child welfare mandates.

Differences in Investigation and Opening Procedures

There are front-end differences in the way cases are identified by the five provinces.

The age of children eligible for investigation varies between the provinces. British Columbia investigates children up to 19 years of age, Alberta and Quebec up to 18 years of age and Saskatchewan and Ontario up to 16 years of age. The CIS-2008 Major Findings Report uses the maximum provincial age served (15 years of age) for analyses. For provinces with legislation that extends beyond 15 years of age, all children investigated were included in the provincial reports and in the tables for this paper. Quebec data in this document were obtained from the Quebec-Rest of Canada comparison section in the major findings report for the Quebec incidence study. This section of the paper only includes children 0 to 15.

The CIS only tracks cases that have been investigated and therefore variations in screening procedures can significantly affect the rate of reports that are counted by the CIS as investigations. Each of the provinces represented in this study has a different screening procedure for investigations. It may be that the screening practices in Alberta, Saskatchewan, and Quebec – the provinces with the lowest rates of unsubstantiated cases – result in more unsubstantiated allegations being screened out prior to a full investigation.

Risk investigations appear to vary across provinces more than maltreatment investigations. This accounts for some of the overall differences in maltreatment-related investigation rates. Each province has child welfare legislation that determines when the state can investigate concerns of child maltreatment, and all legislation provides for situations where there is potential "risk of harm" present for the child. In the CIS-2008, "risk of future maltreatment" investigations were tracked, a concept that is distinct from "risk of harm". The low rate of risk investigations in British Columbia, Alberta, and Quebec may be explained by different provincial legislation. Legislation in British Columbia does not allow for investigations in which the worker is only assessing risk of future maltreatment. In Alberta, the investigation structure changed between 2003 and 2008 such that the length of the initial investigation was extended to 42 days. Within the initial investigation period, child welfare workers in Alberta may have more time to understand family situations and to identify maltreatment concerns, even if the investigation began as a risk assessment. In the most recent set of legislative changes in Quebec, risk of maltreatment was included within each of the maltreatment typologies, for instance, risk of sexual abuse is now built in to the sexual abuse category.

Like rates of maltreatment investigations, the rates of substantiated maltreatment, transfers to ongoing services and placement do not vary as much as the rate of maltreatment-related investigations. This suggests that variations in screening practices may influence overall investigation rates. As children and families become increasingly engaged with the spectrum of child welfare services available, those that are more intensely involved with these services may have more similarities than all of the children and families reported to child welfare authorities. Variations in front-end policies and practices, such as screening procedures, likely do not impact rates of transfers to ongoing services and out-of-home child welfare placements as much as rates of all investigations. The level of resources in a community may greatly influence the placement rate. In jurisdictions where the only available service a worker can provide to a family in need is placement, the placement rates will likely be higher, compared to jurisdictions with a wider range of services available.

In Ontario, investigations in which the worker determines a child is in need of protection are eligible for ongoing child protection services. All other cases are closed or provided with non-protection services or a community link service. When a case is closed, the child protection worker considers if services or resources in the community will prevent or reduce risk of future maltreatment to the child. If so, the child and family are provided with information about, or referred to appropriate resources.

Clinical Practice Differences

Responding to cases of child physical abuse and sexual abuse may be considered a core function of most child welfare systems. This is consistent with the findings, which showed that rates of substantiated physical and sexual abuse did not vary a great deal across

provinces. These maltreatment types may be least influenced by differences in legislation and front line practices. Alternatively, rates of substantiated neglect, emotional maltreatment, exposure to intimate partner violence, and risk of future maltreatment were more variable across provinces.

There is variation in the legislation across provinces with regards to exposure to intimate partner violence. Legislation in Alberta, Saskatchewan, and Quebec defines what constitutes exposure to intimate partner violence, while neither British Columbia nor Ontario explicitly outlines domestic violence as a form of maltreatment in their legislation.

The finding that the highest rate of substantiated exposure to intimate partner violence is in Ontario, a province that does not explicitly outline this as a form of maltreatment in legislation, illustrates that there are sometimes differences between child welfare legislation and practice. In addition, all referrals to child welfare agencies in Ontario are universally screened for the presence of intimate partner violence. The role of the child welfare agency in Ontario is to assess whether adult behaviour or victimization has a direct or observable impact on a child's safety and wellbeing, to assess whether the child has either been harmed or is at risk of being abused physically, sexually, emotionally or neglected because of intimate partner violence, and to intervene where appropriate.

Rates of exposure to intimate partner violence were almost equally high in Ontario and Alberta. In Alberta, the Royal Canadian Mounted Police services submit a report to child protection agencies, including First Nations agencies, each time an intimate partner violence report is attended. Calgary and Edmonton Police Services also have protocols for reporting intimate partner violence. Alberta child welfare agencies also use an intimate partner violence screening tool in the investigation process, which may heighten worker awareness. At the time of the study, child welfare agencies in Saskatchewan did not utilize a screening tool for intimate partner violence.

Quebec's child welfare system appears to differ the most in its structure and function as compared to the other provinces described in this paper. This variation may be due to the extensive network of prevention services in Quebec, the more comprehensive screening process, and/ or the network of preventative and voluntary services developed as alternatives to child welfare.

Quebec may also be distinct as a result of two important differences in the case inclusion criteria used by the CIS and investigation procedures followed in Quebec: (1) Youth Protection regulations in Quebec require separate reporting and investigation of any new allegations involving already open cases, while the CIS excludes such cases from its investigation count; and (2) The Youth Protection Act has a reserved section for cases involving youth with behaviour problems ("troubles de comportment"); investigations where a behaviour problem was the only noted concern were not included in the CIS investigation count for Quebec. Other provinces may encounter cases in which the only concern is a child or youth behavioural problem, yet the child welfare systems in these provinces may code these cases as maltreatment-related investigations because there is no option to code them as behavioural cases only.

The Quebec child welfare system is also unique in that the legislation defines neglect as a failure to meet a child's basic physical needs, and requires the child welfare system to take into account the caregiver's resources. For cases of neglect in Quebec, the first line response is through preventative services offered outside of the child protection system. The Youth Protection Act of Quebec states that every decision made under the Act must aim at keeping the child in the family environment. Cultural factors may also influence placement rates.

Methodological differences

These refer to differences in the way activities are counted, but do not appear to be differences in the actual services delivered. One of the study's major limitations is that the CIS cannot control for differences in screening practices.

Although participating investigating workers are trained to complete the data collection instrument using the study's procedures and definitions, the assessment of the child and family is still made within the context of a unique provincial system. Systems may require workers to document or count procedures differently than other jurisdictions resulting in an overestimate or underestimate of certain events. The data collected from the CIS also does not provide information about the length of placements which is an important consideration when examining the placement decision.

Implications

The public release of the British Columbia, Alberta, Saskatchewan, Ontario and Quebec incidence studies conducted in 2008 represents a unique opportunity in Canadian child welfare history. The CIS Research team received funding from the Social Sciences and Humanities Research Council of Canada to develop a document with officials from the oversampling provinces and First Nations representatives that would compare key figures from the reports and provide some information as to the potential sources of variation. Clearly there is a great deal of variation in rates of maltreatment-related investigations, the classification of risk investigations, rates of substantiated neglect, emotional maltreatment and intimate partner violence. There is less variation in the rates of substantiation, transfers to ongoing services and placement.

Four potential sources of variation were reviewed and explored: socio-demographic differences, differences in screening and investigation procedures, clinical case practice differences and methodological differences. Although child welfare legislation is similar across provinces, the proportion of Aboriginal children and the percentage of persons under 18 living in poverty, and whether or not there is a poverty reduction plan in place (see Table 1), likely explains some of the differences in rates of investigation. Rates of substantiated physical and sexual abuse vary less than rates of neglect, emotional maltreatment and intimate partner violence, which may be an indicator of differences in the understanding of their effect on children and/or provincial and agency mandates.

Finally, the data are not evaluative. It is impossible to infer that a higher or lower rate of investigation is more desirable without data that examines outcomes for families and children. Further research is needed to understand the impact of these variations on services to children and families.

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BRIEF REPORT: Kids Help Phone: Developing a New Go-To Online Mental Health Platform Designed for Young Men in Canada

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Abstract:

Objectives: Kids Help Phone is Canada's only national, professional helpline for children, youth and young adults. BroTalk.ca is a new mobile-responsive microsite (website) and Live Chat service option for young men to reach out for help. A new app is forthcoming in 2016. The new platform and service design were informed by extensive focus group research and feedback received from young men in the target age group, professionals who work with teens, subject matter experts, as well as Kids Help Phone's counseling management staff. In this brief report, the research on the development of this service and the need for on-going research is presented, using Kids Help Phone as an example of youth outreach and community resilience-building.

Today's youth are increasingly gravitating towards technology and social media as their favored channels for communication. According to one poll, over 22% of teenagers log onto their favorite social media site more than 10 times per day (O'Keeffe & Clarke-Pearson, 2011). The Pew Research Center (Lenhart, 2015) found that 92% of teens report going online daily, with 24% of those reporting that they are online "almost constantly." Eighty-eight percent of teens have or have access to cell phones or smartphones; typically, a teen will

send 30 texts per day (Lenhart, 2015). Evidence suggests that favorable outcomes related to the presence of youth online include enhanced communication, social connection, growth of ideas, identity development, and technical skills (Ahn, 2014; Rushing & Stephens, 2011; O'Keeffe & Clarke-Pearson, 2011; Valkenburg, Peter & Schouten, 2006). Concerns, however, include issues regarding identity, privacy, addiction, predators, bullying, inequality, literacy, social exclusion, and high-risk sexual behavior (Ahn, 2014; Rushing & Stephens, 2011; O'Keeffe & Clarke-Pearson, 2011; Valkenburg et al., 2006).

More children and young people are adopting online chat, email and text messaging in order to seek support or advice (Child Helpline International, 2014). The convenience and anonymity involved with accessing health information online leads youth to seek web-based resources on commonly stigmatized topics of interest, such as sexually transmitted infections, stress reduction, and signs of depression (O'Keeffe & Clarke-Pearson, 2011). Although its results cannot be generalized to all First Nations communities, one study found that using social media to reach Pacific Northwest Native youth may yield positive results, since many of those surveyed expressed interest in accessing health information online, with over 75% having done so in the past (Rushing & Stephens, 2011). An Australian-based survey of 486 young men, averaged 18.55 years old found that over half reported that they had talked about their problems online, and most said that talking online had "helped" (Ellis et al., 2013).

Since social media inherently fosters social interaction, it creates opportunities for youth to form and maintain relationships with others (Ahn, 2014; Valkenburg et al., 2006). Social support and close relationships can help youth foster resilience, buffer stress, and form "learned secure" attachments with others (Wekerle, Waechter & Chung, 2012). Resilience is defined as "both the capacity of individuals to navigate their way to the psychological, social, cultural, and physical resources that build and sustain their well-being, and their individual and collective capacity to negotiate for these resources to be provided and experienced in culturally meaningful ways" (Ungar, 2012, p. 17). Masten (2001) said resilience appears to be a "common phenomenon arising from ordinary human adaptive processes" (p. 234). Young people's foray into the Internet for connection can be seen as adaptive, since help-seeking online may be interpreted as a form of resourcefulness and conducive to resilience-building.

Kids Help Phone

Kids Help Phone is Canada's only national, professional helpline for children, youth and young adults. Available 24 hours a day, 365 days a year, the service is offered free of charge to young people, is anonymous and confidential, and is available in English and French. In 2015, about 500 young people reach out to Kids Help Phone every day through three service channels: phone, web post and Live Chat. They also have four award-winning websites that receive thousands of visitors a day. Information on their sites is vetted by a knowledge mobilization department, counselors, youth, and subject matter experts.

Through service monitoring, Kids Help Phone recognized that teen boys were contacting the service far less than girls. This finding is not unusual in the Child Helpline International community. In North America, 32% of contacts are from boys (Child Helpline International, 2011). At Kids Help Phone, that number is 20% (Kids Help Phone, 2015). The number of contacts from boys to Kids Help Phone decreases from 13 to 16 years of age, and does not increase again until age 17; one in three of those who contact the service above the age of 21 are male (Kids Help Phone, 2015). Compared to girls, a higher percentage of boys contact Kids Help Phone about problem substance use and addictions, sexual orientation and gender identity issues whereas a lower percentage of boys and young men discuss mental and emotional health issues, and suicide or suicide-related issues.

To address the relatively smaller number of boys contacting the service, Kids Help Phone applied for and received funding over three years from the Movember Foundation to create the "go-to" online mental health platform for young males ages 14-18 in Canada. They engaged Canadian Red Cross (RespectED Program) and Boys and Girls Clubs of Canada as key collaborators to provide feedback and strategic support to the project.

Method

Kids Help Phone engaged the services of a market research company to further explore ideas of how to create an online platform and to better understand the challenges of young men. Twenty-one focus groups were conducted in Alberta, Ontario and Quebec, in rural, urban and remote locales. In total, 157 participants took part including teens who identified as male, Kids Help Phone counseling management staff, as well as professionals who work with male teens. There were distinct focus groups available for those who identified as GBTQ, Aboriginal or as someone with lived experience of mental illness. Kids Help Phone also consulted with a number of subject matter experts on male mental health to better understand the climate and barriers that young males experience when help-seeking.

Results

Participants cited that they experienced a great deal of pressure to fit in with their peers, to succeed and do well at school, and to determine next steps in their academic or career futures. They also noted mental health issues, such as depression and suicide, when discussing issues of loneliness or not fitting in. In general, it appeared understood that mental health challenges can present themselves when more minor challenges accumulate and are not adequately addressed.

Asked whether they would reach out to a helpline like Kids Help Phone, many of the young men said they would not. One participant noted, "It's a matter of pride. I am a guy and I don't necessarily like talking about my problems." Another noted, "Guys don't want to reach out to people because they feel like they gotta be all tough." It was clear that issues around perceived masculinity influenced help-seeking behavior. Kids Help Phone's online platform uses language and visuals that associate reaching out for help as an act of strength; normalizing help-seeking and reducing barriers to access are two fundamental goals. Aggregate counselor profiles are used so the platform user can better understand with whom they are speaking. There are also stories based on interviews with young men, who share experiences of resilience related to website topics.

Discussion

Kids Help Phone's new website is youth- and research-informed, providing content, videos and interactive tools designed with young males in mind. Expanded Live Chat hours are also offered given the proclivity for young people to engage online and by text. Kids Help Phone will also be releasing an app in 2016 that simulates text messaging, allowing a young person to connect with a counselor when Live Chat is available.

Another finding from the research suggested that young men want to learn solutions and actions to solve their problems if they are going to reach out for help. This discovery also fits with recommendations that "help-seeking" needs to be reframed as "taking action" or "taking control" (Hall & Partners Open Mind, 2012). As a result, the website uses an action-oriented voice, with short tips and suggestions. The first five topics on the site include information about fitting in, depression, relationships and dating, sex, and school-based concerns.

Kids Help Phone created a national Youth Advisory Committee for developing this service to ensure that male voices would continually infuse the project. The young men give feedback and vet the topic content, interactive tools and website design. Kids Help Phone believes that by putting youth at the forefront of planning for the go-to platform, that youth are co-creating a safer space for them to reach out and that they are empowered to help themselves before they are in crisis.

Conclusion

Kids Help Phone is offering young males an online space that is tailored to their needs. By taking insights from market research and creating features on the site important to young people (e.g., providing counselor aggregate biographies to create trust, using real interviews to report stories of resilience with young males), there is an increased chance that more young men will reach out to overcome the barriers to help-seeking. The interactive tools, as well as the Live Chat usage by boys, will be evaluated to better understand their impact on the target audience. Evaluation of these tools will contribute to the larger landscape of program evaluation of helplines, in which there is a paucity of research. Kids Help Phone will continue to involve teen male stakeholders in the testing, feedback and evaluation of the service and website.

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