TRAUMA-INFORMED ASSESSMENT AND INTERVENTION WITH INDIGENOUS YOUTH: EXPLORING THE IMPACT OF COLONISATION, CULTURE, AND ADVERSE CHILDHOOD EXPERIENCES ON BEHAVIOUR

By

Lisa Gaylor

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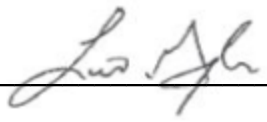
Signature of Candidate: 

Print name: LISA GAYLOR

ABSTRACT

The aim of this PhD was to clarify the relationship between adverse childhood experiences (ACEs) and youth externalising behaviour with consideration for cultural differences, and to propose a conceptual framework for trauma-informed supports. A connection between ACEs and youth behaviour has been consistently observed (e.g., Basto-Pereira et al., 2016; Fox et al., 2015; Tsang, 2018). In North America, colonial impacts have increased the risk of ACEs for Indigenous youth (Burnette & Renner, 2017; Gone, 2013; 2023; Serin et al., 2011), who are also overrepresented within the juvenile justice system (StatsCan, 2023). Traditional developmental models of behaviour and delinquency lack a defined role for historical trauma (e.g., Farrington, 2003; Agnew, 2001; Hirschi, 1969), and most interventions inadequately account for cultural differences (Kumpfer & Alvarado, 2003; Thomas et al., 2019).

The research commenced with two systematic reviews. The focus of the first was whether certain ACEs, some of which cultural minority youth may be more likely to be exposed to, were more strongly associated with particular externalising outcomes. The second examined trauma-informed group behavioural interventions, aiming to identify common and effective practices. Three themes were identified in the first systematic review: 1) a consistent association between ACEs and externalising behaviour, 2) disciplines differ in methodology and terminology, and 3) a lack of generalisability. Four themes were discussed in the second systematic review: 1) Externalising behaviour as a poorly defined construct, 2) effective approaches to address externalising behaviours in trauma-affected youth vary, 3) a lack of reference to trauma theory, and 4) limitations to cultural inclusivity. Minimal inclusion of Indigenous participants and consideration for cultural differences were noted across all reviewed studies.

Next, a Delphi was conducted to survey practices in trauma-informed behavioural intervention with culturally diverse youth. Researchers and clinicians (n =

10) with experience addressing externalising behaviour in these populations were surveyed over three rounds regarding best practices across several topic areas. Consensus was reached on essential components of intervention, approaches to expanding cultural understanding and accounting for differences, and barriers to services. Theories consulted to inform practice differed. Overall results suggested common understandings and strategies when working inter-culturally, but little reference to non-Western theories and models.

Study two was designed to address the absence of Indigenous and non-Western perspectives by explicitly seeking input from First Nations people. There were two components: a review of psychoeducational reports and interviews with First Nations and non-Indigenous educators, with most data being collected from on-reserve communities in Northern Saskatchewan, Canada. The reports evidenced the shortcomings of formalised assessment practices in capturing the experiences of First Nations youth (e.g., Dauphinais et al., 2018; Johnson, 1992). Findings from the interviews were examined using Reflexive Thematic Analysis (Braun & Clarke, 2019) with reference to Indigenous methodology (Kovach, 2020). Overall, First Nations and non-Indigenous perspectives differed regarding challenges in behavioural and mental health impacting youth as well as effective approaches to treatment. First Nations participants emphasised more holistic challenges (e.g., related to family and community) and the value of land-based, hands-on activities as treatment. Non-Indigenous contributors spoke more often to students' individual needs and experiences, emphasising formal mental health services. Responses aligned with previously observed differences in worldview (e.g., Kirmayer, 2007; Linklater, 2017).

The third study was designed to examine the relationship between treatment preferences and individualist and collectivist attitudes (Triandis & Gelfand, 1998). American and Canadian participants (n = 405) from five ethnic groups (i.e., Asian;

Black; First Nations, Inuit, Metis, or Indigenous (FNIMI); White; and "I describe my ethnicity in another way" [IDAW]) were recruited using *Prolific*. Participants rated the helpfulness of and categorised (e.g., engagement vs. diversion) a selection of activities identified previously as useful to address trauma and behavioural symptoms. ACEs, intergenerational trauma, and treatment experience were also queried. Women, FNIMI, and IDAW participants reported significantly more ACEs. A Latent Class Analysis (LCA) indicated five classes: 1) Polyvictimised racialised women, 2) Emotional and observational adversities in racialised groups, 3) Non-racialised polyvictimisation, 4) Racialised low-adversity, and 5) Non-racialised low-adversity. Activity helpfulness ratings were somewhat associated with individualist or collectivist beliefs, with collectivism predicting higher helpfulness ratings for community events, cultural activities, or religious ceremonies.

The programme of research culminated in the *Framework for Relational and Reflexive Assessment and Intervention for Trauma* (FRRAIT). It encourages practitioners and researchers to 1) practice reflexivity, 2) query differences in worldview, 3) prioritise relationship building, 4) consider alternatives to Western assessment and healing approaches, and 5) account for the impact of historical trauma.

Finally, limitations and avenues for future exploration were outlined. Concerns including representativeness of sampling and recruitment strategies and the cultural relevance of the applied methodology are highlighted. Researchers and practitioners are encouraged to continue challenging Western-centric epistemology and methodology alongside opposing the clinical and political status quo that restricts engagement with Indigenous ways of knowing and healing.

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CHAPTER ONE:

SETTING THE SCENE – PERSONAL, HISTORICAL, AND PRESENT CONTEXT

1.1 Positioning: The Settler Psychologist

The task of 'positioning' myself in this work has been a cause of internal conflict and anxiety from the beginning of my programme. On the one hand, I looked forward to exploring and synthesising information that could provide more clarity about how to support the compassionate and determined people I have worked with. However, I also knew this process would require me to turn inwards and confront my culpability in an imperialistic and privilege-driven system: the one through which I have accessed the education and opportunity to do this work. I had to publicly acknowledge the injustice of my being afforded the time and resources to do so when many others, particularly from backgrounds resembling the populations I work with, might not be. I was reluctant to commit to focusing my research on challenges faced by the Indigenous people of Canada. I did not want to tread where I was not welcome.

For the last seven years, I have worked as a contract psychologist conducting psychoeducational assessments and offering behavioural and academic consultation services to Indigenous reserves in the Canadian province of Saskatchewan. Saskatchewan is a province of 1.2 million people, around 11% of whom are of First Nations heritage, the second-highest Indigenous population of any Canadian province (Statistics Canada, 2023). My work has largely taken place in the sparsely populated northwest of the province, where many of the province's reserves, areas of land ostensibly set aside for Indigenous stewardship and residency, are located. Through this role, I have seen first-hand the systemic and economic inequalities that exist in some of these communities. More specifically, I have seen the ways that educational psychology and mental health servicaes provided through a Western lens so often fail at meeting the

needs of the young people living there. Formal assessment and diagnoses acting as gatekeepers to needed support and services is a systemic failure for all young people, but particularly those from diverse cultural backgrounds living in under-resourced conditions created by colonisation. I have been complicit in a politically driven process that is at best inefficient and at worst retraumatising for young people and their families. People who are doing what they can to move forward and heal in the wake of innumerable transgressions over the centuries since European contact. When young people in these communities are struggling, it is absurd that a barrier to intervention might be a settler psychologist administering checklists and interviews to confirm that something has gone awry. This research was primarily borne out of my frustration with and commitment to collaborating in changing these systems.

Throughout this thesis, the terms *Indigenous* and *First Nations* are used to refer to people from diverse bands and tribal affiliations. Indigenous is a more universal term that can be used to refer to the pre-colonisation populations that live in Australia, New Zealand, the United States, and many South American countries as well as Canada (e.g., Kovach, 2020; Weatherburn & Holmes, 2016). First Nations is a term specific to the Canadian context and is used at times to refer collectively to those Indigenous groups living across Canada, including, but not limited to, the Cree and Dene tribes of Saskatchewan (Sasakamoose et al., 2017; Snowshoe et al., 2015). Other Indigenous groups in Canada include the *Métis* and *Inuit* people. They share struggles, cultural similarities, and, in some cases, geographical areas with First Nations groups, but were not the primary focus of this research.

Two-eyed seeing, a term first introduced to academia by *Mi'kmaw* Elder Albert Marshall (Bartlett et al., 2012), is a concept I gravitated towards when beginning my research. Described as weaving together Indigenous and Western ways of knowing, it seemed to provide both a lens to develop my studies as well as an approach to resolving

a major obstacle I saw in proceeding with research that focused on supporting Indigenous people: that I am a white settler. Engaging with Indigenous epistemologies, methodologies, stories, and increasing my awareness of other forms of healing through the work of many generous scholars and Knowledge Keepers has been a life-changing experience for me. I have learned enough to know that there is a great deal that I don't know and that these lessons will continue. Not knowing my destination, I appreciate that this thesis does not represent the end of a journey, but the beginning.

1.2 Canada: A Story of Colonisation

Canada, like all colonial nations, has a legacy steeped in trauma. Many ethnic minority groups have suffered throughout the tenure of European settlement, but the indignities faced by First Nations populations have been a most pervasive and horrific constant. As early as the 18th century, bloody conflict between settlers and First Nations peoples over land, fur, and fish was documented as well as the establishment of the first reservations, restricting movement of previously nomadic populations (Government of Canada, 2017). The first residential schools were also founded during this time by French Catholic missionaries eager to encourage religious and cultural assimilation of First Nations peoples (Mathieu, 2013). In the 19th century, treaties and legislation culminating in the *Indian Act* began a new chapter in exploitation and subjugation (Hanson, 2009; Acoose, 2012). It was through this act that prohibitions on ceremony were enacted and enforced. Dictating the movement of First Nations people on and off reserve and even who was legally considered *Indian* at all, it was comprehensive in scope and paternalistic in flavour.

Particularly impactful was the new, legal imperative to provide education to First Nations. This was managed by compelling them to attend residential schools, an approach mirrored in the United States (Gone, 2009). While some schools offered day programming, most required children to be boarded which, in addition to creating

conditions rife for abuse and neglect, accelerated and systematised the progress of what is now recognised as both a cultural and physical genocide (Linklater, 2017; Gone, 2023). This ripple is felt into present day, when the mass graves secreted away on the grounds of Canadian residential schools and the stories of missing and murdered Indigenous women are only beginning to be unveiled, acknowledged, and collectively grieved (Truth and Reconciliation Commission, 2015). While it remains a deeply problematic piece of legislation, the *Indian Act* has been contemporarily considered a 'necessary evil' insofar as legally recognising the distinct status of First Nations people as sovereign cultural subgroups within Canada.

Amendments to the *Indian Act* began in 1951, as the atrocities of the Second World War and First Nations Canadians' contributions to the cause brought mainstream awareness to their plight as second-class citizens (Hanson, 2009). Human rights were at the forefront of Canadians' minds, and something was clearly amiss in their own backyard. Some of the more oppressive elements of the act were revoked, including prohibitions related to ceremonial and cultural practices and restrictions on movement. However, this also ushered in the era of what has come to be known as the *60's scoop*, wherein many First Nations children were removed from their homes by social services workers, placed either in institutional care or with primarily white families across North America (Helgason, 2009). Residential school educations had destabilised First Nations communities, severing ties between children and caregivers. In addition to the direct impact of the abuses endured, parenting knowledge that might have once been passed on by caregivers and Elders was lost. Rather than addressing the root of this problem, households were assessed by settler social workers, and removal of children from homes and communities was viewed as a kindness. It was not until the early 2000s that control of local social services began being transferred from the provinces back to First Nations communities. The impacts of these compounded injustices have begun to be

formally acknowledged through the efforts of the Truth and Reconciliation Commission (TRC, 2015), an overview of which is described below.

1.3 Present: The Era of Truth and Reconciliation

1.3.1 Truth and Reconciliation

In 2008, the Truth and Reconciliation Commission of Canada (TRC) was developed in the resolution to legal action pursued by Residential Schools Survivors, the Assembly of First Nations, and representatives of Inuit First Nations (TRC, 2015). Discussion took place among these groups and appointed representatives of the political and religious organisations historically involved in the administration of residential schools. Over several years, tasks undertaken included the documentation of testimonies from residential school survivors across Canada, public education and awareness campaigns, and funding for ceremonies and activities commemorating those lost. In 2015, the TRC's efforts culminated in 94 calls to action with specific mandates for child welfare, education, language and culture, health, criminal justice, religious institutions, and government policies more broadly.

While all calls to action have bearing on the present research, several are especially pertinent. Items 10 through 12 call on the federal government to provide funding and resources to address the gap in the quality and accessibility of education services, make cultural and linguistic programming available to all First Nations students, and offer parents and communities control over their schools. Calls 21 through 23 identify the unique health, spiritual, and psychological needs of First Nations peoples and petitions for the provision of specialised centres to facilitate traditional healing and wellness practices. Finally, and poignantly, 31 through 42 call for acknowledgement and action regarding the very real connection between colonial trauma, such as that perpetuated through residential schools, and First Nations overrepresentation in the justice system. Alternative restorative justice practices, provision of culturally

appropriate services, historical education of legal professionals at all levels, and an overarching commitment to identifying and resolving factors contributing to this pattern were prescribed. Nearly a decade on, progress has been slow, as religious, federal, and provincial groups and individuals prove predictably resistant (Jewell & Mosby, 2023). As of April 2024, only nine of the federal government-dependent actions were evaluated as complete by *Indigenous Watchdog,* an independent review and accountability organisation. Representatives of the First Nations-led Yellowhead Institute (Jewell & Mosby, 2023), a Toronto-based research and education organisation, reported no calls to action were completed in 2023, and that only 13 had been wholly completed since the TRC's report was issued in 2015 (see Appendix A for a list).

1.3.2 Truth and Reconciliation for Psychology

Based on the TRC calls, the Canadian Psychological Association (2018), in collaboration with First Nations advisors, issued psychologist-specific guidance. The document outlined ways in which psychologists, through the provision of culturally inappropriate assessment and intervention, have reinforced and exacerbated colonial harm. It was recommended that psychologist desist from assessing and diagnosing using models and tools not normed or validated with Indigenous populations. Assessment reports should be strengths-based and community-centred, and interventions should be crafted with reference to traditional healing strategies.

However, contrary to these provisions, Indigenous Service of Canada's *High-Cost Special Education Program* continues to require that First Nations students living on reserve undergo formal, psychoeducational assessment. The programme gatekeeps on-reserve schools' access to funding for additional services when a student is struggling behaviourally or academically (Government of Canada, 2024). An intervention-based alternative is outlined, wherein the child can access supports prior to being assessed, but it is specified that the school will be required to procure an

assessment by the end of the next school year to retain the funding. While not overtly requiring a diagnosis, the programme stipulates that a student should be "…identified by a report by a professional specific in the relevant educational jurisdiction and are required to have an IEP [Individual Education Plan] that recognizes the broad range of their physical or intellectual abilities and addresses specific educational, health and personal care needs," and, further, that these challenges must be designated as falling within the moderate to profound range. These requirements, intended for implementation Canada-wide, are hardly conducive to the strengths-based, culturally nuanced approaches endorsed by the CPA.

At the provincial level, the Saskatchewan College of Psychologists, in their one-page response to the TRC, targeted four key areas and actions: promotion of cultural awareness and humility in practice and profession, establishing practice guidelines for working with culturally diverse populations, recruiting and supporting First Nations people to enter the discipline of psychology, and addressing practices that disadvantage or disenfranchise them (Saskatchewan College of Psychologists, 2016). Canadian researchers and practitioners have begun to point out the shortcomings of training programmes across the country in instilling these values (Bernett et al., 2023; Day, 2023). Reviewing current curricular content of the University of Saskatchewan's two applied psychology programmes reveals an immediate disconnect between words and action. The clinical doctorate has one required course in Indigenous health and well-being while the School and Counselling Psychology master's, which produces a significant number of the province's educational psychologists, offers only one course clearly rooted in Indigenous epistemology: an elective focused on research methodology. The University of Regina, the province's only other source of graduate-level psychology training, has similar offerings, with no required First Nations content evident from the syllabus for the clinical programme and only one required for

educational psychology majors. While it is certainly incumbent on psychologists already in the field to educate themselves on issues pertinent to the populations they serve, in a colonial context in the era of 'reconciliation,' Indigenous worldviews and wellness should not be optional or restricted to a single course. This may not be directly in control of the College, but, as the sole provincial regulatory body for the profession, influence can be assumed. Addressing the persistent gap between politics and psychological practice that continues to underserve Indigenous youth is an aim of the present research. The consequences of this disparity are particularly dire when it comes to assessment and intervention for externalising behaviour, as ineffective services can increase the risk of contact with the justice system (e.g., Pesta, 2022).

1.3.3 Indigeneity, Education, and the Law

Between 2021 and 2022, 41% of the 9,551 young people incarcerated in Canada identified as First Nations (Statistics Canada, 2022). Context highlights the disparity, as Indigenous-identifying youth made up only 8% of the Canadian youth population in 2021. Very similar trends of overrepresentation are noted in other colonial countries, such as New Zealand (Reil et al., 2021), Australia (Australian Institute of Health and Welfare, 2023), and the United States (e.g., Puzzanchera et al., 2022). For decades, academic and political rhetoric has outlined both the prevalence of and methods by which the legal system disadvantages these populations (e.g., La Prairie, 2002). For example, over-policing of Indigenous communities and selective, ethnicity-based enforcement of certain laws in urban settings, such as public intoxication, have been pointed to as contributing to this disparity (Serin et al., 2011).

However, steps taken in other nations to reduce judicial discrimination against Indigenous groups have been rewarded with little progress. In an Australian example, Weatherburn and Holmes (2016) noted that despite both financial and political efforts to address issues such as housing and systemic racism, Indigenous people continued to be

overrepresented in forensic settings and more likely to engage in violent crime. In exploring the roots of this issue, four offending risk factors were identified that disproportionately affect Indigenous populations in Australia: neglect or abuse, household or personal substance abuse, unemployment, and poor academic engagement and performance. Notably, neglect, abuse, and household substance use have long been considered potentially traumatising, and risk factors for externalising behaviour and delinquency (e.g., Farrington, 2015; Fox et al., 2015). It is not difficult to see the probable connections among these factors. A child who is abused or witnessing the impacts of addiction in their home, in addition to potentially imitating such behaviours (Bandura, 1986; Maxfield & Widom, 1996), will almost certainly struggle academically and be less employable as a result. This effect can only be compounded in situations, like many reserve communities, wherein both educational resources and employment opportunities are often limited (Gone, 2023). Seeing few alternatives for both social and financial security, the path of delinquency may seem a more viable option.

Frequently, preceding delinquency, a child's experiences of household instability and abuse show up as misbehaviour or disengagement in the school setting (Crooks et al., 2007; Loeber & Farrington, 2000; Snyder & Smith, 2015; Watts & Iratzoqui, 2019). As will be expanded on in later chapters, it has been theorised that this relationship between emotional, physical, psychological, or environmental exposure to trauma and externalising behaviour may arise through a variety of causal pathways, such as maladaptive self-regulation (e.g., Meddeb et al., 2023), behavioural modelling (Bandura, 1986; Maxfield & Widom, 1996), resistance to economic strain (Agnew, 2001), or hypervigilance and heightened responses to perceived aggression (e.g., Martinelli et al., 2018). Prevention targeting children and youth is of particular importance, as these early behaviours correlate with both severity and longevity of criminality (Delisi & Piquero, 2011; Loeber & Farrington, 2000). While primary

prevention may seem like an obvious solution, it is not generally accessible to at-risk children and youth, as there are few fully developed, regularly implemented programmes (Augimeri et al., 2007; Reil et al., 2020). Typically, such supports are offered only after a child has had contact with correctional services (Burke & Loeber, 2015). This leaves a troubling gap in services wherein the schools, families, and community are relied upon to manage the behaviour, often with limited or inadequate resources (Armstrong, 2018; Jenssen et al., 2019). Because of the challenges associated with meeting these needs, schools often enforce a combination of exclusion and suspension strategies (Pesta, 2022). While at times necessary to ensure the safety of staff and classmates, this is predictably detrimental to academic and social development, as well as serving to reinforce the school disengagement that acts as an additional risk factor (Farrington, 2015; Snyder & Smith, 2015). This pattern may escalate until police involvement is required, and additional behavioural services may be accessed either via or post-incarceration. This phenomenon has been termed the *school-to-prison pipeline* (Sander, 2010; Goldstein et al., 2019). While ostensibly designed to deter externalising behaviours, the enacting of these unhelpful policies at the school level arguably propels these youth toward the criminal justice system.

When attending mainstream schools, minority youth, many with a history of adversity, are disproportionately targeted by punitive behaviour policies (Sander, 2010; Erickson & Pearson, 2022; Goldstein et al., 2019). Contrarily, behavioural interventions, even those provided following police involvement, have been noted as generally failing to account for cultural diversity and the impacts of trauma (Kumpfer & Alvarado, 2003; Thomas et al., 2019). Indigenous youth have been specifically identified as a neglected group in the research on this topic (Skiba et al., 2015). Given the increased rate of behavioural sanctioning and exposure to risk factors more broadly, it is a clear limitation for assessment and interventions of this kind not to be culturally

and trauma informed. Thus, the present research focused on the development of guidance for trauma-informed youth assessment and behaviour intervention that account for the cultural and experiential differences of Indigenous youth.

1.4 A Path Forward: Indigeneity, Trauma, Externalising Behaviour, and Treatment in Youth

The goal of this PhD was to develop a needed conceptual framework for the link between Indigenous cultural identity, traumatic past experiences, and externalising behaviour in school-aged populations. The purpose was to improve assessment and supports provided by settler psychologists and other mental health services. The research was comprised of five steps, beginning with a review of the literature pertaining to the multifaceted relationship between adverse childhood experiences (ACEs) and antisocial or externalising behaviour. The findings evidenced a limited understanding of applicability across ethnic groups. Next, a review of group-based, trauma-informed behaviour interventions for young people provided an outline of effective elements of such interventions, but identified similar gaps related to work with culturally diverse populations. This was followed by a Delphi survey of clinicians and researchers designed to capture frontline practice in trauma-informed behaviour intervention with culturally diverse youth perhaps absent from the academic literature. Insight from this study fed into a reflexive thematic analysis of psychoeducational assessment reports and interviews with First Nations and non-Indigenous educators working in rural Saskatchewan, the execution and interpretation of which was informed by Indigenous methodology (Kovach, 2020). The data collected evidenced the limitations of Western approaches to assessment and intervention when working with First Nations youth and their communities. This mismatch had clear implications for behavioural consultation, assessment, and intervention, particularly when collecting developmental information and providing relevant, actionable recommendations.

Contextual and cultural barriers to psychological services as well as community strengths and potential pathways for culturally appropriate treatment were explored. Themes around individualist versus collectivist worldviews and coping strategies were generated. These informed a final study with a diverse sample wherein past adversities were assessed alongside collectivist versus individualist attitudes. Beliefs and preferences for a variety of types of treatments or healing practices to address trauma (e.g., spending time outdoors; attending therapy) were considered. Findings highlighted the unique experiences of Indigenous people, limitations of Western assessment strategies, and the need to consider differences in worldview when providing treatment for trauma that addresses externalising behaviour. The theoretical context of the PhD is presented in Chapter Two.

CHAPTER TWO: THEORIES OF EXTERNALISING BEHAVIOUR AND TRAUMA

2.1 Structure of the chapter

In this chapter, terms, theories and models used to explain trauma, behaviour, and offending are summarised, compared, and critiqued. While comprehensive review is beyond the scope of the thesis, key social, forensic, and behavioural theories are included. A section on the challenges of defining trauma and trauma-informed practice will precede a review of trauma theories. Next, behavioural descriptors are disambiguated followed by a review of relevant theories. The chapter closes by outlining gaps in the literature related to the experiences of Indigenous young people.

2.2 Trauma

Defining trauma is a *zeitgeist* that has transcended clinical settings to become the subject of economic, socio-cultural, and epistemological debate (Krupnik, 2019). Recent conceptual shifts have been observed in Western countries insofar as the common understanding of what 'counts' as trauma – a phenomenon termed *concept creep* (Haslam & McGrath, 2024). A recent study demonstrated that age, ethnicity, and political leanings may predict what a person considers to be traumatic (O'Connor et al., 2023). Notably, older participants, those who identified as more liberal, and those from cultural minority backgrounds were found to endorse a wider variety of experiences as potential sources of trauma.

Even within the sphere of mental health care, trauma has been defined and differentiated in a myriad of ways. Canada's Centre for Addiction and Mental Health refers to trauma as "...the lasting emotional response that often results from living through a distressing event," and states, "Experiencing a traumatic event can harm a person's sense of safety, sense of self, and ability to regulate emotions and navigate relationships" (n.d.). The term *distressing event* arguably provides little guidance as to

what kinds of experiences might inflict trauma, implying a subjectivity that has been somewhat bolstered by recent research (Jones & McNally, 2022). That is, it has been found that people who endorse a broader concept of trauma tend to report more ill-effects after being exposed to stressful stimuli.

The American Psychological Association (APA), whose guidelines are most frequently referenced by North American mental health professionals via the *Diagnostic and Statistical Manual* (DSM-V-TR; 2013), provides perhaps the most restrictive, and controversial, definiton. It can be inferred from the diagnostic criteria for Posttraumatic Stress Disorder (PTSD) and limits trauma to the following: direct exposure to or threat of death, serious injury, or sexual violence, witnessing these experiences first-hand as they happened to someone else, hearing about such an event happening violently or accidentally to a close friend or family member, and recurrent or high-intensity exposure to details of these incidences (e.g., a paramedic or first responder).

However, clinicians working with highly traumatised populations have found the diagnostic scope of PTSD (e.g., van der Kolk, 2014) inadequate when working with people who have histories of chronically enduring highly stressful experiences that did not quite reach the threshold of life-threatening. *Developmental trauma* was a term championed by van der Kolk (2005) and the US-based National Child Traumatic Stress Network (NCTSN). It is generally used to refer to recurrent experiences of abuse, neglect, adversity, and/or hardship experienced throughout one's lifespan and resulting in deleterious outcomes that may include or extend beyond those typically associated with a posttraumatic presentation. Many such adversities, while perhaps not commonly traumatising as an isolated event, tend to be chronic in their occurrence and are captured within the Adverse Childhood Experiences paradigm expanded on in the next section.

2.2.1 Adverse Childhood Experiences

A frequently cited heuristic for trauma exposure is what have been termed Adverse Childhood Experiences (ACEs) (Felitti et al., 1998). ACEs have been defined as potentially traumatic experiences including abuse, household substance misuse, incarceration, and/or mental illness; witnessing violence towards one's caregiver, caregiver separation/divorce, and physical or emotional neglect (Wolff et al., 2018). Over the years, evidence has accumulated for a connection between ACEs and the development of externalising and antisocial behaviours such as conduct disorder, substance misuse, and delinquency in youth (Basto-Pereira et al., 2016; Brown & Shillington, 2017; Duke et al., 2010; Fox et al., 2015; Gray et al., 2021; Meddeb et al., 2023; Stinson et al., 2023; Tsang, 2018). More recent hypotheses regarding links between ACEs and negative health and social outcomes have suggested roles for environmental/social conditions (e.g., community upheaval; civil unrest; war) and generational or historical trauma (Centers for Disease Control and Prevention, 2021).

While the relationship between ACEs and behaviour is not fully understood, researchers have explored several probable pathways. For example, in an adult forensic sample (n = 97), emotional dysregulation among ACE-affected participants was found to have a small to moderate effect on the occurrence of aggressive and antisocial behaviour (Meddeb et al., 2023). It was inferred from the findings that ACEs reduce emotional awareness toward self and others as well as the ability to emotionally self-regulate. This can lead to increased occurrence of aggressive outbursts. Other studies have pointed to more social factors such as behaviour being learned through modelling or desensitisation to violence (e.g., Miley et al., 2020) and an unmet need for belonging (e.g., increased risk of joining a gang or affiliating with delinquent peers; Gray et al., 2023), particularly among ethnic minority youth who may be ostracised and oppressed by a Eurocentric and discriminatory social mainstream (Korol & Stattin, 2022), as

increasing the likelihood of externalising. As clear and oft-cited criteria for documenting potentially traumatic experiences, ACEs were used as a primary reference for measuring trauma exposure throughout this programme of research.

In addition to the 10 core ACEs, racial or ethnic discrimination was another measure of adversity relevant to the current research. This was based on accumulating evidence of the impact of racism and discrimination on the health outcomes of visible minority groups (e.g., Gee & Ford, 2011; Bernard et al., 2020). Naturally, this was thought pertinent when working with Indigenous people, who endure systemic oppression based on ethnicity and for whom discrimination is a pervasive experience (Burrage et al., 2022; Choate et al., 2020; Gone, 2009; Kovach, 2020).

There are, however, limitations to the use of ACEs as an operationalisation of potential trauma. As has been outlined, perspectives on traumatising experiences and what role frequency and intensity plays in the likelihood of related symptomology varies widely (Karstoft & Armour, 2022). The referenced ACEs also exclude broader contextual stressors, such as natural disasters, community discord, or sociopolitical conflict. These wider circumstances may feed into a context of vulnerability that contributes to the likelihood of externalising outcomes (e.g., Bonner et al., 2020). Nonetheless, reference to a limited but defined set of experiences was necessary to focus the scope of the PhD - particularly the systematic reviews that provide a foundation for future studies to expand on.

It should also be mentioned that there is the potential for culture-bound interpretations of trauma. For instance, in cultures where primary attachment relationships are not reserved for primary parental figures, it is possible that the loss of a non-parent caregiver, such as a grandparent, is experienced differently than those where extended family is less involved (Choate et al., 2020). Further, among Indigenous populations, there is the possibility of attachment rupture related to the severing of

cultural and spiritual ties to the land (Kirmayer, 2007; Burrage et al., 2021). These types of adversity may be better conceptualised within the framing of *historical trauma.*

2.2.2 Historical Trauma

Historical trauma was a term first applied to the experiences of Indigenous people by Brave Heart and DeBruyn (1998). Initially they referred to the *historical unresolved grief* experienced by American Indians, encompassing the "pervasive sense of pain from what happened to their ancestors and incomplete mourning of those losses" (p. 64). Taking heed from work pertaining to holocaust survivors, Brave Heart and her colleagues drew parallels to the genocidal efforts of Europeans during North American colonisation. Indigenous historical trauma goes beyond personal grief, encompassing a profound sense of cultural and spiritual loss, referred to as a *soul wound* (Duran, 2006).

A more common and related term is *intergenerational trauma.* That is, trauma passed down from one generation to the next, whether through epigenetics, learning, collective remembrance, or family or community dynamics. However, while intergenerational trauma can occur for a variety of reasons and across many contexts (e.g., the *Cycle of Violence*; Maxfield & Widom, 1996), historical trauma differs in that it specifically pertains to situations wherein a core source of adversity is differences in ethnicity, culture, religion, and/or worldview (Gone, 2023; Hamby et al., 2020).

Gone (2023) outlines four key characteristics of historical trauma, known as the 'four Cs': 1) it is rooted in *colonisation*, 2) it impacts a group *collectively* (i.e., there is a shared understanding of both the vulnerability and loss), 3) the effects are *cumulative,* and 4) they are experienced *crossgenerationally* (Gone, 2023). As can be inferred, not all intergenerational trauma is historical, but historical trauma is innately intergenerational. Though not addressed in the systematic reviews, these concepts, including what was viewed as a source of trauma within First Nations communities,

were considered in the development of studies two (Chapter Eight) and three (Chapter Nine), where First Nations and other diverse cultural groups were recruited.

2.2.3 Ambiguities and Cultural Gaps in Trauma-informed Practice

As awareness of the breadth of traumatic experiences increases, so does the proliferation of information regarding trauma-informed practice (see Hanson & Lang, 2016 for a review). Trauma-informed practice has been inconsistently defined (Bendall et al., 2021; May & Wisco, 2016; Thomas et al., 2019) and evaluated (e.g., Hanson & Lang, 2016; Wathen et al., 2023). While the terminology has been adopted across a multitude of disciplines, the operationalisation is varied (e.g., Dublin et al., 2020; Gray et al., 2021). For instance, it may involve the development of low-impact sensory spaces for those who are sensitive to certain sounds or visual stimulation. It could also refer to adjustments in the presentation of information, such as a teacher using a quieter voice when giving instruction or staff prefacing certain discussions with content warnings. At a systemic level, it may involve mental health support for staff who are at risk of vicarious trauma or to students following the loss of a classmate. Though these changes have been embraced in some form by several institutions across Canada, the United States, and the United Kingdom (e.g., the National Health Service; British Psychological Association; National Center for Trauma-informed Substance Abuse and Mental Health Services Administration; Leitch, 2017), consensus as to what the practice should entail has not been reached (e.g., Avery et al., 2020; Bendall et al., 2021) and the efficacy of such practices remains poorly understood (Hanson & Lang, 2016).

Definitions of trauma-informed practices tend to be broad and vague, generally referring to a mix of awareness (e.g., regarding the prevalence or symptoms of trauma) and action (e.g., creating a safe space, allowing the client to feel heard, providing a sense of control for the client) without clear parameters for implementation. An oft-cited guideline for trauma-informed care is provided by the US-based Substance Abuse

and Mental Health Services Administration (SAMHSA, 2014) who refer to the ‘four Rs’: *realising* how widespread trauma is, *recognising* symptoms and signs in clients, *responding* through mindful provision of services and implementation of policies, and *resisting* the possibility of retraumatisation. Factors identified as helpful in obtaining these outcomes are recognition of cultural, historic, and gender issues, empowerment of disenfranchised populations, collaboration across organisations and disciplines, creating safe spaces, operating in trustworthy and transparent ways, and provision of peer support. Nonetheless, standardisation of terminology and measurable outcomes has been limited (Avery et al., 2020; Thomas et al., 2019; Wathen et al., 2023).

After reviewing available information from key publications and American trauma and government organisations, Hanson and Lang (2016) identified three common implementation pathways for trauma-informed practice: 1) workforce development (e.g., staff training; prevention awareness), 2) provision of trauma-focused services (e.g., trauma measurement at intake; availability of trauma related information), and 3) organisational environment and practices (e.g., interdisciplinary collaboration; trauma-informed policies). Though outlined as an important factor in the SAMHSA (2014) guidance, consideration for ethnic or cultural differences did not emerge as a common practice in the provision of trauma-informed care.

In a more recent review of trauma-informed care in youth counselling, Bendall and colleagues (2021) identified only three publications that referred to considerations for either gender or culture of the client (e.g., providing multi-lingual screeners; consultation with a cultural specialist). Broadly problematic for meeting the needs of diverse populations, this is particularly relevant to trauma-informed approaches applied with Indigenous people. Historical trauma’s pervasive and wholistic impact suggests that approaches to meeting the needs of these populations may deviate somewhat from those more common to Western-centric institutions (e.g., Browne et al., 2016; Cullen et

al., 2022). For example, engaging Elders or professionals from an Indigenous background may be necessary to create cultural safety and reduce potential for retraumatisation in mental health settings (Cullen et al., 2022). Thus, trauma-informed practice represents another domain where a lack of consensus and consideration for the needs of Indigenous people exists and needs to be addressed.

2.3 Developmental and Acute: Models and Theories of Trauma and Attachment

2.3.1 Trauma Theories

As the impacts of trauma became more obvious in the aftermath of the Vietnam War, treatment and understanding caught the attention of researchers across the social and medical sciences (van der Kolk, 2014). Many theories and explanatory frameworks have arisen since, including Shapiro's *Adaptive Information Processing Theory* (AIP; 1994), Foa and Kozak's *Emotional Processing Theory* (EPT; 1985; as cited in Foa et al., 2006), and van der Kolk's depiction of *Developmental Trauma Disorder* (2005). AIP purports that symptoms related to trauma are physical and emotional manifestations of unprocessed memories (EMDR Institute, 2021). When a traumatic incident occurs, a person may be unable to consolidate it within the rest of the memory network. This results in elements of the memory being stored across disparate areas of the brain, which can be triggered unexpectedly when activated. This causes posttraumatic symptoms such as panic, night terrors, nightmares, flashbacks, and somatic issues. The ability to reprocess and integrate the traumatic memory is the focus of treatment. Emotional Processing Theory is fundamentally cognitive-behavioural and refers to *fear structures* that can be either normal or pathological (Foa, 2006). Pathological fear structures represent maladaptive cognitive connections between generally safe stimuli (e.g., a certain smell or physical environment) and a sympathetic nervous system response. The internal representation of the feared object is distorted through a traumatic experience, which creates a heightened stress response. This connection is

thought to be reinforced by avoidance, both physical and mental, of the feared stimuli. Extinction of this response is achieved by activating it in a situation that provides alternative and incompatible information, such as safely walking down an alley where one was previously assaulted.

In both AIP and EPT, the experience of acute traumatic incidences is assumed. In EPT, for a fear structure to be built, an association must be made between a given stimulus and a fear response. For example, having a close friend injured or killed in a car accident or being attacked by a dog could result in a heightened fear response when getting into a car or seeing a dog on the street. Similarly, AIP assumes the occurrence of traumatic experiences, whether explicitly identifiable or not, that have been consolidated to memory in a fractured way. Proponents of both theories acknowledge there may be chronic exposure to stressors, but traumatisation itself is typically depicted as a defined, memory-centric process. This does not easily apply to historical trauma, wherein stressors are more pervasive and ongoing, and may include components such as loss of access to cultural or linguistic practices (Gone, 2009; Hamby et al., 2020; Linklater, 2017), housing instability (Bonner et al., 2020), or racial discrimination (Holmes et al., 2024). While individual experiences and memory may contribute to the development of trauma-related symptomology in such cases, the impact is enhanced and broadened by its cumulative nature and collective reach. Some incidences are direct and experiential, but other aspects are societal (e.g., discrimination; community disorganisation), systemic (e.g., barriers to spiritual care; inequitable socioeconomic opportunities), and intergenerational. Thus, AIP and EPT are inadequate explanatory frameworks in cases of historical trauma. Further, treatments based on these theories, such as Eye Movement Desensitisation and Reprocessing (EMDR) (Shapiro, 2019) and exposure therapy, have not commonly been applied to experiences without an

individual, experiential focus. While modification of EMDR protocols to suit these circumstances is in progress (Melo, 2023), they are in their infancy.

Perhaps more applicable to the concept of historical trauma, Developmental Trauma Disorder (DTD) is a diagnostic framework that outlines four-part, causally linked criteria for the posttraumatic presentation seen in those with cumulative traumatic experiences (van der Kolk, 2005). The first element is *exposure*, which involves first or second-hand interpersonal adversity including abandonment, abuse, coercion, threats, witnessing household violence, emotional manipulation, and/or any experience that brings about the internal experience of emotions such as shame, betrayal, or fear. A second key aspect is *repeated dysregulation* across somatic, affective, cognitive, relational, or behavioural domains in response to these cues. This pattern informs *altered attributions and expectancies*, which can translate into learned helplessness, a lack of trust, poor self-esteem, or insecurity and result in *functional impairment* in work, school, and interpersonal relationships. The experiences and symptomologies that fall under the DTD umbrella are very comprehensive. However, historical trauma is purported to extend beyond the affective, cognitive, and physical (Brave Heart & Debryun, 1998; Gone, 2023), involving spiritual and cultural injuries borne by the community and individual simultaneously. In addressing these facets of colonial traumas endured by Indigenous groups, the fundamentally atheistic and individualistic nature of the reviewed trauma theories fall short.

2.3.2 Attachment Theories

Attachment theories, given their relational focus, are *prima facie* more applicable to Indigenous historical trauma than the individual trauma theories outlined above. Though not directly stemming from the trauma literature, attachment theory is commonly referenced when discussing the impact of adversity (e.g., Kerig & Becker, 2015; Choate et al., 2020) and approaches to treatment (e.g., Lindberg & Zeid, 2018).

Bowlby's (1969) early attachment work focused on the biological and behavioural functions of attachment between children and their maternal caregivers and response to disruption and re-establishment of these connections. Ainsworth and colleagues' (2015) parallel explorations of attachment considered the lasting impact of interactions between caregiver and child. Experimental observations were conducted with mother-child dyads in what was termed the *strange situation*, wherein toddlers would be briefly left in a room with toys and an unknown adult. Their reactions to the new environment alongside both the departure and return of their caregiver were observed and informed the labelling of four primary styles of attachment: anxious, avoidant, secure, and disorganised. Anxious children were hesitant to explore, very upset when their caregiver left, and difficult to comfort on their return. Avoidance was indicated by a lack of exploration but being neither upset when the caregiver departed nor interested in their return. Disorganised attachment was evidenced by fearful, oscillating, or even dissociative responses to the caregiver's departure and return. The securely attached children explored readily in the presence of their caregiver and were both upset by their leaving and comforted on their return. Interpersonal developmental traumas are hypothesised to increase the likelihood of insecure attachment styles and propensity for behavioural issues into adulthood (e.g., Kerig & Becker, 2015; Lindberg & Zeid, 2018). While offering a compelling model of social development, attachment theory is decidedly Eurocentric in its focus (Lindstrom et al., 2016). The universal application of attachment theory has been criticised by scholars with expertise in Indigenous culture and norms, as diverse familial structures that are more common among such groups may be maligned within a classic attachment paradigm (Choate et al., 2020).

The development of First Nations children has been observed to occur across "nuclear, extended, clan, community, nationhood, and cultural families" (Lindstrom & Choate, 2016; p. 48). Elders and grandparents also generally play a more significant

role in the lives of children in such communities (Choate et al., 2020). They may be viewed as the source of cultural, spiritual, and parenting guidance, acting as a caregiver and mentor to the child and parent alike. Further, both blood and close, non-kinship relations can be perceived and referred to as aunts, uncles, or cousins. Single parent families cohabitating with extended family members, such as aunts, uncles, or grandparents is very common in First Nations communities. Legal arrangements such as marriage, divorce, and formal adoption are also less common among First Nations people, not being a part of traditional practices (Lindstrom et al., 2016). Further, the natural and spiritual world are seen as extensions of familial and interpersonal connections. That is, Indigenous people may view their relationship with nature and the Creator (or God) as being familial bonds (e.g., Burrage et al., 2021; Choate et al., 2020). In addition to the implications for other extractive industries, these differences have led to conflict with settler social services systems. Further, a legacy of the residential school system, which so frequently alienated children physically and culturally from their families and homelands, is the disruption of attachment. It seems erroneous to generalise theories based primarily on intact, physically proximate families and communities to those who were physically removed from not just caregivers, but their languages, customs, and traditional homelands.

Fundamental differences in family structure and caregiving, assessment, and intervention informed by attachment theory and applied by settler social workers and psychologists have reinforced inequities and resulted in overuse of child protection measures (Choate et al., 2020). Privileging the importance of the nuclear family and mother-child connection and disregarding the contribution of extended family has played a significant part in the removal of First Nations children from their families. Little research has focused on outlining the differences in child-rearing styles among First Nations groups and thus failed to test the relevance of attachment theory in these

contexts (Lindstrom et al., 2016). This reality alongside Western resistance to Indigenous epistemology has resulted in a harmful presumption of universality.

Another oft-cited framework with implications for attachment is the *biosocial model.* It consists of two primary factors: a biological predisposition to emotional or sensory sensitivity and an invalidating social environment (Linehan, 1993). Often applied to the treatment of Borderline Personality Disorder (BPD), the biosocial model posits that some people are biologically inclined to have more substantial affective and physiological responses to environmental and interpersonal adversity, such as frustration or conflict. People who are more sensitive in this way tend to have more intense reactions, difficulty regulating their emotions, and need more time to return to baseline following a stressor. This dysregulation has been attributed to a variety of biological factors including neurochemical or neurostructural differences and genetic vulnerabilities (see Crowell et al., 2009 for a review). When the dysregulation is consistently met with rejection, abuse, or invalidation rather than support, a child learns to try and inhibit or internally manage their emotions (Crowell et al., 2009). Maladaptive coping strategies may be adopted in the form of externalising (e.g., substance misuse; self-harm) or internalising behaviours, sensation-seeking, and volatile relational dynamics. Insecure and disorganised attachment styles have been found to correlate with the presence of BPD characteristics (e.g., Agrawal et al., 2004; Badoud et al., 2018). While causality has not been established, the biosocial model and attachment theories could converge in that the relationship between caregiver and child is likely compromised by the emotional invalidation experienced by the child and subsequent behavioural issues the child may develop in attempting to regulate their emotions.

Studies have demonstrated racial and ethnic differences in the prevalence of adverse birth outcomes and biological predisposition for emotional dysregulation (e.g., Alhusen et al., 2016). It is hypothesised that prenatal stressors related to discrimination

and socioeconomic challenges can affect both the stress hormones and basic prenatal health of mothers (Grant et al., 2008; Schwarze et al., 2013). This is thought the cumulative effect of racial stressors, community challenges, maladaptive coping strategies, and inequitable access to healthcare (Alhusen et al., 2016; Holmes et al., 2024). Holmes and colleagues (2024) described the racial stress reaction as comprised of "physiological (e.g., heart racing, eyes narrowing), behavioral (e.g., fight or flight), and emotional response (e.g., feeling fear or unsafe)" (p. 13.2) to maltreatment based on ethnicity. Exposure to chronic stress of this kind has clear implications for prenatal health and foetal development.

Further, significant comorbidity has been noted between traumatic experiences and the diagnosis of BPD (Bozzatello et al., 2021; see Porter et al., 2020 for review). Porter and colleagues (2020) noted that emotional abuse and neglect were consistently related to a BPD diagnosis and that those diagnosed were 3.15 times more likely to report having experienced ACEs. Given what has already been reviewed (see Chapter One) regarding the prevalence of ACEs among Indigenous groups, it seems biosocial factors could be significant for the development of symptomology in these populations. While BPD and other personality disorders cannot be diagnosed in youth, studies have demonstrated an increased presence of traits predictive of later diagnosis among adolescents and young adults who offend (e.g., Bozzatello et al., 2021). However, like the other theories reviewed, studies that have focused on biosocial factors and included Indigenous experiences in their samples have been few and largely descriptive (e.g., Grant et al., 2008). Further, there is no known mention in the literature of historical or intergenerational factors beyond prenatal stress. Therefore, another aim of the present research was to explore the probable connections among Indigenous experiences of discrimination, biosocial factors, and the potential for externalising behaviour.

2.4 Theories of Externalising Behaviour

2.4.1 Disambiguating Externalising and Antisocial Behaviour

Problematic behaviour is often categorised in one of two ways: 1) whether it is directed outward (i.e., externalising) or inward (i.e., internalising) (Achenbach, 1978; 1991) and 2) whether it transgresses a legal or contextual rule. An *externalising behaviour* is typically more readily observable and directed at objects or others (e.g., verbal or physical aggression, lying, stealing, and rule breaking) (Liu, 2004). On the contrary, a maladaptive behaviour that is indicative of psychological distress, but not outwardly focused, may be referred to as *internalising behaviour* (Achenbach, 1978; Reynolds & Kamphaus, 2015). Examples might include negative self-talk, worrying, irritability, and isolation from peers. The term *antisocial* or, more recently, *dissocial behaviour*, while overlapping definitionally, is more commonly applied to behaviour falling in the domain of rule-breaking, delinquency, and criminality (e.g., Farrington, 2015; Kerig & Becker, 2015). The present study focused primarily on externalising and antisocial behaviour, terms which are used interchangeably at points throughout the paper to refer to acts of verbal or physical aggression, theft, lying, and other types of observable criminal or non-criminal rule breaking. Essentially, while only select externalising behaviour is typically considered delinquent or anti/dissocial, most antisocial and delinquent behaviour is externalising. Externalising was found to be a more inclusive term when navigating between educational and forensic literature, as behavioural measures used in school and clinical contexts often use this term (e.g., BASC-3; Reynolds & Kamphaus, 2015). Thus, it was the main term utilised in later studies when samples included people from mixed educational or professional backgrounds. Explanatory models and theories pertaining to these behaviours are reviewed in the next section.

2.4.2 Theories of Externalising and Antisocial Behaviour

Three pertinent conceptual frameworks for externalising behaviour that reaches the threshold of delinquency include a developmental model put forth by Farrington (1992; 2003), *Control Theory* (Reiss, 1951; Hirschi), and *Strain Theory* (Merton, 1938; Agnew, 2001). Farrington's developmental approach emerged from the Cambridge Study in Delinquent Development (2003). Outcomes suggested that if a youth had internalised beliefs that offending was wrong, good impulse-control, academic success, financial security, and were of average intelligence, they were less at risk to engage in delinquency. In more recent years, this model has been expanded into the *Integrated Cognitive Antisocial Potential* (ICAP; Farrington, 2015) theory, wherein the key construct is *antisocial potential* – the likelihood of engaging in offending behaviour. This model integrates long-term risk factors (e.g., biological or developmental) and short-term, dynamic factors (e.g., opportunity, financial strain), pulling together elements of strain, control, learning, and decision-making models. Notably, many risk factors outlined by this and other developmental models of delinquency overlap with ACEs, as listed above (Farrington, 1989; 2015; Patterson et al., 1989). Additional risk factors include low socioeconomic status, growing up in low-income neighborhoods (Farrell & Bruce, 1997; Jiang & Dong, 2022; Powell & Davis, 2019); and association with delinquent peers. However, the lack of diversity of validation samples entails that the theory primarily explains the behaviour of what Farrington refers to as "lower-class males" (2015; p. 108), calling generalisability into question.

Control theories broadly focus on the role of self-control, rule enforcement, and internalisation of social norms (Reiss, 1951). Gottfredson and Hirschi (1990) expanded on this to emphasise the importance of the individual's bonds to society and explored the changing influence of family, friends, and society throughout the lifespan. An obvious limitation of control theory insofar as how it applies to Indigenous youth being

raised in a colonial context is that these populations have historically justified opposition to internalising the social norms of the dominant culture (Gone, 2023). Exploration of the relationship between social control theory and behaviour that accounts for ethnic or cultural differences has been limited, but results have demonstrated differential effects (e.g., Perguero et al., 2016; Fix et al., 2021). In one study looking at the school behaviour of youth, ethnic differences were found in the relationship between participants' self-rated school commitment and attachment and misbehaviour (Perguero et al., 2016). While higher levels of school connection were found to correlate with better behaviour overall, the relationship was weaker for Black students than Asian, Hispanic, or White participants. Notably, the students involved in this study were not all attending the same schools and, thus, the authors hypothesised that the adversity and adjacent, oppositional culture present in the Black communities may contribute to an overall lack of connection with mainstream social norms. Similarly, Fix and colleagues (2021), finding that self-control had less predictive power for the behaviour of Black adolescents than parent attachment, concluded that community norms were a factor. That is, ethnic minority groups that are more likely to live in poverty, have poorer quality education, less access to employment opportunities, and less political power, may be understandably less invested in the prevailing social norms (e.g., Anderson, 1999). Black Americans are not unlike Indigenous groups insofar as experiences of cultural subjugation. While behavioural interventions based in control theory may involve encouraging individual buy-in to social norms, this could be perceived as forced assimilation within a decolonising framework (Linklater, 2017).

Similarly, strain theories outline societal pressure to achieve success as a potential causal factor in criminality among those for whom conventional markers of "success" were out of reach (Merton, 1938). Agnew (2001) extended this work, titling the revision the *General Strain Theory* (GST), and identified four modifiers that were

likely to increase strain: when economic strife is 1) seen as unjust, 2) experienced as intense or high-frequency, (3) is perceived as outside of the person's social control (e.g., prejudice within a community; breakdown of family structures), or (4) criminal coping is socially incentivised (e.g., violence garnering respect within a community). In a recent comparison of the applicability of Strain, Social Cognition/Learning, Control, and Trauma theories of crime to the experiences of Black women, Trauffer (2020) concluded that GST was best equipped for explaining offending both overall and when accounting for the role of trauma. Trauffer analysed data from a longitudinal study of Black children who had been abused and neglected. She reviewed findings from two interviews conducted at approximately age 30 and 40, including only those who participated in all three waves of data collection (n = 863). Interviews involved measures or questions regarding lifetime victimisation and trauma exposure, general demographic factors (e.g., employment and marital status), as well as formal arrest data. Interview data was organised based on how topics mapped onto Strain, Social Learning, Control, or Trauma theory factors. For example, Strain Theory variables included abuse or neglect, lifetime victimisation, childhood poverty, and instability in work, residence, or education. Control Theory was flagged in mentions of neglect, impulsivity, social involvement, and marital status and Social Cognition or Learning would be suggested by exposure to violence or crime. Finally, trauma theory was flagged in cases where any mention of abuse (including domestic violence), trauma victimisation, and witnessed violence. While there was some overlap within the 'blocks,' Strain Theory was identified as best identifying risk factors pertinent to later criminality.

Supportive of strain theory, the economic and social realities of many minority youth increase the likelihood of alienation from social institutions and opportunities within mainstream society (e.g., Podgurski et al., 2014). They are less likely to enjoy same economic privileges as their white peers. Further, given limitations related to both

their age and socio-political standing, they may rightly view this ‘strain’ as outside of their control. In Canada, historical and present-day traumas of colonisation have resulted in First Nations children being statistically more likely than non-Indigenous peers to be exposed to risk factors such as limited educational opportunities and housing instability (Gone, 2013; Ross et al., 2015; Linklater, 2017). It is well established that barriers have existed and continue to exist for First Nations people in achieving the goals associated with success in Canada (Burrage et al., 2022; Linklater, 2017; Sasakamoose et al., 2017). Compounded by other risk factors, it seems reasonable that a higher propensity for externalising behaviours would be present in these circumstances.

Nonetheless, while the models and theories reviewed provide insight into the probable interplay between physiological, biological, environmental, affective, cognitive, and developmental factors in predicting externalising behaviour, Indigenous representation and consideration is absent. There is little doubt that First Nations people would lack affinity for the social norms of a culture that has been thrust upon them, and it is hard to imagine a less just imposition of financial strain than that endured under colonisation. That being said, the limited exploration of Indigenous perspectives in the literature means little is known regarding risk and protective factors that may be unique to these populations. In the next section we turn to cognitive-behavioural explanations of externalising.

2.4.3 Cognitive-behavioural Theories of Externalising Behaviour

There are several cognitive-behavioural theories proposed to explain and treat challenging behaviour. Such models include *Cognitive Theory* (more contemporarily referred to as *Cognitive-Behavioral Theory*; Beck et al., 1979) and *Social Cognitive/Learning Theory* (Bandura, 1986) alongside more decision-focused paradigms, such as *Social Information Processing* (Dodge & Crick, 1994) and the *Theory of Planned Behaviour* (Ajzen, 1991). One of the earliest and most established

cognitive-behavioural models, Beck identified that *cognitive distortions* often modulated his patients' emotions and behaviours (Beck et al., 1979). These distortions generally manifested in automatic and unfounded thoughts about oneself, others, or their environment (e.g., Everyone is out to get me; I can't get anything right). By challenging and altering these thoughts, as well as the beliefs that underly them, it was possible to change both emotional states and behavioural outcomes. Bandura's Social Cognitive or Social Learning approach identified the important roles of social modelling and self-efficacy, or the belief one has in their ability to perform a given behaviour or achieve a desired outcome on behavioural development (1986). Early explorations related to this theory focused on the *Cycle of Violence* (Maxfield & Widom, 1996), which posits that those who observe or experience violence are more likely to engage in it themselves. It informed later theorising regarding the learned nature of aggression. Integrating and expanding on aspects of both theories, Social Information Processing and the Theory of Planned Behaviour detailed the various sources of information young people may pull from when making behavioural choices (Ajzen, 1991; Crick & Dodge, 1994). Both models include roles for self-efficacy, often developed by watching the conduct of age and ability-alike peers and any resulting consequences. Like factors presented in Control Theory (Gottfredson & Hirschi, 1990), community norms and the group response to delinquency was weighted against one's own and familial endorsements of antisocial behaviour.

The relevance of cognitive and behavioural theories may be captured by what Anderson identified as the *Code of the Street* (1999). Conducting an ethnographic study of under-resourced Black neighbourhoods in Baltimore, Anderson observed prevalent attitudes and behaviours reinforcing the use of aggression to establish social order among marginalised populations. He hypothesised that the lack of trust, engagement, and representation these communities felt they had within political and judicial

institutions alongside their socioeconomic struggles gave rise to a secondary, respect-based social economy. Children grew up seeing few paths to achieve economic security and purpose, often having limited educational opportunities and stressful household dynamics. Some of the adults around them modeled maladaptive coping strategies and antisocial approaches to obtaining financial and physical security. Broadening the theory, Moule and Fox (2021) conducted a meta-analysis of 20 studies examining the connection between 'code of the street' belief and offending in diverse populations (i.e., 52.6% primarily non-white; 52.6% adolescents; 68.4% violent offenders) and a consistent, modest effect size was documented. It was theorised that the loss of agency, upward mobility, and cultural gaps within disenfranchised communities conspire to elevate interpersonal respect as a core currency. Indigenous youth may certainly see aggression and criminality modelled as pathways to economic stability in some communities (Brockie et al., 2015; Brownridge et al., 2017; Gone 2023). However, Indigenous samples have not been included in the validation of these theories.

Significant efforts have been made to validate the use of CBT and related therapies across different ethnic groups, demonstrating mixed outcomes (e.g., see Amati et al., 2022 and Cougle & Grubaugh, 2022 for recent reviews). Amati and colleagues (2022) evaluated effectiveness outcomes for the NHS-based Improving Access to Psychological Therapies (IAPT) and found that non-White participants tended to see less improvement after using these services. They cited potential moderating effects of socioeconomic status, employment, severity of mental health difficulties, and linguistic barriers as probable contributors, noting that differences were lessened when these variables were controlled for. However, treating probable symptoms of systemic inequity, such as socioeconomic status, as simple confounds and then labelling CBT an effective intervention across ethnic groups seems a glib disregard for overarching issues of systemic oppression (Gone, 2023). Further, while a systematic review of meta-

analysis suggested that CBT is effective regardless of ethnicity (Cougle & Grubaugh, 2022), a significant limitation was noted in that most reviewed studies lumped together non-White participants into a single category for analysis. The assumption of statistical homogeneity among highly diverse ethnic groups is obviously problematic. Cougle and Grubaugh (2022) also remarked on the lack of data from Indigenous populations in the reviewed papers, noting their inclusion in only those studies looking at treatment for depression, and stating that they amounted to less than 25% of the sample in any study. Assessment of the efficacy of unaltered cognitive behavioural treatment with Indigenous populations has indicated reduced effectiveness (Acoose, 2012; Linklater, 2017; Sasakamoose et al., 2017), though culturally adapted versions have shown promise (e.g., Nowrouzi et al., 2015; Dingwall et al., 2023). A recent review focusing on Indigenous-specific adaptations to CBT interventions with Indigenous youth (Kowatch et al., 2019) found only 10 relevant interventions, four of which addressed trauma-related symptoms. Though reduced symptoms were noted across the interventions, none involved measures related to externalising or antisocial behaviour. The overall underrepresentation of Indigenous people in the reviewed research and implications for the PhD are summarised below.

2.5 Addressing Indigenous Absence in Theories of Trauma and Externalising Behaviour

The theories and models summarised thus far offer a substantial amount of information about potential connections between trauma and externalising behaviour but offer little in the way of insight specific to Indigenous populations. The intergenerational and systematic nature of colonial traumas have instilled patterns of adversity that are pervasive and poorly accounted for (Gone, 2009; Weatherburn & Holmes, 2016). As seen throughout, a role for historical trauma and potential impact on spiritual and cultural domains are underexplored factors. It is certainly true that abuse

and neglect may reduce family and social bonds as sources of emotional support and resilience for Indigenous youth (e.g., Acoose, 2012; Burrage et al., 2022). However, they are further contending with the existential injury that has been inflicted upon their communities and culture more holistically (Gone, 2009). We must consider the full measure of obstacles faced in pursuing healing while living within colonial systems. The reviewed theories fall short of addressing the magnitude of the transgression. As phrased eloquently by Tuck and Yang, "… the disruption of Indigenous relationships to land represents a profound epistemic, ontological, cosmological violence" (2012, p. 5). When confronted with this reality alongside the broader, intergenerational impacts of historical trauma outlined by Gone (2023), the reviewed behavioural, developmental, and trauma theories simply fall short. It is hypothesised that the largely cognitive and individualist focus of the scope and treatments associated with these theories are at odds with the more collectivist and holistic worldviews underlying Indigenous cultures; a proposition explored in more depth in Chapter Three.

CHAPTER THREE: THE CONVERGENCE OF TRAUMA, TREATMENT, AND CULTURE

3.1 Structure of the Chapter

This chapter will outline the ways culture can shape the experience and treatment of trauma. First the differences in prevalence and type of ACEs are summarised followed by a discussion of an alternative, culturally informed ACEs model. Then the concept of individualism versus collectivism is introduced and explored in its application to adverse experiences and mental health treatment. The latter half of the chapter is dedicated to an overview of Indigenous perspectives on trauma and its sequelae as well as traditional and integrative healing practices. This transitions into Chapter Four, where the questions that guided this research are outlined.

3.2 Cultural Factors

As can be inferred from the information presented so far, there are several ways in which cultural background, trauma, and treatment interact. Notably, some researchers have petitioned for the unilateral recognition of discrimination and racism as ACEs (Cronholm et al., 2015; Bernard et al., 2020). Being that most theories of behaviour and offending have focused on individual and environmental risk factors as largely distinctive categories, the inclusion of discrimination would involve the acknowledgement of the interaction or overlap. That is, while most ACEs would be considered primarily environmental, racism seems to have qualities of both an environmental and individual risk factor: it is the person's appearance (an individual difference) that, in a discriminatory environment, increases the likelihood of an adverse experience. In the next section an emerging model of ACEs that embraces the unique experience of culturally diverse groups is summarised.

3.2.1 The Culturally-Informed Adverse Childhood Experiences (C-ACE) framework

Proposing a culturally informed model of ACEs, Bernard and colleagues (2020) intended the C-ACE to address observed sociocultural disparities in adversity exposure. The C-ACE framework embeds the occurrence of ACEs within a context of racism-informed social conditions, biopsychological vulnerability, and historical trauma. There is also an acknowledgement of the reciprocal relationship between negative mental health outcomes (e.g., depression, PTSD), vulnerability, social conditions, and increased risk of additional ACEs. That is, emphasising that the ACEs and negative health outcome relationship is not a unidirectional cause and effect, as implied by the dose-response paradigm frequently adopted by ACE researchers (e.g., Briscoe-Smith & Hinshaw, 2006; Brown & Shillington, 2017; Connolly, 2020; Delisi et al., 2017). Assessment using the principles outlined in the C-ACE would include measures of social and systemic experiences, such as overt or covert racism, micro-aggressions, barriers to healthcare, education, employment, or housing, and general socioeconomic disadvantage. Further, as touched on in the review of biosocial theory (Linehan, 1993), transmission of biopsychological vulnerability (i.e., hypervigilance) and other stressors related to historical trauma would also be accounted for. The C-ACE's significantly more robust consideration of historical trauma is an important step toward understanding the full scale of what is required to best support Indigenous youth.

In North America, children from Indigenous and other minority backgrounds are more likely to experience ACEs than their peers (Burnette & Renner, 2017; Edwards et al., 2022; Felitti et al., 1998; Richards et al., 2021; Serin et al., 2011; Trauffer et al., 2020). Richards and colleagues (2021) analysed ACE data from a sizeable sample (n = 34, 653) of Americans, concluding that Native American participants had significantly more ACEs than any other minority ethnicity group (i.e., Black, Asian, and Hispanic), and at rates 46% higher than White participants.

The reviewed findings (Richards et al., 2021) align with other studies demonstrating that ACEs strongly linked to externalising behaviour, such as abuse, neglect, and maltreatment or family mental health challenges (Fergusson & Lynskey, 1997; Frick et al.,1994; Muniz et al., 2019; Waschbusch, 2002), occur with disproportionate frequency in communities contending with historical trauma (Brave Heart & DeBruyn, 1998; Gone, 2023). This reality seems well-represented by the C-ACE's recognition of historical trauma and racism-informed social conditions as intensifying the risk and effect of adversity. For instance, for Indigenous young people, many characteristics that could be considered individual risk factors within a developmental model of offending (e.g., Farrington, 2015) are in fact the result of inequalities in socioeconomic status and community instability resulting from colonisation (Acoose, 2012; Gone, 2023). Traits like delayed language development (Seguin et al., 1995); impulsivity, truancy, or low academic commitment (Farrington, 1989; Hinshaw, 1992) may be considered individual differences that increase risk. However, many children who are living on First Nations reserves are growing up in poverty or in otherwise unstable living situations due to poor municipal funding, limited employment opportunities, or caregiver struggles with mental health and addiction. They may, as a result, lack access to literacy resources, have fewer interactions with carers (e.g., those working long hours or commuting), and struggle to maintain a schedule conducive to school attendance, which has a clear knock-on effect on peer relationships and academic engagement. This issue can be exacerbated by inequitable local access to educational opportunities and language resources. In Northern Saskatchewan, for example, it is not uncommon for families to have a linguistic generational gap wherein grandparents and parents are partially or fully bilingual in a traditional language while a child speaks only English. Within the C-ACE framework, each of these examples could be more accurately accounted for as the result of historical

trauma that enhances both the risk and experience of adversity. Such factors should be viewed as important moderators and mediators and are accounted for within this model.

Though the C-ACE model provides a more robust explanation of the occurrence of ACEs in cultural minority groups, it does not touch on potential differences in world view. These are important to consider in development of culturally valid, trauma-informed assessment and interventions. Pertaining to Indigenous groups, the individualist-collectivist divide has been found particularly relevant and is explored next (Kirmayer, 2007).

3.2.2 Collectivism and Individualism

A key way in which most contemporary Western models of trauma and treatment fail to address the needs of culturally diverse groups is the individualisation of psychological experience. Western Europeans and their diaspora across Canada and the United States as well as Korean, Japanese, and Black Americans have been shown to score higher on measures of individualism (Oyserman et al., 2002), which is marked by a focus on one's own goals, self-betterment, opinions, and preferences (Singelis et al., 1995; Triandis & Gelfand, 1998). Individualism and collectivism have been theorised to differ in four domains: 1) emphasis of on characteristics of self as individual versus self as a member of a group, 2) prioritisation of individual versus group goals, 3) emphasis on transactional as opposed to communal relationships, and 4) the valuing of norms and attitudes in determining social behaviour (i.e., tendency to conform) (Triandis & Gelfand, 1998). Self-reliance and independence are prized within individualistic cultures and people will tend to make decisions with consideration only for the costs or benefits to themselves and perhaps members of their immediate family. There are also implications for emotional expressiveness, as individualism values openness and the sharing of feelings and perspectives. In contrast, collectivists tend to prioritise in-group harmony and success, which is at times better maintained through withholding contrary

views, internal modulation of emotion, or sacrificing for the collective good. Many cultures tend to rate more highly on collectivist measures or have been observed to have more collectivist characteristics, including Chinese, Indian, Latin Americans (Yeh et al., 2006), Sudanese (Copping et al., 2010), and most Indigenous groups (Burrage et al., 2021; Gone, 2023). They are more likely to focus on contributing to the achievement of group goals or avoiding collective losses. Collectivists hold themselves accountable to duties and prioritise their responsibilities to the group. These differences are significant and permeate many aspects of social and psychological experience.

There are several ways differences in individualist and collectivist views, attitudes, and priorities can affect the experience and treatment of trauma. First, those who are a part of a collectivist culture may be more aware and sensitive to obstacles faced by their families and community members. In the Cree and Dene communities of Northern Saskatchewan, for example, funerals and mourning rituals often include everyone living on the reserve, with schools and businesses closing to facilitate involvement. As they are more attuned to the needs of those around them and the way in which others are connected to their support system, collectivists may be more likely to experience grief or worry when a friend, relative, or neighbour is suffering. Second, family and elders are viewed as important sources of support and wisdom in many collectivist cultures (Yeh et al., 2006). Thus, when someone is struggling, problem-solving or therapeutic supports may be expected to include family members or key community figures who a Western mental health worker would not normally consider inviting into the treatment (Kirmayer, 2007). In addition to these differences, the focus in collectivism of maintaining harmony and balance may discourage members of the group from changing or asserting themselves in ways that could create interpersonal conflict. Therefore, they may be inclined to mould themselves to the needs or preferences of the group rather than asking to be accommodated (Triandis et al., 1998;

Yeh et al., 2006). Some cultures may view negative events as the work of a higher power and feel compelled to engage in faith-based rituals rather than attempting to alter a given situation. While professionals educated in Western, individualist practices may see these as maladaptive strategies, the adaptiveness of coping must be evaluated within the appropriate cultural context (Kirmayer, 2007).

3.3 Indigenous Perspectives on Trauma, Behaviour, and Treatment

From what has been outlined so far, it follows that Indigenous people could hold views on trauma, its influence on behaviour, and the ways to best approach recovery that differ from the Western mainstream. In this section, we take a closer look at some aspects of Indigenous worldview and traditional practices that have been earmarked as potential pathways for the treatment of trauma. For instance, while Western psychology centres the self (i.e., egocentric), Indigenous cultures tend to centre nature (i.e., ecocentric) or spirituality (i.e., cosmocentric). It is important to note that Indigenous cultures differ significantly in their traditions and epistemologies, but some shared principles common to North American Indigenous groups have been acknowledged (e.g., Kovach, 2020; Sasakamoose, 2017). In the following sections, Indigenous worldviews, epistemologies, and traditional understandings of well-being are described.

3.3.1 Psychology's Myopia: Egocentric Limitations in Indigenous Contexts

A major criticism of modern psychological theory and treatment when applied to other cultures is its fundamentally egocentric assumptions, centring the self as a priority and agent of change (Kirmayer, 2007). As expanded on previously, individualism prioritises the awareness and discussion of emotions and thoughts and the acting upon these private experiences to affect change in one's sphere of social or political influence. It can inform both the way people relate to one another socially and how resources are distributed, with an emphasis on the accumulation of resources for oneself and close inner circle being a reward for pursuing self-advancement. These priorities

frequently act in direct opposition to the those that underly Indigenous belief systems (Burrage et al., 2021; Gone, 2023).

Indigenous peoples have been observed to favour *sociocentric, ecocentric,* and *cosmocentric* ontologies, which deemphasise the self (Kirmayer, 2007). Members of sociocentric cultures view people as responsible foremost to the larger community and fulfilling the duties and roles therein. Doing what is required to be a good child, parent, and community member is valued more highly than one's own preferences or individual goals. Ecocentrism places the relationship to nature at the forefront, encouraging reciprocity with the natural world. Balance and harmony are prioritised, and poor mental or physical health may be attributed to dysregulation within these systems. Shamanistic healing methods, medicine people, and Indigenous healers may be consulted for support that involves plant-based medicines or consultation with non-human entities (Linklater, 2017). Related to the animistic elements of this connection, cosmocentrism prioritises one's embeddedness within the spiritual world (Kirmayer, 2007). Ancestral wisdom and the influence of spirits may be sought to provide solutions to everyday challenges. Life's obstacles might be attributed to fatalistic causes or the need to appease or ward off wicked spirits and are not always viewed as consequences of an individual's decisions or characteristics.

With reference to Kirmayer's (2007) work, Burrage and colleagues reviewed and synthesised 40 narrative accounts of residential school survivors from Northern Saskatchewan that had been documented by the Truth and Reconciliation Commission of Canada (2022). Four themes emerged: *losses of connection, individual losses, broader impacts,* and *types of healing.* Loss of connection pertained to family, community, language, and culture. The restrictive environment of most residential schools, in addition to children usually being removed from family and community to attend, prohibited transmission of traditional culture or language, whether verbally,

through ceremonial practices, or in one's appearance (e.g., children who had their hair kept traditionally long had it forcibly cut) (Acoose, 2012; Brave Heart & DeBruyn, 1998; Richards et al., 2021). As adults, some survivors reported reenacting these patterns in their personal lives, thus compromising family connections as well. These were clear impacts on the sociocentric elements of this culture. Individual losses, though making up only a small portion of the discourse, spanned several areas. Health and mental wellness were frequently mentioned, including alcoholism, chronic illness, and anger. Loss of voice was also touched on, as participants felt compelled to suppress their thoughts and feelings about residential school. Meaning was another area where participants identified losses, as they felt disconnected from belief systems and struggled to integrate their residential school experiences with overarching world views. This aligns more closely with the cosmocentrism of Indigenous groups, as the banning of spiritual and cultural practices along with forced religious conversion created profound existential wounds and confusion in this regard (Duran et al., 1998). Survivors rarely mentioned individual, clinical impacts of the residential school experience, such as depression or trauma (Burrage et al., 2022). When discussing healing, participants emphasised reconnecting with family and friends or being able to call on Elders within the community for support. Culture was another aspect of healing mentioned and was primarily related to revitalizing the collectivist, sociocentric balance through supporting one another. These findings indicate a wholistic and group-centred view of both trauma and healing that is supported by previous theory and study (Acoose, 2012; Linklater, 2017; Hamby et al., 2020). Indeed, as stated by Kirmayer (2007),

> While the declared aim of psychotherapy is usually the alleviation of psychological distress, psychotherapy, even of severe pathology, always involves subtler normative questions of how to live the good life. Thus, the goals of psychotherapy are tied to the cultural concept of the person. (p. 248)

For this reason, it is necessary when supporting Indigenous clients to educate ourselves and inquire about their beliefs and values in these regards. Aligned with this goal, a description of the Medicine Wheel follows.

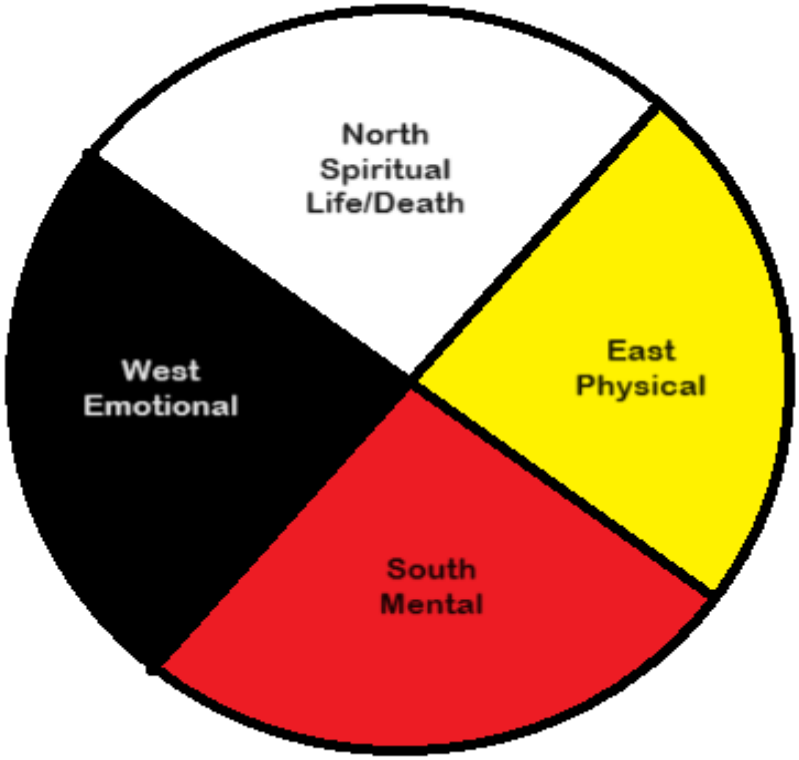
3.3.2 The Medicine Wheel

Recognised as a symbol of Indigenous wellness across many North American tribal nations, the Medicine Wheel is a visual representation of the sacred (Gone, 2009) (see Figure 3.1 for a depiction). There are many variations, but the consistencies are as follows: each quadrant signifies an area of need, a stage of life, and a direction. In some cultures, seasons, animals, ethnicities, or sacred medicines are linked with each section (Acoose, 2012). In this version, the north is where life begins and ends, usually associated with the spiritual, and east is an area of growth, both physically and in terms of knowledge. The south represents the transition into life as an adult and making independent decisions - a place of mental growth. West is commonly associated with the emotional domain, wherein some will reckon with past mistakes and try to get back on the path to a good life (Acoose, 2012; Linklater 2017). While theoretically occurring in a kind of sequence, people are thought to move between the sections at different paces. Further, colonial impacts have unquestionably altered the typical life path of many First Nations people, meaning they may move out of the north to 'start' in a different area of the wheel (Acoose, 2012). However, the figure itself represents the cyclical and unending nature of life and death, and the pursuit of harmony and balance across emotional, physical, spiritual, and mental health. Notably, historical and individual trauma has been theorised to impact all areas of the Medicine Wheel (e.g., Gone, 2023; Linklater, 2017) and one's journey through the stages (Acoose, 2012). In addressing this deeply felt imbalance, Indigenous people have traditionally and contemporarily turned to ceremony (Burrage et al., 2021; Gone et al., 2020; Linklater, 2017). The Medicine Wheel and similar holistic frameworks have also been the basis

for prior adaptations of Western assessment to meet the needs of Indigenous children and youth (e.g., Dauphinais et al., 2018).

Figure 3.1

Basic Visual Representation of the Medicine Wheel



3.3.3 Holistic Healing and Ceremony

Indigenous cultures have a long history of ceremonial practices that have been demonstrated to support trauma recovery and improve wellbeing (Burrage et al., 2021; Linklater, 2017; Sasakamoose et al., 2017). Studies on the use of sacred ceremonies, such as sweat lodges and Sharing Circles, have demonstrated the positive impacts of these activities in addressing historical trauma (Acoose, 2012; Gone et al., 2020). Generally ceremonial knowledge is restricted to cultural insiders and participants, but some broad aspects have been published on widely and are included here. Ceremonies are usually opened by an Elder, Knowledge Keeper, or healer who will *smudge* with the participants to cleanse them and the space for ceremony. This may involve burning of

local, sacred medicines such as tobacco, sage, or sweetgrass. Tobacco is also often offered, as a sign of respect and honour, in exchange for participation or sharing in North American Indigenous traditions (Acoose, 2012). There are certain restrictions placed on ceremony, such as women who are menstruating being unable to participate. Contrary to being a patriarchal provision, it is thought to be the time when women's sacred reproductive powers are strongest and therefore can disrupt the ceremonial process. The sharing of food, either before or after, is another a key component of First Nations ceremony and the space used is important – usually a sacred area used only during spiritual activities. In one example of applying Indigenous approaches to healing from traumatic experiences, Acoose, drawing on cultural knowledge as well as her experiences as a criminalised abuse survivor, conducted *Sharing Circles* with fellow survivors as they discussed their experiences of poverty, violence, sexual abuse, and incarceration (2012). Participants were vocal about the way that the Circles supported them, and ceremonies were conducted on an ongoing basis, at the request of those involved, for some time following the conclusion of the research.

In a scoping review, Burrage and colleagues (2021) consolidated data on mental health interventions based on Native Hawaiian healing and wellness traditions. Methodologies included focus groups, interviews, or self-report surveys. Only one study was a Randomised Clinical Trial. This finding reflects what has been shared by many scholars regarding the valuing of firsthand, subjective and abductive (i.e., defined as the 'aha' of internally felt knowledge) experience in Indigenous epistemology (e.g., Gone, 2009, Kovach, 2020). Findings reinforced the importance of '*ohana* (i.e., family bonds), community and cultural connectedness, immersion in cultural traditions, and feelings of being one with the land, including the harvesting and consumption of local foods (Burrage et al., 2021). When evaluating the outcomes of intervention studies, Burrage and colleagues suggested that researchers measure impacts on self-efficacy, cultural

identity, self-esteem, and connectedness to family and land rather than solely focusing on mental health diagnoses. This has clear implications for the assessment and treatment of trauma, which is often conceptualised in diagnostic terms (e.g., PTSD; DSM-V, 2013; Developmental Trauma Disorder; van der Kolk, 2005). The barriers to changing these approaches are pervasive and systemic. A credit to the resilience of Indigenous healers, Knowledge Keepers, and researchers, however, approaches to overcoming them are summarised below.

3.3.4 Overcoming Barriers

In more urban settings, a significant barrier to effective Indigenous treatment is requirement of accreditation or specialised training for treatments and practitioners. These 'standards' are often imposed by insurers or other service-providing institutions. Often not having Western qualifications or titles, Indigenous healers may be excluded from environments where they could be most helpful by this colonial barrier (Linklater, 2017). Traditional healing methods that involve ceremonies and natural medicines may not have been evaluated through clinical trials or other methods approved of by Western health or pharmaceutical regulators (Kirmayer, 2012). This lack of integration of Indigenous content, traditions, sacred medicines, and healers in mainstream health services reduces the likelihood of engagement among these populations and perpetuates health and wellness disparities (Burrage et al., 2021).

In the past, well-meaning Western mental health practitioners have simply identified evidence-based practices that work for the cultural majority and then attempted to tweak them for use with culturally diverse populations by infusing language and content that is relatable to the community at hand (e.g., Nowrouzi et al., 2015; O'Callaghan et al., 2013). This practice of effectively costuming a Western treatment in the paraphernalia of multiculturalism has been described as both tokenistic and ineffective (Gone, 2009). As an example of diverging from this trend, Payne and

colleagues (2013) developed an integrative process called Pathway to Hope (PTH) with an Indigenous community in Alaska. Their approach drew on community problem-solving to encourage ownership and collaboration with service-providers working in the area to develop culturally relevant solutions to sexual abuse. A key component was the centring of awareness and understanding of cultural values and local traditions. Community members provided positive feedback about their experiences within the intervention and the impact it had on lifting the silence locally about issues related to sexual abuse. Similar models for youth behavioural supports have not been documented to date. While inter-community mentorship was encouraged, highlighted within this approach is the need for intervention to be formulated within the culture and community it is intended to serve.

In Saskatchewan, Sasakamoose and colleagues (2017) have presented the *Indigenous Cultural Responsiveness Theory* (ICRT) for addressing Indigenous health and well-being. Rather than a prescriptive 'how to' for enhancing First Nations wellness, the ICRT provides four conceptual guidelines intended to inform the collaborative process of improving education, health, or other systems intended to serve and these populations. The four points are as follows: 1) middle ground (Ermine's (2007) ethical space), 2) two-eyed seeing (Bartlett et al., 2012, as referenced in Chapter One), 3) neurodecolonization, and 4) protective factors of culture-based healing. *Middle ground* (Ermine, 2007 as cited in Sasakamoose et al., 2017) is defined as a willingness shown by two disparate cultural groups to understand one another and may involve both a physically and mentally neutral positioning. Non-Indigenous people are expected to prepare themselves spiritually and ideologically to enter this space (Sasakamoose et al., 2017). *Neurodecolonization* involves the use of mindfulness and traditional ceremonies to physically alter the mind and heal historical traumas. Non-Indigenous people are asked to participate in ceremony to support this process. Snowshoe and Starblanket's

(2016) protective factors for culture-based healing include *spiritually grounded, community-based, trauma-informed,* and *strengths-based nurturing*. Overlapping significantly with the work of Kovach (2020) and Linklater (2017), these concepts contributed to the development of the present research. A reflective summary follows.

3.4 Reflections on Trauma-Informed Treatment for Externalising Behaviour in First Nations Youth

Culturally centred, adaptive wellness models offer guidance for addressing trauma and externalising behaviours in First Nations communities. As was demonstrated in Chapter Two, Western theories of trauma, offending, attachment, and cognition seem a poor fit for explaining the relationship between trauma and externalising among Indigenous youth. Trauma theories and treatments are largely focused on individual experiences and adversities with little consideration for group experiences or intergenerational factors (e.g., Kirmayer, 2007; Shapiro, 2019). Theories pertaining to externalising behaviour have been developed within an individualist paradigm, considering the environment only insofar as it increases risk for the individual, and have mixed success in predicting outcomes for ethnically diverse populations (e.g., Farrington, 2015). Further, Strain and Control Theories, while providing insight into ways cultural minority groups may feel socially alienated, offer little in the way of acknowledgement of the injustice of Western cultural norms being imposed on colonised groups (e.g., Agnew, 2001). Cognitive and behavioural theories have been criticised for the privileging of the cognitive and absence of consideration for spiritual and cultural factors (Gone et al., 2020; Linklater, 2017). Additionally, there is an overall dearth of research about Indigenous populations across these topics. Treatments developed within Western paradigms neglect key aspects of Indigenous worldviews, including the important roles of land, spirituality, ceremony, and community. While some effort has been made in recent years to address this deficit,

significant gaps remain. The PhD research was intended to acquire needed insight into the relationship between ACEs and externalising behaviour among culturally diverse youth, gather information about effective treatment modalities, and to compare Indigenous and non-Indigenous experiences and beliefs regarding trauma and healing. The overarching aim was to develop guidelines for trauma-informed assessment and treatment when working with First Nations youth who are demonstrating externalising behaviour. The individual studies are summarised in Chapter Four.

CHAPTER FOUR: FORMULATION OF THE RESEARCH OUTLINE

4.1 Structure of the Chapter

The preceding chapters spanned the relevant theoretical, cultural, and political context related to Indigenous cultures, trauma, externalising behaviour, and treatment or healing as it applies to youth. The chapter opens with a summary of relevant ethical considerations, impacts of COVID-19, and the key aspects of grounded theory applied throughout the research process. Overall research aims and predictions are followed by a summary of the rationale and methods specific to each review and study. Limitations in the current literature are also reviewed, focused primarily on the lack of data regarding ACEs and trauma treatment as they pertain to Indigenous youth and the disregard for non-Western worldviews in the application of theory, assessment, and intervention. These gaps are linked in turn to the present research.

4.2 Ethical Considerations

Several ethical standards and stakeholders had to be considered in the development of this research: the University of Central Lancashire (UCLan) ethics committee, the Meadow Lake Tribal Council, and individual schools involved in some aspects of the data collection. The COVID-19 pandemic was also a factor, as the UCLan ethics committee was reluctant to permit travel and in-person engagement with participants at the time. Acquisition of these approvals preceded the seeking of consent from individuals. Considerations unique to the integration of Indigenous methodology and First Nations participants included offering Cree and Dene translation services, a verbal informed consent process, ensuring that participants had the opportunity to review their interview transcripts at each stage of writeup, and a plan for dissemination at the community level (Kovach, 2020). It was also determined that data collection should not involve directly asking participants to share personal traumatic experiences, as the ability to provide ongoing, culturally responsive support was too limited. The

recent and extractive history of Western research with Indigenous populations was at the forefront of the planning for this PhD, and I aspired to limit negative impacts and invasiveness wherever possible. Details specific to the ethical considerations for each individual study can be found in their respective chapters.

4.3 Implications of COVID-19

While most of the studies included in this PhD were carried out in an online format (i.e., two systematic reviews, a Delphi, and an online questionnaire), COVID-19 had significant implications for engaging with First Nations communities and the recruitment of in-person samples. In addition to the hesitation for the ethics committee to approve in-person consent and data collection, there was also transience between First Nations communities and urban centres throughout the pandemic. Those who remained on-reserve speculated that limited access to critical healthcare resources, difficulties with food supply infrastructure, and a desire to be closer to family members were possible reasons. The pandemic conditions made it more difficult to connect with community members and may have served to renew distrust of healthcare providers or those perceived to be connected to government (e.g., Gone, 2023). This issue is expanded on in context in Chapter Eight.

4.4 Applying Elements of Grounded Theory

A *grounded theory* approach, simply stated, encompasses "systematic, yet flexible guidelines for collecting and analyzing qualitative data to construct theories 'grounded' in the data themselves" (Charmaz, 2006, p. 2). Data collected in the early stages of the research is analysed for what are referred to as *incidents,* described as an "umbrella term for recurring actions, characteristics, experiences, phrases, explanations, images, and/or sounds," (Birks & Mills, 2023, p. 165) depending on the type of material. These incidents are compiled and comparative analysis used to inform the development of overarching concepts. Codes are used to identify the presence of these

concepts and, as data accumulates, similar codes may be organised into higher-level categories. Data collection at all stages can inform later inquiry. In the present research, the concepts identified in the two systematic reviews spurred the generation of questions that guided a Delphi survey, file reviews, and interviews. In turn, data collected in those studies was coded and conclusions contributed to the design of the questionnaire used in the last study. Ultimately, categorised data can be used to inform an overarching theory or conceptual framework (Birks & Mills, 2023; Charmaz, 2006).

The interplay of interpretation on the part of the researcher and the categories generated through interaction with various forms of data (e.g., interviews, publications, questionnaires), sometimes referred to herein as *themes*, is arguably a fundamentally constructivist process (Charmaz, 2006). This approach was thought to be highly compatible with the principles of Indigenous methodology (Kovach, 2020), outlined in Chapter Eight. Elements of both methodologies were integrated in the development of the research and interpretation of the data collected.

4.5 Aims and Predictions

The overrepresentation of Indigenous children and youth being sanctioned in schools (e.g., Pesta, 2022) and through the youth justice system in North America (e.g., Statistics Canada, 2023) underscores the importance of trauma-informed, culturally appropriate behavioural assessment and intervention practices. While a grounded theory approach encourages the researcher to eschew hypothesis development prior to data collection (e.g., Charmaz, 2006), literature accessed in preparation for the present PhD informed initial predictions to provide direction for two systematic reviews. Based on these findings, the goal of the PhD research was to synthesise previous knowledge, culture-specific perspectives, professional opinion, and the views of Indigenous people to propose a conceptual model. The literature reviewed in Chapter Two and Three indicated limited study of the relationship between ACEs and externalising behaviour

among Indigenous youth (e.g., Richards et al., 2021) and a need for further information about effective treatment modalities, encompassing the Indigenous world views and beliefs regarding healing practices (e.g., Burrage et al., 2021; Gone et al., 2020; Linklater, 2017). It was anticipated that findings could inform trauma-informed, behavioural recommendations and programming provided to Indigenous youth through school or community-based psychoeducational and mental health services.

While there is clear evidence for the relationship between ACEs and externalising behaviour in young people, many questions remain about generalisability and how each type of ACE might predict specific externalising outcomes (e.g., Muniz et al., 2019). For instance, very few studies to date have accounted for potential ethnic or cultural differences in their analyses, with Indigenous populations being largely neglected (e.g., Richards et al., 2021). Another recurrent limitation has been that possibly confounding variables (e.g., including ethnicity, community stability factors, socioeconomic status, family structure, and the presence of prosocial relationships) have not been consistently accounted for in research designs (Farrington & Welsh, 2007; DeLisi et al., 2017; Bonner et al., 2020). Differences in terminology and methodology (e.g., a dose-response measurement of ACEs; aggregating behaviours) add layers of perplexity. This review was anticipated to clarify and identify gaps in the literature regarding the relationship between ACEs and externalising in youth.

4.5.1 A Systematic Review Exploring the Relationships between Adverse Childhood Experiences (ACEs) and Externalising Behaviour in Youth

Aims

1. To examine the relationship between specific types of ACEs and categories of antisocial and externalising behaviour to acquire an understanding of more nuanced connections than explored previously (e.g., Fitton et al., 2020).

2. To summarise and evaluate representation of Indigenous and other ethnic minority groups in the ACEs and externalising behaviour literature.
3. To identify commonly applied models of delinquency, externalising behaviour, and the mechanisms of traumatisation.
4. To evaluate the methodology and measurement of both ACEs and externalising behaviours.

Predictions

4.2.1.1 Operationalisation and measurement of both externalising behaviour and ACEs will be highly varied (e.g., Fitton et al., 2018; Huei-Jong Graf et al., 2021).

4.2.1.2 Indigenous and other ethnic minority groups will emerge as at higher risk of experiencing ACEs (e.g., Edwards et al., 2022; Richards et al., 2021)

4.2.1.3 Stronger relationships will be identified between ACEs connected to violence (e.g., the experience of physical abuse or witnessing domestic violence) and aggression-related externalising behaviours (e.g., Fitton et al., 2020). Similarly, sexual abuse will correlate more strongly with externalising behaviours related to sexual misconduct (e.g., sexual assault, sexual abuse) (e.g., Jespersen et al., 2009).

Further understanding of the relationship among childhood adversity, youth externalising behaviour, ethnicity, and trauma was ultimately sought to inform intervention practices. Literature reviewed in the preceding chapters highlighted theoretical and cultural differences in the approach to assessing and treating behavioural challenges in a trauma-informed way (e.g., van der Kolk, 2014; Linklater, 2017). Programming to address youth behavioural concerns in North America has primarily focused on attempting to build on general protective factors. For example, strengthening students' academic skills and aspirations (Blum & Blum, 2003; Brier, 1995; Duke et al.,

2010; Hinshaw, 1992), fostering a supportive relationship with an adult (Brookmeyer et al., 2005), working to reduce negative interactions with family members (Dubow et al., 2016), the provision of clear and consistent behavioural expectations, building prosocial peer relationships (Fergusson & Horwood, 1996), and participation in structured activities (Jessor et al., 1995). However, pertinent limitations have been noted insofar as a lack of consideration for cultural diversity in the development of many of these programs and the role of trauma being clearly identified or integrated (Kumpfer & Alvarado; Thomas et al., 2019). The second systematic review focused on identification of the components of both effective and ineffective approaches to trauma-informed behavioural intervention and their application to culturally diverse young people.

4.5.2 A Systematic Review of Trauma-informed Group Behaviour Programmes and Interventions for Children and Youth

Aims

1. To identify key components of effective trauma-informed behavioural intervention.
2. To collate relevant models of trauma and behaviour that inform intervention.
3. To outline limitations of previous research and intervention design, particularly regarding cultural inclusivity and applicability with Indigenous groups.

Predictions

4.5.2.1 Common components of treatment to address trauma and externalising behaviour will be identified (e.g., cognitive-behavioural skills, somatic strategies, exposure or trauma narratives, emotional regulation techniques).

4.5.2.2 There will be limited examples of interventions that have been developed or conducted using culturally informed methods (e.g., Gone et al., 2020).

Programmes focused on the reduction of antisocial and externalising behaviours in youth typically involve approaches including parenting and family support (Kaminski & Claussen, 2017; Kumpfer & Alvarado, 2003; McDonald et al., 2011), skills training to address emotional regulation and problem solving, and the teaching of cognitive-behavioural coping strategies (Augimeri et al., 2007). These programs are typically offered through a school or another community-based organisation and have been shown to have a positive impact (Kaminski & Claussen, 2017; Matjasko et al., 2012). However, as evidenced in the reviewed literature, using cognitive and behavioural strategies to address individual risk factors is a Western approach to therapeutic intervention (e.g., Kirmayer, 2007). Given that research does not necessarily represent frontline practice, a Delphi study was conducted to determine mental health practitioner and researcher consensus on best practices in providing trauma-informed behavioural intervention for culturally diverse young people.

4.5.3 Study One: A Delphi Survey of Current Practices and Cultural Adaptations in Treatment of Externalising Behaviour in ACE-affected Children and Youth

This study involved a Delphi survey of the practices of clinicians and researchers with competency in the treatment of externalising behaviour in ACE-exposed young people. The systematic reviews outlined in Chapter Five and Six highlighted a robust connection between ACEs and externalising behaviour in youth as well as the trends in group-based interventions being used to address these behaviours. Further, these reviews pointed to semantic differences in working definitions of externalising and antisocial behaviour as well as varied targets when it came to cultural adaptation of programming (e.g., language, social norms). There were overall remarkably few examples of approaches to cultural modification of programming noted, but those present included recruitment of local facilitators (Johnston, 2003; Tol et al., 2008; 2012), translation services (e.g., O'Callaghan et al., 2013; Tol et al., 2008; 2012),

or altering content (Jaycox et al., 2009; O'Callaghan et al., 2013). These findings begged the question of whether frontline practices reflected published literature insofar as the limited adaptation for cultural differences.

Rationale for Delphi

Findings from the second systematic review suggested that trauma-informed intervention targeting externalising behaviour was both a highly varied practice and one in which there was limited consideration for cultural differences. However, this literature represented only those interventions and practices that had been documented in published studies. It was important to get insight into the perspectives and practices of those actively working with adversity-exposed youth to address externalising behaviour. The use of a Delphi was thought to be appropriate in achieving this, as they are often used to survey the views of health professionals when trying to identify best practice (Howarth et al., 2018; Jorm, 2015).

A key point of exploration was perceptions on the role of culture in assessment and treatment. Because mental healthcare providers who worked with youth, trauma, and externalising behaviour were anticipated to be a small population, experience specific to Indigenous clients was not a requirement to participate or a direct focus of the questions. Thus, the purpose was to identify best practices and limitations of treatment for cultural minority groups generally. Responses were assumed to encompass how practitioners would be likely to accommodate the needs of Indigenous youth.

Aims

1. To acquire insight into the current practices and perspectives of mental health care providers regarding trauma and behavioural treatment.
2. To identify potential barriers to access to or provision of mental health services for cultural and ethnic minority groups.

3. To develop consensus on best practices in the treatment of trauma and externalising behaviour with culturally diverse young people.

Predictions

4.2.3.1 Treatment components noted in the interventions reviewed in systematic review two will be endorsed as effective by researchers and practitioners.

4.2.3.2 Theoretical and conceptual frameworks identified in systematic review two will be cited as informing the work of researchers and practitioners surveyed.

4.2.3.3 Practitioners will identify common challenges and barriers in meeting the needs of young clients whose cultural origins are different from their own.

While insight into the practices and perspectives of mental health experts is a valuable contribution to this topic, the reviewed literature is emphatic about the necessity of Indigenous consultation when providing care to Indigenous populations (e.g., Gone et al., 2020; Payne et al., 2015; Sasakamoose et al., 2017). For this reason, in the second study, two First Nations communities were consulted regarding local concerns regarding ACEs and youth behaviour, involving reviews of psychoeducational reports and interviews, followed by a reflexive thematic analysis.

4.5.4 Study Two: An Inquiry into Behavioural Concerns, ACES, and Healing in First Nations and Non-Indigenous Populations

This study expanded on the findings from the first systematic review regarding the links between ACEs and behaviour by engaging a sample that had been minimally represented in the literature up to this point (e.g., Burrage et al., 2021): Northern Saskatchewan (Canada) First Nations populations living on reserve. In this study, psychoeducational assessments were reviewed to evaluate the connection between externalising behaviours observed by teachers and caregivers and a history of ACEs. Building on the systematic review findings, this study sampled a community population and accounted for all 10 ACE types as well as multiple behavioural outcomes. These

findings were enriched through the addition of interviews with four First Nations community-members and educators as well as a comparison sample of three non-Indigenous educators from other parts of rural Saskatchewan.

Rationale for Reflexive Thematic Analysis and Indigenous Methodology

Psychoeducational reports and interview data were interpreted using reflexive thematic analysis (Braun & Clarke, 2021) informed by Indigenous methodology (Kovach, 2020). As outlined in Chapters Two and Three, the Western-centric approach to data collection and theory development in the literature related to trauma and externalising behaviour has limitations for understanding the needs of Indigenous youth and their communities (e.g., Gone, 2013; Linklater, 2017). The integration of elements of reflexive thematic analysis with principles of Indigenous methodology represents an attempt at two-eyed seeing (Bartlett et al., 2012), with the goal of gaining insight into how settler mental health practitioners can better serve First Nations youth.

Aims

1. To increase First Nations representation in the literature around the prevalence of ACEs and externalising behaviour.
2. To acquire insight into community views on ways to improve assessment, supports, and intervention for young people.
3. To identify differences between First Nations and non-Indigenous perspectives on improving these practices.

Predictions

4.2.4.1 Behavioural differences will be observed in the psychoeducational reports of youth who have experienced ACEs and those who have not (e.g., Fox et al., 2015; Gray et al., 2021).

4.2.4.2 Aggression-related ACEs will be more likely to be associated with heightened scores in externalising behaviour (e.g., Muniz et al., 2019).

4.2.4.3 First Nations interviewees will be more likely to emphasise the importance of community, land-based activities, and traditional practices in addressing the behavioural and mental health difficulties of young people (e.g., Linklater, 2017; Snowshoe et al., 2017).

Findings from studies two and three related to the occurrence of ACEs, beliefs, and treatment preferences of Indigenous and non-Indigenous groups informed the development of a final study.

4.5.5 Study Three: A Cross-cultural Comparison of ACES, Beliefs, Trauma, and Treatment Preferences

The final study addressed the relationship between ethnicity or culture, gender, ACE exposure, and perspectives on healing and coping strategies. Analysis of interviews from study two reinforced themes in the literature (e.g., Brave Heart & DeBruyn, 1998; Gone, 2023) around the importance of accessible community-based supports (e.g., Elders, counsellors), land-based activities, and hands-on traditional activities (e.g., hunting and trapping, beading) in addressing behavioural and trauma-related difficulties. These findings complement previous findings related to unique, community-focused coping strategies in collectivist cultures (e.g., Kirmayer, 2007; Bryant-Davis et al., 2011; Kuo et al., 2013). Recommendations tended to emphasise the importance of connecting with peers and other community members, as well as being rooted in local spiritual and cultural activities. The methodology of the final study involved surveying a diverse sample of participants across North America regarding their lived experiences, collectivist-individualist leanings, and perspectives on topics related to healing and coping.

Rationale for Online Recruitment and Questionnaires

This study addressed two key points identified across the preceding research: 1) a lack of Indigenous representation in the literature and 2) the need to hear from

adversity-affected people directly about their views on treatment. Online recruitment provided a means to engage larger sample groups from minority populations efficiently. Questionnaire development was based on findings from the previous studies and reviews regarding the comparative prevalence of ACEs and intergenerational trauma as well as potential disparity between people from collectivist and non-collectivist cultures regarding psychological treatment preferences and their efficacy (e.g., Gone, 2020; Kirmayer, 2007).

Aims

1. To compare the prevalence of ACEs among different ethnicities and genders.
2. To identify potential patterns in endorsement of individualist versus collectivist beliefs based on ethnicity.
3. To identify gender or cultural differences in preferred coping or healing strategies when addressing behavioural issues in trauma-affected youth.
4. To examine potential relationships between individualism versus collectivism and preference for different styles of treatment for behavioural concerns in trauma-affected youth.

Predictions

4.2.5.1 Indigenous and female-identifying participants will have a significantly greater number of ACEs compared to other groups (e.g., Acoose, 2012; Richards et al., 2021).

4.2.5.2 Indigenous participants will score significantly higher on collectivist scales than White participants (e.g., Burrage et al., 2021; Kirmayer, 2007).

4.2.5.3 Higher collectivism scores will predict higher ratings of helpfulness for activities such as time spent in nature, physical activity, and community, traditional, or religious practices in treating trauma (e.g., Kirmayer, 2007) and a preference for group treatments (Kuo, 2013).

The outcome of the summarised research was a conceptual framework that incorporates Western and Indigenous approaches to understanding trauma and its impact on behavioural outcomes in Indigenous youth. Further, guidelines emerged regarding more culturally appropriate assessment and treatment strategies, clarifying the role of settler mental health practitioners and service providers. In the next chapter, the first systematic review is described.

CHAPTER FIVE:

A SYSTEMATIC REVIEW EXPLORING THE RELATIONSHIPS BETWEEN ADVERSE CHILDHOOD EXPERIENCES (ACES) AND EXTERNALISING BEHAVIOUR IN YOUTH

5.1 Structure of the Chapter

A systematic literature review of studies exploring the relationship between specific ACEs and types of externalising behaviour among youth samples was conducted. An enhanced understanding of the relationship between certain ACEs and their behavioural sequelae could have implications for the focus of preventative and treatment services. The specifics of these connections, as well as mediating and moderating effects, were noted. Further, demographics of the populations sampled, including gender and ethnicity, was collated. Future directions were identified and informed later PhD studies.

5.2 Adverse Childhood Experiences (ACEs) and Externalising Behaviour

Over the past 30 years, a significant body of research has developed regarding the pervasive impact of adverse childhood experiences (ACEs) on health, social, behavioural, and psychological outcomes (e.g., Felitti et al., 1998; Fox et al., 2015; Fraad, 2012; Gray et al., 2021). As reviewed in Chapter Two, the seminal study of ACEs was medically focused and primarily examined health impacts of seven categories of adversity: physical, sexual, and emotional abuse, household substance use, mental illness, or incarceration, and violence towards a child's mother (Felitti et al.,1998). Emotional and physical neglect, as well as parental divorce or separation, were identified as additional ACEs shortly thereafter (Centers for Disease Control and Prevention, 2021). Contemporary researchers in disciplines such as criminology and social work were simultaneously identifying a correlation between developmental adversities and antisocial behaviour (e.g., de Paul & Arruabarrena, 1995; Farrington,

1995; Perez, 2001). A Canadian systematic review looking specifically at the prevalence of childhood abuse among incarcerated adults concluded that, while individual estimates varied, approximately half of Canadian prisoners reported experiencing at least one type of abuse growing up (Bodkin et al., 2019). While ACEs are not uncommon in the general population, they appear to be more prevalent among delinquent youth. One study found that 97.2% of a forensic youth sample had experienced at least one ACE compared to 64% of a matched comparison group (Baglivio et al., 2014). Further, they calculated that the forensic youth were nearly four times as likely to report having endured four or more ACEs than their non-offending counterparts (i.e., 50% compared to 13%), a phenomenon termed *polyvictimisation*.

Though there is mounting evidence of a relationship among these variables, there remain gaps and inconsistencies that limit the usefulness of recent studies in estimating risk and informing intervention. Of primary importance in the present study, at the time of writing, there are no known studies examining the connection between externalising behaviour and ACEs in Indigenous youth. Even prevalence data regarding ACEs within these populations has been limited (e.g., Richards et al., 2021). More broadly, Kerig and Becker (2015) commented on the lack of research empirically examining causal factors in the correlation between ACEs and delinquency. They cited numerous possible mechanisms, including the manifestation of PTSD symptoms directly increasing antisocial behaviour (e.g., maladaptive coping with hypervigilance), self-regulation deficits (e.g., decreased behavioural inhibition), neurological differences, and rejection sensitivity or alienation. Terminology differences contribute to the lack of clarity in this area as well, with some researchers generalising externalising behaviour as a cohesive whole and others subdividing based on type (e.g., criminal or non-criminal acts; violent versus sexual transgressions). As a further source of confounds, numerous factors noted to predict the presence of such behaviour (e.g., ethnicity,

community factors, socioeconomic status, family structure, or prosocial relationships) are neither consistently measured nor controlled for (Farrington & Welsh, 2007; DeLisi, Acala, et al., 2017; Bonner et al., 2020). A broad review, including studies that involve a variety of populations, methods, and variables, is necessary to acquire a robust picture of the current state of the literature and to inform future research. Next, the risk overlap between ACEs and externalising behaviour is described.

5.2.1 The Risk Factor Overlap

Prevalence studies have identified numerous risk factors for ACEs and externalising. Youth with poor self-control (Fix et al., 2021), low socioeconomic status (Jiang & Dong, 2022), and those living in high-risk neighbourhoods (Kotlaja et al., 2020) have been identified as more likely to engage in antisocial behaviours. Further, longitudinal studies have highlighted that poorly developed verbal skills, low intelligence, low cognitive empathy, high impulsiveness or, risk-taking behaviour, witnessing marital discord, criminal activity, or substance abuse in the home, poor academic achievement, a single-parent home, a large family, and neglect or abuse also increase the likelihood of externalising and delinquency (Farrington & Welsh, 2007; Farrington et al., 2015). Similarly, ACEs have been associated with the factors such as delinquent peers (Korol & Stattin, 2021), poverty, endorsement of violence and criminality in the home, foster care, single-parent, non-parent, or divorced caregivers, inconsistent or harsh parenting strategies, families managing care for children with special needs, and living in high-risk communities (Armour et al., 2012; CDC, 2021; Crouch et al., 2019). These lists overlap significantly, and their contents differ little from criminogenic factors identified in much earlier research (e.g., Levy, 1932).

While our awareness of risk factors for both ACEs and delinquency has been long-standing, significant questions remain about the particulars of these relationships. As expanded on previously, the apparent relationship has been explained through

several theories, such as Social Cognitive/Learning Theory (i.e., youth who witness violence or crime go on to perpetrate it; Bandura et al., 1961), Strain Theory (i.e., societally-endorsed types of success are out-of-reach for group members living in ACE-laden contexts, encouraging criminality among them; Merton, 1938; Agnew, 2001), and Control Theory (i.e., bonds to social groups that support the inhibition of antisocial behaviour are compromised by ACEs; Reiss, 1951; Hirschi, 1969). Early findings suggested that certain outcomes may be more strongly related to certain subtypes, combinations, or severity of such experiences (Felitti et al., 1998). Interestingly, while some such connections have been thoroughly studied (e.g., cycle of violence; Maxfield & Widom, 1996), relatively few researchers have investigated this possibility comprehensively. That is, studies often focus solely on one type of ACE, such as physical or sexual abuse (Cain, 2020). Those that do survey a broader array often reduce their findings to an overall score, focusing on the dose-response relationship, assuming, methodologically, that all ACEs are equal (e.g., Briscoe-Smith & Hinshaw, 2006; Brown & Shillington, 2017; Connolly, 2020; Delisi et al., 2017; Layne et al., 2014, Negriff et al., 2020). This narrow scope fails to account for either the other ACEs that could be present in an environment where a particular type of abuse is occurring or what each may uniquely contribute to behavioural outcomes. Of the few authors who do account for multiple types of ACEs, many fail to differentiate behaviours in their analysis (e.g., Fagan & Novak, 2018; Muniz et al., 2019; Rosen et al., 2018; Wemmers et al., 2017), glossing over the potential variation in outcomes. These omissions unnecessarily limit our understanding of the relationships among specific ACE categories and the variety of externalising behaviours, which could serve to better inform prevention and intervention (Adams et al., 2016; Farrell & Zimmerman, 2017).

5.3 Semantic Considerations in Studying ACEs

While, as outlined above, the connection between ACEs and externalising behaviour seems strongly suggested by research, terminology differences can make it difficult to compare the full extent of the literature on this topic. ACEs are alternatively referred to in the literature as potentially traumatic events (PTEs; e.g., Adams et al., 2016; Karstoft & Armour, 2022), child maltreatment (e.g., Crouch et al., 2019), or, most commonly, individual descriptors such as abuse, sexual assault, domestic violence, maltreatment, trauma, and neglect (e.g., Widom, 2017). This conflict of terminology appears in part a symptom of the variety of academic disciplines from which relevant research originates (e.g., criminology, social work, health, justice, forensics, psychology, psychiatry) as well as an artefact of theoretical differences (e.g., potentially competing theories, such as the cycle of violence). This challenge can be well-met by the systematic review approach.

5.4 Review Aim

The purpose of the present review is to collate the findings of published studies across disciplines that examine the differential relationship among ACEs and various forms of externalising behaviour. Previous reviews have compared studies examining singular relationships between ACEs and offending (e.g., physical abuse and violent delinquency; Ertem et al., 2000), included only one type of behavioural outcome (e.g., violent behaviours; Fitton et al., 2020); and relied exclusively on formal reports of maltreatment (e.g., Malvaso et al., 2018) or delinquency (e.g., Graf et al., 2021). Little consideration has been given to the role of ethnicity and culture in the literature, including systematic reviews, to date (e.g., Craig & Zettler, 2021; Fitton et al., 2020; Graf et al., 2021). Further, no previous review specifically sought out articles where both multiple ACEs and target behaviours are accounted for in the analysis and which allow for inclusion of studies that rely on informal or self-reported ACEs. Under-

reporting of child maltreatment is a well-known issue (Barnett et al., 1993; Statistics Canada, 2022). This, alongside the fact that many other ACEs are not events likely to be formally tracked or reported (e.g., death of a family member, caregiver addiction or mental health challenges), underscores the value of including studies where informal and self-reporting of ACEs was utilised. While restricting the analysis of ACEs to formal reports may seem to bolster reliability, reporting trends would suggest it is more likely to artificially limit the data and account for the impact of only the most severe forms of ACEs. The current study mitigated this by including research using a variety of approaches and conducted with diverse populations, so long as more than one ACE and more than one externalising behaviour was considered in the analysis. For these reasons, the current review is presented as unique in both coverage and contribution.

5.5 Method

5.5.1 Data Sources and Search

A systematic literature review was conducted, and reporting adhered to the process outlined in the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA; Page et al., 2021) protocol. The initial scope included all studies examining the relationship between adverse childhood experiences (ACEs) and antisocial behaviour. Studies published in peer-reviewed journals and postgraduate dissertations (I.e., grey literature) were reviewed for inclusion. Articles published up to June 4, 2021, and accessible via the following databases were reviewed: Academic Search Complete, APA PsycArticles, APA PsychInfo, Child Development & Adolescent Studies, ERIC, MEDLINE with Full Text, Social Sciences Full Text, SocINDEX with Full Text, and Web of Science. It was thought that this selection of databases, spanning education, social sciences, child development, law, and medicine, would provide a robust picture of the current state of research on this topic. The search terms were as follows: ("adverse childhood experiences” or ACEs or “potentially

trauma* events" or "child maltreatment" or "child abuse*" or neglect* or rape*) and (viol* or crim* or aggress* or danger* or delinquency or dissocial* or "antisocial behav*"). These broad search terms were selected to and reference lists from articles included for analysis were hand-searched to reduce the likelihood of missing pertinent articles. Cited papers with relevant titles were reviewed for inclusion.

Selection Criteria

Articles were included based on factors related to the sample, data type, outcome variables, and method of analysis. The population sampled either had to be younger than 21 or the study had to be focused on adverse experiences and behaviours that occurred before the age of 21. The rationale for this was to include all participants who could be considered 'school-aged,' up to the common age cutoff used in Canadian high schools (Saskatchewan Ministry of Education, 2021). The review focused primarily on quantitative studies, to facilitate comparison of behaviour measures, and those that utilised purely qualitative approaches were excluded. Outcome variables had to include both a measure of externalising, antisocial, or delinquent behaviour and ACEs. Importantly, the analysis had to differentiate in some way the types of behaviour and the types of ACEs. For example, if a study amalgamated all ACEs into a single score for overall adversity (i.e., a dose-response approach) or solely aggregated externalising behaviour into a total score, it would be excluded[1]. While some authors endorse more comprehensive approaches to intervention (e.g., Hale et al., 2014), others suggest that the needs of youth differ based on their ACE history, and that treatment should be informed by these experiences (Rolfsnes & Idsoe, 2011). Studies are rarely designed to investigate this possibility, and the aim of this systematic review was to capture those wherein the intricacies of the ACE-behaviour relationship were examined more closely.

[1] A total of 177 studies were excluded based on this criterion, though other exclusion criteria may have also applied (e.g., not differentiating between behaviours or only measuring one behaviour type)

Titles and abstracts of potentially relevant articles were reviewed by the author and full-text versions of those that met inclusion criteria were retrieved. Two randomly selected papers were reviewed by a second researcher for quality and consistency with the inclusion criteria. Inclusion criteria were confirmed to be met for both papers. Inter-rater agreement for quality assessment was 90% and disagreement was resolved via discussion, resulting in score changes of three points in total across the two papers.

5.5.2 Study Quality Assessment

Quality assessment was carried out using the QualSyst (Kmet et al., 2004). Designed for the evaluation of both quantitative and qualitative studies, the QualSyst is robust and can be applied across study designs. This made it suitable for the present review in that the selected studies involved varied methodologies. Using this tool, reviewers were able to assess included papers based on the 1) clarity of the research question, 2) selection and description of the sample, 3) use of appropriate methodologies and measures, 4) sufficient disclosure and analysis of results, and 5) findings being tied clearly to conclusions.

The total checklist includes 14 areas of review, each contributing a maximum of two points to the final quality score. Most of the questions on the checklist have *not applicable* as an option, with such questions omitted from the final quality calculation as necessary. The 12 included criteria from the QualSyst were as follows:

1) Question/Objective sufficiently described?

2) Study design evident and appropriate?

3) Method of subject/comparison group selection or source of information/input variables described and appropriate?

4) Subject (and comparison group, if applicable) characteristics sufficiently described?

5) Outcome and (if applicable) exposure measure(s) well defined and robust to measurement/misclassification bias?

6) Means of assessment reported?

7) Sample size appropriate?

8) Analytic methods described/justified and appropriate?

9) Some estimate of variance is reported for the main results?

10) Controlled for confounding?

11) Results reported in sufficient detail?

12) Conclusions supported by the results? (Kmet et al., 2004; p. 4)

A two-point score indicated a judgement of total fulfilment of the criteria while a one-point score was applied for partial fulfilment. The points excluded were determined to pertain exclusively to intervention-focused studies (e.g., If interventional and random allocation was possible, was it described? If interventional blinding of investigators was possible, was it reported?). Point scores were translated to percentages for ease of understanding. Articles scoring below 75% or with a score of 0 in any one category of the quality evaluation were to be removed from the data set to ensure sufficient information for analysis while not unduly restricting sampling. No articles were found to fall below this threshold, and all were retained at this stage.

5.5.3 Synthesis of Study Results

As outlined in Chapter 4, an overarching methodology that informed this thesis as well as the present review was Grounded Theory (GT). GT is appropriate for exploratory research where the possibility of an underlying theory or conceptual framework is being investigated (Glaser & Strauss, 1967). The process is not linear, and adjustments are made throughout data collection as new information emerges. At this early stage, and because of the diversity in study designs, Thematic Analysis (Braun & Clarke, 2006) was determined to be an effective approach to synthesising the overall

findings. Aligning well with the code and concept development elements of GT, this involved immersion in the data, generating initial codes, searching for, refining, and naming themes, reviewing the themes against the data, writing descriptions, and writing up for dissemination and reflection. A table was developed to summarise literature review, method, analysis, and discussion for each paper to facilitate comparison. A thematic summary of methodology, challenges, and key conclusions was compiled.

5.6 Results

5.6.1 Literature Search

The initial search returned 42,335 results. Meta-data were exported, for initial review and removal of duplicates, to the *Mendeley* reference management programme. 15,109 duplicates were identified and removed, leaving 27,226 titles for review. The data was then exported to *Rayyan's* systematic review programme. An additional 1,025 duplicates were flagged, manually reviewed, and removed, bringing the total to 26,241. After scanning titles for relevant keywords, 2,741 articles remained for abstract review.

At the abstract review stage, the following inclusion criteria were applied:

1. Full-text available in English
2. Studies must be original and include a quantitative element
3. Longitudinal or cross-sectional designs where temporal order of ACE can be established as occurring prior to the observed behaviour
4. Both ACE and externalising behaviour occurred prior to age 21
5. Analysis differentiates between at least two types of ACEs. If ACEs are not explicitly identified as such (e.g., the experiment simply measured the occurrence of different types of abuse), the relevant variables must be specific enough that they can be abstracted as one of the ACE categories
6. Analysis differentiates among behaviours (e.g., property crime, aggression, and illicit substance use)

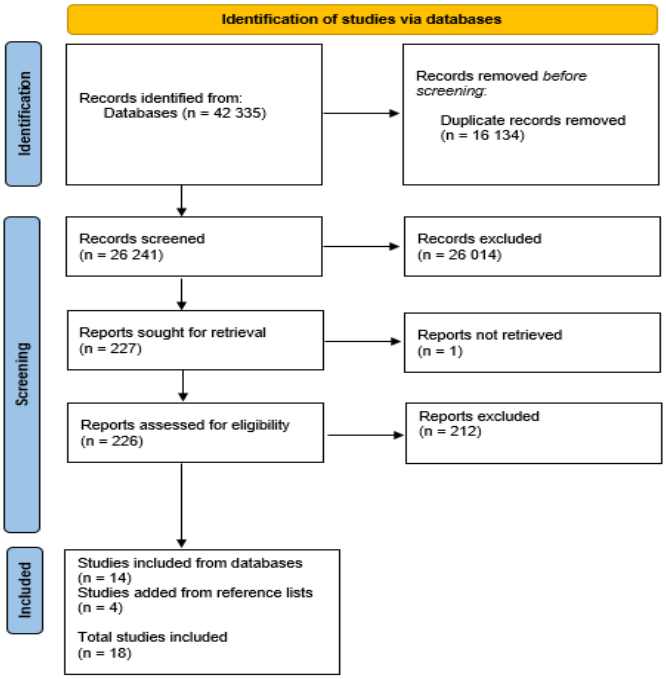
Of the 2,741 articles reviewed at this stage, 227 were determined to meet criteria for full-text review. Only 13 articles remained after this step, as there seemed to be relatively few studies that differentiated among non-criminal, externalising behaviours. Most authors opted to use measures that provided an aggregate score across antisocial behaviours (e.g., a collective score for externalising behaviours). For this reason, the inclusion criteria were expanded to permit the addition of papers (n = 14) wherein at least two types of behaviour were measured and accounted for in the analysis (e.g., delinquency vs. externalising behaviour, antisocial behaviour vs. substance use). Articles that had been excluded based on their having limited their measurement of behaviour in this way were revisited, applying the new criteria, resulting in a total of 28 papers. In-depth, full-text review revealed 14 additional papers for exclusion that combined ACEs in their analysis (n = 7), did not differentiate among behaviour types in their analysis (n = 5), or wherein the age information included was incorrect or insufficient to establish prior occurrence of ACEs (n = 2). Reference lists of the 14 remaining articles were hand-searched for other potential additions. Four relevant papers were identified and added to comprise the final total of 18 articles.

Throughout the review, articles were flagged as included, excluded, or potentially included depending on the topic, sample demographics, measures used, and focus of the analysis. A total of 26 954 studies were excluded[2] as depicted in Figure 5.1 below.

[2] See Appendix B for a detailed list of exclusion rationales.

Figure 5.1

PRISMA Diagram of Inclusion and Exclusion Decisions for Systematic Review One



5.6.2 Characteristics of Included Studies

Information about the design, sample, methodology, and findings of each study is summarised for comparison in Table 5.1.

Three research designs were identified: prospective cross-sectional (k = 1), retrospective cross-sectional (k = 14), and prospective longitudinal (k = 3). The majority of studies occurred in the United States (k = 13) and the remainder were spread across Austria (k = 1), Spain (k = 2), Australia (k = 1), and China (k = 1).

Sampling took place in a variety of contexts. A large number were identified as involving “high risk” community samples (k = 8) and were recruited from populations identified as being more likely to be exposed to ACEs (e.g., families involved with child protective or intimate partner violence support services). Other groups sampled included clinical outpatients (k = 3) (i.e., those receiving treatment for trauma symptoms or behavioural challenges), clinical inpatients (k = 1) (i.e., substance abuse treatment),

incarcerated populations (k = 4), and the broader community (k = 2). Three studies included matched samples from the general population.

Four of the included studies were analyses of previously collected data with some involving overlapping samples. These studies reviewed data collected through the LONGSCAN project[3] (k = 1) (Villodas et al., 2015), National Longitudinal Study of Adolescent to Adult (Add Health) (k = 2) (Farrell & Zimmerman, 2017; Watts & Iratzoqui, 2019), and National Child Traumatic Stress Network (NCTSN) (k = 1) (Spinazzola et al., 2014). Given that each took a unique approach to both selecting from and analysing the dataset, inclusion of all studies was determined to be of value. However, this sample overlap made it difficult to assess the total number of participants across studies.

5.6.3 Participant Demographics

In line with the variety of populations involved, sample characteristics ranged considerably. Sample sizes ranged from 50 to 64,639, with the smallest seven studies falling below 1,000, the middle seven ranging between 1,000 and 6,500, three larger studies including between 12,000 and 14,500 participants, and the largest being a significant outlier at 64,639. Most of the reviewed research surveyed participants' sex, age, economic status, and ethnicity. Three studies included only male participants (Aebi et al., 2015; Bonner et al., 2020; Zou et al., 2019), one reported no gender information (Depaul & Arruabarrena, 1995), and samples from the remaining studies ranged from 14.5 - 61.7% female. Ethnicities most often reported were Black, Hispanic, and white with most including at least one additional category (e.g., Asian, Hawaiian, mixed, or other) (k=11), some collecting no ethnic information (k=5), and one study involving

[3] LONGSCAN stands for the Longitudinal Studies of Child Abuse and Neglect, which was initiated in 1990 using funding from the National Center on Child Abuse and Neglect. Five satellite research centres combined efforts to produce studies based on longitudinal data from a shared sample.

exclusively Chinese participants (Zou et al. 2019). Notably, only two studies specified the inclusion of Indigenous participants (e.g., Native American) (Watts & Iratzoqui, 2019; Cain, 2020). Additional demographic information collected included household income (k = 2), academic achievement (k = 3), current living situation (k = 3), and psychiatric symptomology or diagnosis (e.g., ADHD, ODD, PTSD, learning disability) (k= 4).

Table 5.1

Summary of Articles Included in Systematic Review One

Study	Design	Sample	Setting	Measure(s) of ACEs and foci	Measure(s) of behaviour and foci	Other variables measured/ controlled for	Conclusions
Aebi, M. et al. (2015).	Retrospective, cross-sectional	N = 260; aged 14-20 years (m=16.5) 100% male; no ethnicity information reported	Incarcerated/ Forensic Austria	Brief version of the Childhood Trauma Questionnaire (CTQ; Bernstein et al., 2003) • Physical trauma • Emotional trauma • Sexual trauma	Youth Self Report (YSR, Achenbach, 1991) • Social problems • Attention problems • Delinquency • Aggressive behaviour	Mini-International Neuropsychiatric Interview for Children and Adolescents (MINI-KID; Sheehan et al., 2010) • Presence of a psychiatric disorder	LCA revealed no classes with a single type of abuse detected – abuse of one kind co-occurs with others Maltreated groups displayed higher behaviour problems than non-maltreated across scales. No sig. differences based on type.
Asscher et al. (2015).	Retrospective, cross-sectional	N = 13,613; aged 12-18 years 74.3% male;	Convicted delinquent United States	Washington State Juvenile Court Assessment (WSJCA; Washington State Institute for Public Policy, 2004), corroborated by the youth's social services history and data provided	Washington State Juvenile Court Assessment (WSJCA; Washington State Institute for Public Policy, 2004), corroborated by the youth's criminal record and	• None	Sexual abuse associated with sexual offending and physical abuse correlated with violent offending.

Study	Design	Sample	Setting	Measure(s) of ACEs and foci	Measure(s) of behaviour and foci	Other variables measured/ controlled for	Conclusions
		no ethnicity information reported		by other persons or organisations • Physical abuse • Sexual abuse • Neglect	data provided by other persons or organisations • Sexual misconduct • Felony sexual offenses • Violence • Uncontrolled anger • Intentionally inflicting pain • Fire starting • Using or threatening use of a weapon • Destruction of property • Animal cruelty		For both genders, sexual offending and a history of sexual abuse were associated, with males at higher risk.
Bonner et al. (2020).	Retrospective, cross-sectional	N = 2,520; age not reported (assumed to be under 18 based on classification as "juvenile offenders") 100% male; 38.3% Hispanic, 35.3% Black, and 24.8% white	Incarcerated/ Forensic United States	Review of archival data from state and county records, observations of professional and correctional staff, and/or youth self-report info. • Physical abuse • Emotional abuse • Sexual abuse	Criminal record • Homicide • Sexual offenses • Serious offenses against another person Serious property offense	Review of archival data from state and county records • Chaotic home • Age of first incarceration	Impact of abuse on offending appeared to vary based on ethnicity. Differences in abuse type related to different types of offending. Those who sexually offended more likely to have a history of sexual abuse.
Cain (2020).	Retrospective, cross-sectional	N = 6,315; aged 10-20 years	High-risk sample (i.e., justice-	Researcher-created questionnaire	Self-report and record check re: most serious offense committed	Researcher-created questionnaire	Sig. differences noted among offense types

Study	Design	Sample	Setting	Measure(s) of ACEs and foci	Measure(s) of behaviour and foci	Other variables measured/ controlled for	Conclusions
		85.5% male; 2.9% Native American, Asian, or Hawaiian, 24.2% Hispanic, 31.5% Black, 33.1% white, and 8.4% other or 2+ ethnicities	involved youth) United States	• Physical abuse • Emotional abuse • Sexual abuse • Witnessing serious violence • Family structure	• Violent (i.e., murder, kidnapping, robbery, assault) • Rape • Property (i.e., arson, burglary, auto theft, vandalism, trespassing) • Drug possession/use • Carrying a weapon • Other nonviolent (e.g., running away, drunk in public, prostitution, truancy) Researcher-created questionnaire • Substance use	• Academic achievement • School attendance • Learning disability • Foster or group care • Prior offenses and probation • Gang affiliation	depending on victimisation type. Physical abuse and sexual abuse correlated with sexual offenses. Physical abuse and witnessing violence appeared to impact violent offending.
Cavaiola & Schiff (1988).	Retrospective, cross-sectional	N = 270; Experimental sample of chemically dependent youth (k = 150) and two comparison groups: non-abused, chemically dependent adolescents (k	Clinical inpatient (substance use) United States	Review of inpatient records. • Physical abuse • Sexual abuse • Incest • Incest and physical abuse • Marital status of biological parents	Alcohol and Drug Problem Index (Van-Houton & Golembiewski, 1978) • Alcohol and drug use Inpatient records • Animal cruelty • Legal involvement • Abuse of others • Sexual acting out/promiscuity • Runaway behaviour	Review of inpatient records • Presence of a custodial parent • Relationship to abuser • Abuser's mental health and addiction status • Homicidal ideation	Abused youth more likely to demonstrate aggressive behaviours. No sig. differences based on type.

Study	Design	Sample	Setting	Measure(s) of ACEs and foci	Measure(s) of behaviour and foci	Other variables measured/ controlled for	Conclusions
		= 60) and non-abused youths who were not chemically dependent (k = 60); aged 13-18 years 48.5% female; no ethnicity information reported				• Out-of-home placement history • Prior treatment history	
Depaul & Arruabarrena(1995).	Retrospective, cross-sectional	N = 66. Three groups of children from a stratified, random sample: physically abused (k =17), neglected (k = 24), and control (k = 25) No gender or ethnicity information reported	High risk community sample Spain	Reports to the Child Protection Agencies of the Basque Country • Physical abuse • Neglect • Marital status of parents	Teacher's Report Form of the Child Behavior Profile (TRF, Achenbach, 1991; Achenbach & Edelbrock, 1986) • Delinquent behaviour • Aggressive behaviour	Samples matched on the following: • Socioeconomic status • Mother's education level • Mother's age • Number of children in the family	Physically abused more likely to be withdrawn while neglected were more aggressive. All problem behaviours more common among maltreated children. No sig. differences based on type.

Study	Design	Sample	Setting	Measure(s) of ACEs and foci	Measure(s) of behaviour and foci	Other variables measured/ controlled for	Conclusions
Farrell & Zimmerman (2017).	Prospective, cross-sectional	N = 12,603; aged 11-21 years (m=15.3) 48.3% male; 16.8% Hispanic, 20.9% Black, 54% white, and 8.2% other	General community sample United States	Participant interview re: occurrences in past 12 months • Experiencing violence • Witnessed violence • Family structure • Any one type of violence more than once • Multiple types of violence more than once	Self-report of occurrence within the past 12 months • Property crimes • Violent offending • Substance use	Researcher-developed questionnaire • Impulsivity • Neighbour-hood bonds (e.g., social connections with neighbours, impression of community)	Exposure to violence strongly associated with later property crime, violent offending, and substance use. Exposure to multiple types of violence had a stronger effect than exposure to any single type of violence. Polyvictimization had strongest effects on the offending outcomes. No sig. differences based on type.
Higgins & McCabe (2003).	Retrospective, cross-sectional	N = 50; no age range provided, but children were under age 12 (m=8.6)	General community sample Australia	The Comprehensive Child Maltreatment Scale (CCMS for Parents; Higgins & McCabe, 2001) • Physical abuse • Psychological abuse	Child Behavior Checklist (CBCL) • Externalising behaviour	Family Adaptability and Cohesion Evaluation Scales II (FACES II; Olson et al., 1982).	Maltreatment of one kind is unlikely to occur in isolation. All types correlated with the

Study	Design	Sample	Setting	Measure(s) of ACEs and foci	Measure(s) of behaviour and foci	Other variables measured/ controlled for	Conclusions
		56% male; 68% "Australian," 16% European, 10% Anglo-Celtic, and 6% Asian		• Sexual abuse • Neglect • Witnessing family violence Demographic questionnaire • Parental separation or divorce	Child Sexual Behaviour Inventory (CSBI) (Friedrich et al., 1991) • Age-inappropriate sexual behaviour	• Traditional family values Rosenberg Self-Esteem scale (Rosenberg, 1965) • Self-derogation Demographic questionnaire Household income	antisocial behaviours measured, but especially divorce. No type of maltreatment was found to be sig. more related to negative outcomes than others.
Lopez-Soler, et al. (2017).	Retrospective, cross-sectional	N = 189; aged 6-17 years (m = 10.2) 50.3% male; no ethnicity information reported	High risk community sample Spain	Inventario de Evaluación del Maltrato a la Infancia (ICMI; researcher-developed) • Physical abuse • Emotional/ Psychological abuse • Neglect Inventario de Evaluación del Maltrato a la Mujer por su Pareja • Witnessing or being forced to participate in abuse of mother • Witnessing outcome of abuse to mother	Child Behaviour Checklist (CBCL; Spanish version, Achenbach & Rescorla, 2001) • Rule-breaking behaviour • Social problems • Attention problems • Aggressive behaviour	Socio-demographic questionnaire • Education level and employment of mother • Current household (e.g., living with abuser) • Child's relationship to abuser	Maltreated children more likely to engage in externalising behaviour. Strong relationship noted between abuse of the mother and the presence of emotional and behavioural problems in the child. No significant differences

Study	Design	Sample	Setting	Measure(s) of ACEs and foci	Measure(s) of behaviour and foci	Other variables measured/ controlled for	Conclusions
							between certain types of maltreatment and behavioural outcomes.
Miley et al. (2020).	Retrospective, cross-sectional	N = 64,639; age not reported, though "delinquent juvenile" status required they were under 18 at the time of initial data collection 78.3% male; 38.2% non-white, 61.8% white	Incarcerated/ Forensic United States	Positive Achievement for Change Tool (PACT; Winokur-Early, et al., 2012) • Physical abuse • Sexual abuse • Household substance abuse • Emotional abuse • Neglect • Household mental illness • Witnessing household violence • A member of the household being incarcerated	Information from referral to forensic services • Violent offending • Sexual crimes • Drug use	Review of interview and socio-demographic data • Self-control • Poverty • Peer antisocial behaviour • Thought disturbances	Children who experience physical, sexual, and/or household substance abuse have a much higher risk of engaging in related illegal acts in adolescence. Relationships noted between sexual abuse and sexual offending, physical abuse and violence, and household substance abuse and drug offenses.
Perez, (2001).	Retrospective, cross-sectional	N = 2,466; aged 12-18 (m = 16.5).	High risk sample (i.e., high school dropouts) and two	Self-report questionnaire • Physical abuse (i.e., frequency of being beaten by parents)	Three-index questionnaire developed by the researchers • Property offenses • Violent offenses	Demographic selection criteria • Academic achievement	A history of maltreatment significantly increased the likelihood that

Study	Design	Sample	Setting	Measure(s) of ACEs and foci	Measure(s) of behaviour and foci	Other variables measured/ controlled for	Conclusions
		Two groups: High school dropouts (k = 911) and two controls matched for ethnicity, sex, grade, and academic achievement (k = 1,550). 58.2% male; 68.5% Hispanic and 31.5% non-Hispanic white	matched community samples United States	• Sexual harm (i.e., frequency of rape or sexual assault) Demographic selection criteria • Family structure	• Sexual offenses	• Socio-economic status	adolescents would report involvement in delinquency. Sexual assault found to be a significant predictor of violent offenses.
Spinazzola, et al. (2014).	Retrospective, cross-sectional	N = 5,616; aged 6-17 years (m = 10.2) 58% female; 21% Black, 30% Hispanic/ Latino, 38% white, 8% other, and 4% no response	Clinical outpatient United States	The Trauma History Profile (THP; Pynoos et al., 2014) • Physical abuse (i.e., an incident of actual or attempted harm on the part of a caregiver) • Emotional abuse/psychological maltreatment (e.g., verbal abuse, overwhelming demands, and/or emotional neglect)	Child Behavior Checklist (CBCL) • Externalising behaviour Clinician ratings in participant file • Sexualised behaviours • Behaviour problems at school • Behaviour problems at home • Criminal activity	UCLA Posttraumatic Stress Disorder-Reaction Index (PTSD-RI; Steinberg et al., 2004) • Total trauma scale score Clinician ratings in participant file • Attachment problems	Emotional/ psychological maltreatment related similarly to adverse behavioural outcomes as physical and sexual abuse. Abuse type appeared to influence type of behaviours

Study	Design	Sample	Setting	Measure(s) of ACEs and foci	Measure(s) of behaviour and foci	Other variables measured/ controlled for	Conclusions
					• Skipping school or daycare • Alcohol abuse • Running away Substance abuse	• Psychiatric diagnosis	observed (e.g., sexual abuse associated with inappropriate sexualised behaviour) and diverse abuse history increased risk of overall negative outcomes.
Vachon et al. (2015).	Retrospective, cross-sectional	N = 2,292; aged 5-13 years (m = 9.0). **Two groups:** maltreated (k = 1,193) and non-maltreated (k = 1,099) 54.7% male; 60.4% Black, 31% white, and 8.6% other. Of that total, 3.4% identified as non-white Hispanic and 11.4% as	High risk sample (i.e., families involved with Family Services) United States	Maltreatment Classification System (MCS; Barnett, Manly, & Cicchetti, 1993) and review of CPS records one year following camp attendance • Physical abuse • Emotional abuse • Sexual abuse • Neglect • Multiple types	Teacher's Report Form of the Child Behavior Profile (TRF, Achenbach, 1991) • Rule-breaking • Aggression Peer ratings • Disruptive • Fighting	Maternal Maltreatment Classification Interview (Barnett, Manly, & Cicchetti, 1993) • Occurrence of abuse among non-maltreated sample	Physical abuse, emotional abuse, and neglect equivalent impact on negative psychiatric and behavioural outcomes. Rare for children to be exposed to only one type of abuse. No sig. difference among types and experiencing more types or higher frequency of abuse is associated with worse outcomes.

Study	Design	Sample	Setting	Measure(s) of ACEs and foci	Measure(s) of behaviour and foci	Other variables measured/ controlled for	Conclusions
		white Hispanic.					
Villodas et al. (2015).	Prospec-tive, longitu-dinal	N = 788; data used gathered at multiple points: ages 4, 8, and 12 years 51% female; 54% Black, 6% Hispanic, 26% white, 14% mixed or other	High risk community sample United States	CPS records using modified version of the Maltreatment Classification System (MCS; Barnett, Manly, & Cicchetti, 1993) • Physical abuse • Emotional abuse • Sexual abuse • Neglect • Multiple types	Child Behaviour Checklist (CBCL; Achenbach, 2001) • Externalising behaviour The NIMH Computerized Diagnostic Interview Schedule for Children IV (Shaffer, et al. 2004): ODD Items • Disobedient at home • Disobedient at school • Temper tantrums or hot temper CD Items • Threatens people • Cruelty, bullying, or meanness to others • Gets in many fights • Physically attacks others • Cruel to animals • Vandalism • Destroys others' things • Sets fires • Steals at home • Steals outside home • Lying or cheating • Runs away	The NIMH Computerized Diagnostic Interview Schedule for Children IV: ADHD Items • Poor concentration • Restless or hyperactive • Impulsivity • Very talkative • Unusually loud CD Items • No guilt after misbehaving • Antisocial peers Impulsive or acts Demographic questionnaire • Living situation (e.g., with parents or relatives) • Household income (i.e., more or less than	LCA and latent transition analysis (longitudinal) indicated that recent physical abuse associated with aggressive/rule-breaking behaviour across age-groups. Neglect showed a relationship to hyperactive/ oppositional and aggressive/rule-breaking from middle to late childhood depending on maltreatment timing. Sexual abuse a predictor of behaviour issues across age groups.

Study	Design	Sample	Setting	Measure(s) of ACEs and foci	Measure(s) of behaviour and foci	Other variables measured/ controlled for	Conclusions
					• Truancy from school • Swearing or obscene language	$15,000 US per year)	Emotional maltreatment was inconsistently related to negative behavioural outcomes.
Watts & Iratzoqui, (2019).	Prospec-tive, longitu-dinal	N = 14,322; aged 11-21 years (m = 15.61) 52.8% female; 52% white, 20% Black, 16% Hispanic/ Latino, 8% Asian, 2% Native American, and 1% other	General community sample United States	Self-reported occurrence before the beginning of 6th Grade • Physical abuse • Sexual abuse • Neglect	Researcher-developed questionnaire; occurrence within the past 12 months: • Violent offending • Property crimes • Selling drugs • Running away Occurrence within the last 30 days: • Alcohol use • Substance use	Researcher-developed questionnaire • Self-control • Peer deviancy • Closeness to mother • Parent's education level • Receiving public assistance	Gender differences in impact, though apparent, not statistically sig. Suggested there are more gender similarities than differences in how children are impacted by abuse and neglect. Type of maltreatment related to type of antisocial behaviour observed.

Study	Design	Sample	Setting	Measure(s) of ACEs and foci	Measure(s) of behaviour and foci	Other variables measured/ controlled for	Conclusions
Zingraff et al. (1993).	Prospec-tive, longitu-dinal	N = 1,216; 'school-aged' children. **Three groups:** maltreated (m = 15 years; k = 655), non-maltreated and impoverished (m = 13.8 years; k = 177), and a non-maltreated, general control (m = 15.3 years; k = 281). 57% female; 43% white, 57% other	High risk sample (i.e., contact with juvenile justice system) United States	Reports to the North Carolina Central Registry of Child Abuse and Neglect • Physical abuse • Sexual abuse • Neglect	Juvenile court records • General offenses • Property offenses • Violent offenses • Status offenses (e.g., truancy, underage drinking)	Demographic questionnaire Family structure (e.g., single parent, blended)	Maltreatment generally increased risk of offending. Neglect had strongest effect. Impoverished similarly likely to offend as maltreated. No significant relationship between type of maltreatment and type of offense.
Zou et al. (2019).	Retrospect ive, cross-sectional	N = 125; aged 6-13 years. **Two groups:** ADHD diagnosed (k = 48) and a non-ADHD control (k = 77).	Clinical outpatient (i.e., ADHD patients) China	Childhood Trauma Questionnaire, Short Form (CTQ-SF) (Chinese version; Zhao et al., 2005). • Physical abuse • Emotional abuse • Sexual abuse • Emotional neglect • Physical neglect	Child Behaviour Checklist (CBCL; Achenbach, 1991) • Social problems • Compulsive activity • Aggressive behaviour • Delinquent behaviour	Barratt Impulsiveness Scale Version 11 (Chinese version; Li et al., 2011) • Impulsivity Demographic questionnaire	Boys with ADHD more likely to display aggressive and impulsive behaviours. EA and PA possible contributors to behavioural

Study	Design	Sample	Setting	Measure(s) of ACEs and foci	Measure(s) of behaviour and foci	Other variables measured/ controlled for	Conclusions
		100% male				• Adverse living conditions	problems in boys diagnosed with ADHD. PA more strongly related to impulsivity than EA. No sig. relationship between behaviours observed and type of abuse.

5.6.4 Measures of ACEs or Related Factors

ACEs were evaluated using an array of approaches within the reviewed studies (see Appendix B for a more detailed summary). Many researchers opted to use child protection or clinical records as a source (k = 6). Two such studies used a systematic approach to the file review (i.e., the Maltreatment Classification System [MCS; Barnett et al., 1993]; Vachon et al., 2015; Villodas et al., 2015) while the majority self-determined the presence or absence of the targeted ACEs (k = 4) based on what was included in the reviewed file. Others gathered ACE information using established interview protocols (e.g., the *Trauma History Profile*) (k = 4) or developed their own semi-structured interview questions (k = 4). The remainder used a variety of validated, self-report questionnaires. Parental marital status was reported in fewer than half of the studies (k=7) and generally as a part of a demographic assessment rather than through an ACE measure.

5.6.5 Measures of Behaviour

There was significant variation in the approaches used to measure behaviour in the reviewed studies (see Appendix B for an overview). Police or inpatient records and self-created questionnaires were the most common methods for determining the presence of externalising behaviour and delinquency (k = 7). Of those that included a separate behavioural measure (k = 11), most primarily relied on one or more of the quantitative questionnaires included in the Achenbach System of Empirically Based Assessment (ASEBA; Achenbach & Rescorla, 2004) (k = 9). Four of those papers included additional measures of behaviour, such as a clinical file review (Spinazzola et al., 2014), peer ratings of child behaviour (Vachon et al., 2015), or an additional standardised measure (i.e., the CSBI in Higgins & McCabe, 2003 and the NIMH DISC in Villodas et al., 2015). Two studies used non-ASEBA measures (i.e., the WSJCA

interview (Asscher et al., 2015) and the Alcohol and Drug Problem Index (Cavaiola & Schiff, 1988)).

The differences outlined above suggest a split in terms of focus on delinquent versus generally antisocial or externalising behaviour. Unsurprisingly, this difference in methodology seemed to fall along professional boundaries, as papers published in justice and criminology journals were more likely to restrict measurement to delinquent acts while those from psychology journals were broader in their inclusion of a variety of externalising behaviour types.

5.7 Findings

5.7.1 Findings Related to ACEs and Externalising Behaviour

Half of the studies examined found a relationship between the type of ACE experienced and the behavioural outcome (k = 9). Instances of externalising behaviour that involved sexual elements were reported to be more common among those who had a history of sexual abuse (k = 5) than those with other ACEs (Asscher et al., 2015; Bonner et al., 2020; Cain, 2020; Miley et al., 2020; Spinazzola et al., 2014). Aggressive behaviour was recurringly found to correlate with past experiences of physical abuse and/or witnessing violence in the home (k = 4) (Cain, 2020; Miley et al., 2020, Villodas et al., 2015; Watts & Iratzoqui, 2019). Conversely, Depaul and Arruabarrena (1995) concluded that physically abused children were more likely to be withdrawn and that neglect and aggression were correlated while Perez's (2001) findings suggest a stronger relationship between being exposed to sexual abuse and engaging in aggressive behaviours. Though they did not collect data regarding inappropriate sexual behaviours, Watts and Iratzoqui (2019) also reported a relationship between sexual abuse and violence. One study (Asscher, 2015) found that, while male violence increased regardless of the type of abuse endured, females were more likely to demonstrate violent behaviours when they had been physically abused. Bonner et al. (2020) noted an

increased risk for homicide related to the experience of emotional abuse. Miley et al. (2020) identified a correlation between household substance abuse and drug offenses. Of those who did not find a significant relationship, many mentioned the prevalence of polyvictimisation, and that it was unusual for participants to have experienced only one kind of ACE. This finding may be partially accounted for by the commonality of high-risk samples among the surveyed studies (k = 14), as such youth are understandably more likely to experience ACEs than the general population.

5.7.2 Methodological Factors

Methodological approaches were diverse. Among those studies that did find a significant relationship (k = 9), analyses were less varied but discrepant methodologies for data collection again emerged. Sample sizes ranged from 66 to 64 639. In processing their findings, most authors used linear or logistic regression (k = 8) while one conducted a latent-class analysis (LCA; Villodas et al., 2015). Professionally administrated semi-structured (e.g., the PACT or THP) (k = 2) or researcher-created interviews (k = 4) were most used to identify ACEs (k = 6) while other studies referred to documentation of abuse obtained through child protection or clinical records (k = 3). Those that did find a significant relationship between specific ACEs and particular behaviours primarily collected information about forms of abuse and neglect (k = 6). Two studies added witnessing domestic violence and/or family structure and only one looked at a broad range of ACEs including household mental illness and incarceration (Miley et al., 2020). Behaviour measures also varied, including criminal records or self-report questionnaire about offending (k = 5), an ASEBA questionnaire (i.e., TRF) (k = 1), an established, structured behavioural interview (k = 1), or a combination of an ASEBA measure (i.e., the CBCL) and a secondary measure (i.e., a file review; the Computerised NIMH-DISC-IV) (k = 2).

Studies showing a non-significant relationship between ACE type and behaviour type (k = 9) were observably more varied in their methodology. Sample sizes ranged from 50 to 12 603. One was an LCA (Aebi et al., 2015), two used Pearson correlation (Zou et al., 2019; Lopez-Soler et al., 2017) one used structural equation modelling (Vachon et al., 2015), and the remainder linear (e.g., ANOVA) or logistic regression (k = 4). ACEs were identified using a validated semi-structured interview (i.e., the THP) (k = 1), researcher-developed interview (k = 1), self-report questionnaire (e.g., the CTQ) (k = 4), and review of clinical or child protection records either using a protocol (k = 1) or informally (k = 2). ACE documentation was generally limited to abuse and neglect (k = 5) with some adding witnessed domestic violence (k = 3). Most studies in this category measured behaviour using one of the ASEBA (Achenbach, 1991) quantitative measures (k = 6), focusing on the higher-level externalising or antisocial scale (k = 2) or specifying social problems, delinquency, and aggressive behaviour subscale scores (k = 4). Others used self-report or court records of offending (k = 2). One added peer ratings of disruptiveness and fighting (Vachon et al., 2015).

The overall quality of the reviewed studies was good, with only two studies scoring below 85% according to the QualSyst criteria (Kmet et al., 2004). Among the studies that did have scores of "1" in one or more areas, weaknesses were commonly related to methodology and analysis. These are summarised below.

Vague descriptions of methodology. Some researchers were noted to leave out important information about their process either insofar as selecting or recruiting participants or identifying group membership (e.g., Caivola & Schiff, 1988; Aebi et al., 2015; Asscher et al., 2015; Lopez et al., 2017). For instance, only speaking to how the experimental group was selected for participation or not reporting information about gender or ethnicity. Alternatively, writing in general terms about a process for reviewing clinical files for incidents of ACEs or externalising behaviour without

providing information about how those determinations were made (e.g., Depaul & Arruabarrena, 1995; Vachon et al., 2015).

Insufficient ACE information and limited controls for confounding variables. Gaps in measurement of ACEs and known confounding variables more broadly were noted as issues in the reviewed studies. The literature has long identified common risk factors that relate to both antisocial behaviour and ACEs, including marital discord, poverty, and community violence (Felitti et al., 1998; Farrington et al., 2015). For instance, socioeconomic status was accounted for by only six of the included studies (e.g., Depaul & Arruabarrena, 1995; Higgins & McCabe, 2003; Perez, 2001; Vachon et al., 2015; Miley et al., 2020). Caregiver divorce or separation (i.e., family structure or marital status) was generally framed as a control variable and, while at times collected demographically, it was rarely accounted for in the analyses (e.g., Cavaiola & Schiff, 1988; Higgins & McCabe, 2003; Farrell & Zimmerman, 2017). None of the studies involved all 10 identified ACEs in their analysis.

Frequent use of only high-risk samples. As the research in this area concerns delinquency, challenging behaviour, and childhood hardship, most children were sampled from high-risk populations (e.g., forensic, outpatient, social services, or clinical settings) with only three looking at samples from the general population (Farrell & Zimmerman, 2017; Higgins & McCabe, 2003; Watts & Iratzoqui, 2019). Relatedly, the inclusion of a general population control was rare (k = 5 out of a total of 16 studies using high-risk samples) (Depaul & Arruabarrena, 1995; Perez, 2001; Vachon et al., 2015; Zingraff et al., 1993; Zou et al., 2019).

Limitations in measurement of behaviour. Generally, only one source of information was acquired (e.g., a parent or teacher report; review of referral documents) and some measures were time limited. For instance, asking whether a type of offending or externalising had happened within the past six or twelve months (e.g., the ASEBA

measures). Similarly, behaviours of interest included acts of varying severity, ranging from rule-breaking and aggression to homicide and sexual offending. A third of the studies included measures of both criminal and non-criminal behaviours (k = 6), four of which aggregated all criminally relevant information into a delinquency subscale (i.e., domains of the TRF and YSR; Achenbach, 1991) (Aebi et al., 2015; Depaul et al., 1995; Spinazzola et al., 2014; Zou et al., 2019). The most common distinction within behavioural variables was among violent, property, and sexual offending (k = 4), but it was uncommon for any two studies to look at the exact same behavioural outcomes.

5.8 Thematic Discussion

Insights provided by this review fell into three broad themes: 1) ACEs are consistently associated with externalising behaviour, 2) disciplines differ in methodology and terminology, and 3) lack of generalisability.

A consistent association between ACEs and externalising behaviour. All papers reviewed concluded that the risk of engaging in externalising behaviour was increased by exposure to at least one ACE. Narrowing in on individual or types of experiences and certain categories of antisocial behaviour, though, was less straightforward. As touched on previously, exactly half of the studies supported a unique relationship between behaviours observed and ACEs of certain types. Many of the findings indicated a relationship between being abused or seeing abuse and later engaging in similar behaviour (e.g., Spinazzola et al., 2014; Bonner et al., 2020; Cain, 2020). Rather than a causal relationship, however, the fact that most people are exposed to some form of ACE and do not go on to engage in these types of behaviours indicates that ACEs are rightly understood as one of many dynamic sources of risk in this regard (Felitti et al., 1998). Congruence between ACE and externalising type support 'cycle of abuse' (Maxfield & Widom, 1996) or social modelling frameworks, such as social cognitive/learning theory (Bandura, 1986), social information processing (Dodge &

Crick, 1994), or the theory of planned behaviour (Ajzen, 1991). Similarly supportive of these theories was Miley and colleagues' (2020) finding that past exposure to household substance misuse was more common among youth who were charged with drug-related offenses. This contributes to the long-standing evidence base for social influences on behaviour. One study, wherein youth who were abused were more likely to become withdrawn while neglected youth tended to be more violent (Depaul & Arruabarrena, 1995), could be interpreted to align with a trauma (e.g., EPT; Foa, 2006) or Strain Theory (Agnew, 2001). That is, the experience of abuse facilitating a trauma response of avoidance and neglect creating sufficient tension (i.e., in terms of a child striving to meet physical needs) that they feel emboldened to engage in antisocial behaviour. Again, however, the small portion of ACE-exposed youth who go on to engage in externalising behaviour reinforces the findings outlined in more developmental models that ACEs are only one factor among a myriad of risks that contribute to the likelihood of demonstrating externalising behaviour (e.g., Farrington, 2015)

Two of the reviewed studies were of particular interest because of shared samples and seemingly contradictory findings regarding the relationship between ACEs and behaviour (i.e., the National Longitudinal Study of Adolescent to Adult Health (Add Health) Farell & Zimmerman, 2017; Watts & Iratzoqui, 2019). However, closer look at the methodologies provides insight, as the two research groups looked at different stages of data collection (Farrell & Zimmerman, 2017; Watts & Iratzoqui, 2019). The first wave of Add Health data was collected from youth aged 14 to 16 during the 1994-1995 school year through a national, stratified sampling process that was intended to be representative of the US population. The second set of interviews were conducted between one and two years later while the final occurred between 2001 and 2002, when participants were between 18 and 26 years old. Being that the study limited to wave one and two data analysis did not find a significant relationship but one was

found between waves one and three, it may be that a correlation between ACE type and behavioural outcome takes more time to emerge.

Methods of both measurement and analysis varied widely, even down to the way in which a single instrument might be used (e.g., use of the broad CBCL antisocial scale versus contributing subscales). Despite sampling a wide swath of studies from a variety of fields, none both measured and included all 10 types of ACEs in their analysis. Several studies that were excluded during the selection process did include measurement of the occurrence of all 10, but then went on to aggregate the scores in their analysis. Given both the *prima facie* distinctions among ACEs (e.g., physical abuse vs. parents divorcing) and the recommendation for doing so that is laid out in the original ACE study (Felitti et al., 1998), it is surprising that so few researchers looking at trauma and antisocial behaviour have separated out these diverse experiences and use analyses that would be conducive to spotting differences in impact. Overall, variety among the studies in this area speak to theoretical and conceptual discrepancies, making them difficult to reliably compare.

Disciplines vary in methodology and terminology. The different approaches that studies took to measurement seemed to vary across fields of study. Research from journals with a broadly social science or psychology scope (e.g., *Child Abuse & Neglect, Journal of Family Violence, Journal of Abnormal Child Psychology*) was more likely to involve the use of standardised measures or processes (e.g., the Maltreatment Classification System; Barnett et al., 1993) to assess ACEs and/or externalising behaviour. On the contrary, papers published in justice and criminology journals (e.g., *Journal of Developmental and Life-Course Criminology, Justice Quarterly, Journal of Criminal Justice*) tended to rely on criminal and clinical records or researcher-created questionnaires. This implies a difference in perspective insofar as the nature of the variables, with perhaps justice and criminology being focused on the discrete event (i.e.,

did the ACE or behaviour occur?) while colleagues in psychology and social work look for shades of grey within them (i.e., what was the context, frequency, and severity of the ACE or behaviour?).

The cross-discipline discrepancies speak to a lack of uniformity insofar as the way that externalising behaviour is conceptualised, and which behaviours can be expected to be impacted by ACEs. This conclusion is supported by the diversity of theories and models that purport to explain such behaviours. For instance, a strain theorist who views violence or theft as a response to societal pressures and a lack of social guidance (Agnew, 2001) may view these behaviours as somewhat transactional (i.e., meeting a need or obtaining an unobtainable, desired outcome), and therefore only whether the act occurred or not is important. Cognitive behavioural theorists, seeing the act as one of several options in response to internalised beliefs, would perhaps take a more iterative view where details such as internal processes, frequency, and severity are relevant (Beck et al., 1979).

It should also be highlighted that among the studies that did use a standardised approach to measuring behaviour, almost all of them relied on some form of the ASEBA (Achenbach, 1991). These behaviour measures were slightly overrepresented among studies that did not find a significant relationship between ACEs and externalising behaviour as compared to those that did. Perhaps the relationship is present but difficult to differentiate when behaviour is less severe. That is, those who remain below the criminal threshold do not significantly stand out from their peers or other ACE-affected youth in this regard. However, it should also be noted that many of the studies that used ASEBA measures relied solely on one of the included questionnaires, such as the CBCL or TRF, and only two acquired ratings from multiple sources (e.g., a professional and a parent). This would be contrary to common best practices in behavioural assessment, which would require multiple data sources

(National Association of School Psychologists, 2020). Considering the way in which environment-specific expectations (e.g., home versus school) can impact a child's behaviour, it is insufficient to limit data collection to only one source. This approach is likely to provide only a partial picture, and a more robust assessment method is merited.

Issues of generalisability. Concerns about generalisability of findings were largely related to sampling restrictions. Samples often shared characteristics such as socioeconomic status, gender, culture or ethnicity, forensic or otherwise high risk (e.g., high school dropouts; Perez, 2001). Some researchers solely recruited from populations that had reported abuse to authorities or were presently receiving services (e.g., trauma treatment; family care for intimate partner violence). While the logic of targeting these populations may be based on behavioural prevalence or convenience, it both limits generalisability and may serve to reinforce harmful stereotypes. In some cases, it may also skew the findings as only the most high-frequency or most severe ACEs or behaviours are being accounted for. Of the studies that did not report generalisability concerns, only four used strategically sampled groups selected to represent the general population (i.e., stratified and/or matched sampling; DePaul & Arruabarrena, 1995; Farrell & Zimmerman, 2017; Higgins & McCabe, 2003; Watts & Iratzoqui, 2019). Additionally problematic, some studies relied on formal reports of ACEs - generally child protection, court, or social services reports. Chronic underreporting of child maltreatment is a well-known phenomenon (StatsCan, 2021; NSPCC, 2021), and not accounting for unreported ACEs is likely to have reduced validity and generalisability of findings. Further, no studies actively measured whether a child had received treatment or used it as a criterion when selecting their sample.

Finally, ethnicity was very poorly accounted for in the reviewed studies with half of the reports offering no ($k = 6$) or minimal (e.g., white versus non-white) ($k = 3$) ethnic information. Of those that did outline ethnic distribution of their samples, only

two included Indigenous categories (Cain, 2020; Watts & Iratzoqui, 2019). It is possible that the inclusion of additional search terms at the outset of the review, such as historical or intergenerational trauma, would have increased the representation of Indigenous samples, though unlikely given the general lack of research with Indigenous populations (e.g., Richards et al., 2021). Nonetheless, neither study that included Indigenous participants accounted for ethnic differences in the analysis of their data. In fact, only one study reviewed (Bonner et al., 2020) stratified their analyses by ethnicity. The results indicated that ethnicity may have a moderating effect across different behavioural outcomes. This suggests that further study of differential impacts of ACEs across ethnic groups is warranted.

5.8.1 Limitations and Future Directions

This systematic review had several limitations. First, as noted, adding search criteria such as historical or intergenerational trauma could have improved the likelihood of accessing studies involving multicultural and Indigenous samples. Of perhaps more impact, however, limiting inclusion to quantitative analyses likely reduced the diversity of papers reviewed, demonstrating an empirical, Western bias (Kovach, 2020). Nonetheless, the general lack of representation of Indigenous people within what might be considered the more Western-centric literature on this topic (i.e., quantitative and empirically driven) is a valuable insight, reinforcing the paucity of consideration given to these populations when conducting research that is likely to inform treatment and policy (e.g., Gone et al., 2020; Richards, 2021). Next, best practice would have been to have a secondary reviewer participating in all stages of the review rather than solely for the quality review. A final noted limitation was publication bias. Though accessing only papers available through academic databases is not an atypical approach to systematic review, papers that demonstrate significant findings are more likely to be published. The only grey literature accessed was in the form of

academic theses. It is likely that relevant information would also be available through other sources (e.g., national statistical bodies), but time and resource limitations prevented their inclusion.

Future research in this area would benefit from several changes in approach integrated in the studies summarised in the following chapters. First, at minimum, 10 ACEs should be accounted for when examining the relationship between adversity and behaviour. Relatedly, a formal report of ACEs (e.g., police or social services documentation) should not be the sole indicator. Second, measurement of behaviour should include at least two sources of data (e.g., observation and behavioural measures; a behavioural measure completed by at least two informants) as well as consideration for historical behavioural trends. Third, given the known differences in socialisation and behavioural norms related to culture, ethnic and cultural information should be collected and considered in the analyses. Further, while over three quarters of the studies took place in countries with a significant Indigenous population, only two elected to parse out these ethnic identities in their design. Also, as noted, there was a distinct lack of Canadian and Indigenous representation in the studies reviewed, demonstrating a need for research with these populations.

5.9 Conclusion

While some conclusions can be drawn about the relationship between ACEs and externalising behaviour, there are many ways in which the research in this area could be improved. An important finding is that despite numerous methodological differences, a consistent correlation was observed between the ACEs measured (i.e., most often child maltreatment, sexual abuse, and neglect) and an array of behaviours. Though support for more nuanced relationships was not as strong, several possibilities were noted. Most examples were supportive of a Social Learning Theory of behavioural transmission with some evidence provided for Strain Theory. Exploration of the relationship between

specific ACEs and types of antisocial behaviour is complicated by parallel terminology and a lack of consensus about best practice in assessment. Another factor impacting the viability of comparison is divisions in methodology that are present both between and within professional disciplines. Also, ethnicity was mostly neglected as a variable in the reviewed studies, particularly to the exclusion of Indigenous populations. Finally, there was a notable absence of trauma theorising in the literature. As the aim of the thesis was to inform both assessment and intervention, a systematic review of trauma-informed behaviour interventions follows.

CHAPTER SIX:

A SYSTEMATIC REVIEW OF TRAUMA-INFORMED GROUP BEHAVIOUR PROGRAMMES AND INTERVENTIONS FOR CHILDREN AND YOUTH

6.1 Structure of the Chapter

This chapter describes a review of group programmes and interventions to address antisocial or externalising behaviour with children and youth who have a documented history of ACEs. First, the rationale for the review approach is outlined. This is followed by the methodology and findings. Potential mediators and moderators of intervention effectiveness are identified, and the chapter closes with a summary of recurrent limitations and recommendations for prospective research.

6.2 Addressing ACEs and Behaviour in Children and Youth

ACEs have been found to relate to numerous behavioural sequelae. A large-scale study in the US found that delinquent youth were nearly four times as likely as their non-offending peers report four or more ACEs (Baglivio et al., 2014). Before behaviour reaches the threshold of delinquency, it is common for children and youth to demonstrate misbehaviour or disengagement in school (e.g., Crooks et al., 2007; Watts & Iratzquoi, 2019). Common non-criminal behaviours span externalising and internalising, such as aggression, depressive symptoms, withdrawal, or attention difficulties, alongside symptomology more commonly associated with trauma, such as avoidance or anxiety (American Psychiatric Association, 2013; Farrington, 2003; Baglivio et al., 2014). While each may serve to exacerbate academic difficulties or estrange a child from their peers, externalising behaviours are particularly disruptive within a child's typical environments. Prosocial classmates are likely to distance themselves from aggressive peers and not seek them out for socialising. Under-resourced teachers and parents may struggle as well, with educators using exclusionary strategies to maintain a calm learning environment. Indigenous and ethnic minority

students are more likely to be targeted by these punitive practices (Pesta, 2022). As discussed in Chapter One, this can lead to the criminalisation of children known as the school-to-prison pipeline (e.g., Goldstein et al., 2019). Loeber and Farrington (2000) found that children who become involved in crime before age 13 are two to three times more likely than their same-aged peers to engage in serious, violent, and chronic offending as adults.

As schools or community health agencies are often the first points of contact for children demonstrating externalising behaviour, there is a need for assessment and intervention that can be accessed where these behaviours are first emerging or recorded. Given the clear relationship between such behaviours and a history of trauma outlined in Chapter Five, the necessity of a trauma-informed approach is self-evident. The inconsistent definitions of trauma-informed practice touched on in Chapter Two support the value of using a broad definition when gathering information about current practices. Further, the disproportionate prevalence of behavioural sanctioning among minority youth indicates that cultural and ethnic differences should be considered at both the assessment and intervention stages.

6.3 The Value of the Group Format in Working with Children and Youth

There are several benefits to providing interventions for trauma-affected children and adolescents in a group setting. A group can serve as a space for a child to share their experience and reaction with peers who have similar backgrounds (e.g., Batkin Kahn & Aronson, 2007; Thomas et al., 2019). This can have a normalising effect, helping to reduce shame and feelings of isolation (e.g., Boss et al., 2003; Grijalva, 2021). Being accepted within this peer group can provide a sense of belonging and community – protective factors which may have been compromised by ACEs. This can be especially valuable in the treatment of clients from collectivist cultural backgrounds (Kirmayer, 2007; Linklater, 2017; Yeh et al., 2006), wherein establishing

and maintaining one's group connection is strongly prioritised. Practically speaking, a group dynamic can also offer opportunities to practice social problem solving and coping skills learned together, enhancing learning through peer modelling, roleplaying, or *in vivo* socialising. Finally, group delivery of intervention can be an effective way to address the needs of multiple youth simultaneously. This efficiency can be an important consideration for under-resourced services, such as schools, non-profit mental health organisations, and other community programming, which are often initial points of contact for disenfranchised or cultural minority youth (e.g., Browne et al., 2016).

6.4 Review Aim

The intent of this review was to provide a summary and critical analysis of the current state of trauma-informed, group interventions for externalising behaviour in children and youth. Recent systematic reviews in this area evaluated parenting-focused programmes (Lindstrom Johnson et al., 2018), adult-only interventions (Han et al., 2021), multi-tiered school-based programmes (Berger, 2019), and general trauma-informed school practices (Thomas et al., 2019). While caregivers undoubtedly play an important role when providing services of this kind to children, it was thought valuable to examine interventions where children were also involved. One reason was that there can be numerous barriers to connecting with the caregivers of children who are demonstrating behavioural issues. For instance, they may have limited availability or will to engage due to work or lifestyle factors (e.g., substance use disorder, challenges related to poverty), a lack of phone or internet services, or fear of being blamed. Within Indigenous communities, there could be the added complexity of a learned, historically rooted distrust for formal mental health services (Linklater, 2017). Focusing on interventions that take place in adulthood is also worthwhile, but it is commonly understood that early treatment tends to be more effective (e.g., Dorsey et al., 2017). One reason for this is increased neural plasticity and the ways in which foundational,

regulatory systems in the brain are thought to be more amenable to change while advanced cortical structures are still developing (Tronick & Perry, 2015). Finally, multi-tiered, school-based programmes are an important element of mental health service provision for children and youth, as they take place in an environment most young people are already accessing and can be adapted based on need. However, by focusing a review solely on interventions structured this way and delivered in schools, there are many programmes offered to similar clientele, but delivered using a single-tier approach in community or clinical settings that would be missed. This was also thought to be of importance when seeking literature that would be more likely to include Indigenous populations, as intervention may be more likely to take place in a collective, traditional or ceremonial, community-based setting (e.g., Gone et al., 2020; Linklater 2017). Thus, comparison of the findings across methods and context is valuable. Further, neither these papers nor earlier high-impact reviews in this area (e.g., Dorsey et al., 2017; Rolfsnes & Idsnoe, 2011), specified externalising behaviour as an outcome measure in their inclusion criteria. Comparing effectiveness of interventions across contexts, with various methodologies, and involving diverse populations provides an original and comprehensive contribution.

6.5 Method

A systematic literature review was conducted. The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA, Page et al., 2020) was consulted in the development and write-up of the review. The papers found were analysed qualitatively for shared themes (Green et al., 2001; Popay et al., 2006).

6.5.1 Data Sources and Search

This review focused on the published, peer-reviewed literature pertaining to trauma-informed, group interventions for antisocial behaviour in children and youth. Grey literature from the accessed databases was not included because of an error in the

search process (i.e., selection of the *peer reviewed* search specifier) that could not be rectified within the timelines of the PhD. Papers accessible as of June 21, 2022 via the following databases were included: Academic Search Complete, AMED – The Allied and Complementary Medicine Database, APA PsycArticles, APA PsychInfo, Child Development & Adolescent Studies, ERIC, MEDLINE with Full Text, Social Sciences Full Text, SocINDEX with Full Text, and Web of Science. The diverse subject areas covered by these databases offered a comprehensive view of the literature. The search terms were as follows: (“trauma-informed” or "adverse childhood experiences" or ACEs or "potentially trauma*" events or "child maltreatment" or "child abuse*" or neglect* or rape*) and (“behav* problem*” or viol* or crim* or aggress* or danger* or delinquency or dissocial* or "antisocial behav*") and (intervention or prevent* or workshop or program or treat*). The reference lists from articles selected for full-text analysis were also hand-searched and additional relevant articles reviewed for inclusion.

6.5.2 Selection Criteria

Population, intervention structure, method of data collection, and outcome variables formed the inclusion criteria. The intervention had to be offered in a group format to children and youth between the ages of four and 21. As in the first systematic review, this reflects the common age cutoffs used in Canadian schools (Saskatchewan Ministry of Education, 2021). The apparent lack of agreement on what constitutes evidence-based, trauma-informed practice (e.g., Avery et al., 2020; Watham et al., 2021) entailed that the present review included any study that mentioned considering trauma in its development. Following the example of Dorsey and colleagues (2017), the review was not restricted based on type of trauma (e.g., war, abuse, natural disasters) or research design. Data collected regarding outcome variables included a quantitative measure of behaviour that was administered both before and after the treatment.

Article titles and abstracts were reviewed, and full-text versions were retrieved for those determined likely to meet inclusion criteria. A randomly selected sample (i.e., approximately 10%) of these papers were co-rated by another researcher for quality. Initial assessments were 96% in agreement overall, and within two points of one another for each article's score. Disparate evaluations were discussed and resolved through email correspondence.

6.5.3 Study Quality Assessment

Quality assessment was conducted using the QualSyst evaluation developed by Kmet et al. (2004). Described in detail in Chapter Two, the QualSyst approach been recently used in similar systematic reviews involving psychological interventions (e.g., Killaspy et al., 2022; Lannes et al., 2021; Wright et al., 2021). The QualSyst authors suggest that a cut-off score of 75% provides a conservative guideline for inclusion of studies for analysis (Kmet et al., 2004). However, rather than excluding studies that fell below a certain threshold, prior reviewers have opted to include all studies. while providing a qualitative descriptor for the given range of scores (e.g., <50% being poor quality, 50-69% fair quality, etc.; Lannes et al., 2021; Wright et al., 2021). Due to few studies meeting initial inclusion criteria (n = 26, see below for details), this approach was applied. Most articles (k = 23) scored above 75%. Of the remaining five, three fell between 60 and 70% (i.e., Carbonell & Parteleno-Barehmi, 1999; Ehntholt et al., 2005; and Tourigny et al., 2005) and two between 50 and 59% (De Luca et al., 1995; Rivard et al., 2005). Articles scoring below 75% were among the oldest studies reviewed, with publication dates ranging from 1995 to 2005.

6.5.4 Synthesis of Study Results

As with the first review, principles of GT were applied in reviewing and coding data regarding the experimental aspects of each study (i.e., the sample, methodology, analysis, results, and discussion). Data is summarised in Table 6.1 to assist in

comparison among the findings. Research questions had guided the collection and analysis of data, and a narrative approach was applied to describing the findings (Green et al., 2006; Popay et al., 2006). Coding and comparative synthesis were used to organise the findings thematically (Birks & Mills, 2023). This review focused on trends within and the effectiveness of trauma-focused, group therapy interventions for children who were demonstrating externalising behaviours. A secondary goal was to gather information about limitations, mediators, or moderators within such interventions. To that end, data about the structure of the evaluation as well as the programmes themselves (see Appendix C, Table C.1) was collected and analysed. The outcome was a summary of common approaches and activities, design, structure, delivery, facilitator characteristics, and insight into the role of caregivers or community members.

6.6 Search Process

Databases were searched using EBSCO Host and Web of Science and 22,372 potential articles were identified. Findings were exported to *Mendeley*, where 6,605 duplicates were identified and removed. In total, 15,767 references were transferred to *Rayyan*. Titles were reviewed for keywords and 919 were selected for abstract review.

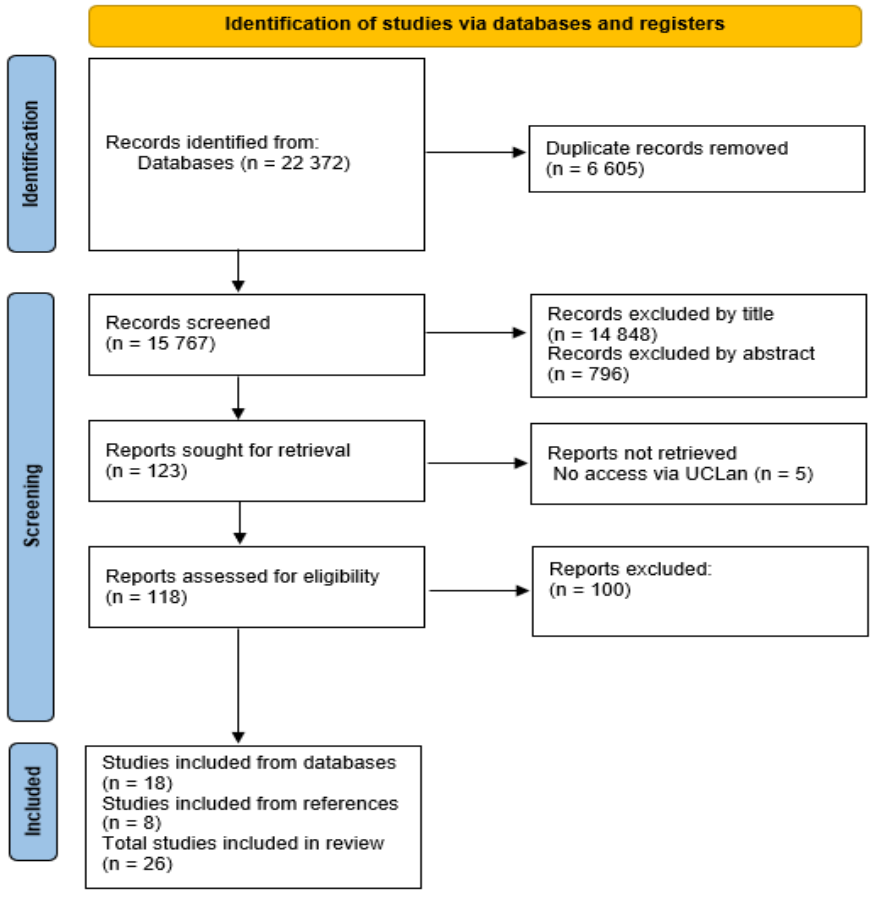
The following inclusion criteria were applied to the abstracts:

1. Full-text available in English.
2. Study evaluates an intervention for school-aged children and youth (aged 4-21) that includes a group component.
3. Antisocial or externalising behaviour of some kind is a quantitatively measured outcome.
4. The programme is described as trauma-informed or was created with the needs of traumatised children and youth in mind.
5. Paper includes an outline of the intervention.

Based on this, 123 articles were selected for full-text review. Full criteria were met by 18 articles. References from each were hand-searched and six additional papers identified. Two articles not captured during the search process were found in the reference list of other systematic reviews read in the preparation of the present one. Thus, the total number of included articles was 26. The process is summarised in Figure 6.1 below.

Figure 6.1

PRISMA Diagram of Inclusion and Exclusion Decisions for Systematic Review Two



During the review process, inclusion or exclusion was determined based on sample demographics, intervention structure, methodology, and focus. 15,749 studies were excluded (See Appendix C for a detailed summary of exclusion rationales).

6.7 Characteristics of Included Studies

6.7.1 Location and Design

Information about the design, sample, method, and findings of each study is summarised in Table 6.1. The majority of interventions occurred in the United States (*k* = 17) while the remainder were conducted in Canada (*k* = 4), Beni (*k* = 1), Indonesia (*k* = 1), Sri Lanka (*k* = 1), The Netherlands (*k* = 1), and the United Kingdom (*k* = 1). Six research designs were employed throughout the 26 included interventions: uncontrolled case series (*k* = 8), randomised or semi-randomised control trial (*k* = 10) (e.g., Participants being placed in a specific group at request of school teams out of concern about peer conflict; Mendelson et al., 2015), uncontrolled randomised trial with two experimental conditions (*k* = 3), non-randomised control trial (*k* = 3; Ehntholt et al., 2005; De Luca et al., 1995; Hebert et al., 2010), quasi-experimental, non-randomised control trial (*k* = 1; Tourigny et al., 2005), and quasi-experimental, archival study (*k* = 1; Grijalva et al., 2021). Three of the randomised studies used clustering approaches, assigning whole organisations or service settings to the given condition (Rivard et al., 2005; Tol et al. 2008, 2012). Most researchers recruited a comparison group (*k* = 17), nearly one third of whom indicated significant differences between the experimental and comparison samples on outcome variables prior to participation (*k* = 5; Rivard et al., 2005; Tourigny et al, 2005; De luca et al., 1995; Hebert et al.; 2010; Grijalva et al., 2021). All but one study (Grijalva et al., 2021) utilised a repeat measure (i.e., pre-post) approach to data collection and nearly one fifth collected additional follow-up data between three and twelve months after the intervention concluded (*k* = 5; Ehntholt et al., 2005; Johnston, 2003; O'Callaghan et al., 2013; Salloum & Overstreet, 2012; Stein, 2003).

Table 6.1

Summary of Articles Included in Systematic Review Two

Study & Location	Design	Sample	Setting	Measure(s) ACEs and behaviour	Trauma and behaviour outcomes	Authors' conclusions
Beltran et al., (2016).	Pre-post, uncontrolled case series	N = 10; aged 8-12 years (m = 10.3) 100% male; 70% Black, 30% other. Children who were receiving treatment.	Community-based, mental-health centre United States.	Clinical history taken by a licenced social worker or clinical psychologist • Emotional, physical, and sexual abuse • Neglect • Grief or loss • Community or school violence • Domestic violence • Parental mental illness, substance abuse, and incarceration **Behavioral and Emotional Rating Scale – 2nd Edition** (BERS-2; Epstein, 2004); parent and self-report • Interpersonal strength • Affective strength • School functioning	Parents' BERS rating on the Interpersonal Strength scale improved significantly. Changes in affective strength and school functioning were not significant. Children's self-rating did not change significantly on any subscale.	Use of yoga and mindfulness as an adjunct to trauma-informed mental health treatment may help mitigate adverse impact of trauma and stress.
Brown et al., (2006).	Quasi experimental, non-randomised control with	N = 63; aged 8-13 years 46% female;	School-based, targeted educational and mental	**Traumatic Events Screening Inventory - Child Version - Brief Form** (TESI; Ford et al., 1999) • Serious accidents	Arousal and total symptoms of PTSD in students who met diagnostic criteria sig. decreased following classroom intervention.	Students with PTSD showed greater decreases in arousal and total symptoms than those without following both classroom and individual

Study & Location	Design	Sample	Setting	Measure(s) ACEs and behaviour	Trauma and behaviour outcomes	Authors' conclusions
	non-equivalent groups (those who got individual treatment after)	63.5% Black, 22.2% Hispanic/ Latino, 14.3% biracial. Charter school students	health programme. United States	• Natural disasters • Bereavement • Medical trauma • Community violence • Domestic violence • Sexual abuse **Child PTSD Symptom Scale** (CPSS; Foa et al., 2001) • Total symptoms • Re-experiencing • Avoidance **Behavioral Assessment System for Children** (BASC; Reynolds & Kamphaus, 1992) • Externalising behaviour • Internalising behaviour	After individual intervention, sig. decrease in re-experiencing, avoidance, and total symptoms. No sig. findings for students who did not fit PTSD criteria. No significant interactions or main effects for behaviour.	intervention. No change in externalising or internalising behaviour. Lack of impact in students who did not meet PTSD criteria may be related to systemic stressors, such as community or family-related traumas and patterns of behaviour. Involving families in the therapy may improve both PTSD and behavioural outcomes.
Carbonell & Parteleno-Barehmi (1999).	Pre-post test, randomised control trial	N = 26; aged 11-13. 100% female; 54% Latina, 42% Black, 4% Haitian. **Two groups:** Treatment (*k* = 12) and waitlist control (*k* = 14). Students.	Middle school in a low-income, high-crime, urban neighbor-hood. United States.	Clinical history of traumatic events gathered through screening interview (results not reported) **Youth Self Report Form** (Achenbach, 1991) • Delinquent Behaviour • Aggressive behaviour	No sig. changes in delinquent or aggressive behaviours identified.	Group format allowed youth to learn new coping patterns from their peers. Impact on symptoms was restricted to numbing-type, internalising symptoms rather than externalising.

Study & Location	Design	Sample	Setting	Measure(s) ACEs and behaviour	Trauma and behaviour outcomes	Authors' conclusions
De luca et al., (1995).	Pre-post test, non-randomised control trial with non-equivalent groups.	N = 51; aged 7-12. **Two groups:** sexually abused experimental (*k* = 30) and non-abused control (*k* = 21). Children referred for therapy. 100% female; no ethnicity information provided.	Provincial child protection agencies. Canada	**Child Behaviour Checklist** (CBCL; Achenbach & Edelbrock, 1983) • Internalising behaviour • Externalising behaviour	Sig. difference in externalising and internalising behaviours from pre- to post-treatment. Difference in externalising but not externalising was maintained at follow-up nine to twelve months after the end of treatment.	A brief group intervention seemed to improve behavioural outcomes for children with some improvements lasting up to a year after treatment.
Ehntholt et al., (2005).	Pre-post test, cohort, non-randomised control trial	N = 26; aged 11-15. **Two groups:** treatment (*k* = 15; m = 12.47) and waitlist control (*k* = 11; m = 13.46). Refugees or asylum-seekers who had traumatic experiences related to war	Clinical United Kingdom	**War Trauma Questionnaire** (WTQ; Macksoud, 1993) • Separation from caregiver • Loss of home or possessions • Threat to loved ones • Direct contact with danger • Witnessed violence • Physical threat • Loss of loved ones **Revised Impact of Event Scale** (R-IES; Smith et al., 2003)	Sig. reduction in overall PTSD symptoms for treatment group. Specifically, a reduction on intrusion subscale and lower arousal scores. Sig. decrease in behaviour and emotional difficulties following treatment. At two-month follow-up, group differences were no longer significant.	Students who participated in the treatment demonstrated reduced PTSD symptoms and behavioural difficulties. Most students continued to meet diagnostic criteria for PTSD. Post-treatment gains were not maintained. Measures were not normed for use with the given sample. Adding an individualised treatment component or involving families may create more lasting change in behaviour and PTSD symptoms.

Study & Location	Design	Sample	Setting	Measure(s) ACEs and behaviour	Trauma and behaviour outcomes	Authors' conclusions
		34.6% female; Nationality reported rather than ethnicity		• Intrusion • Arousal • Avoidance **Strengths and Difficulties Questionnaire** (SDQ, Goodman, 1994) • Peer relationship problems • Conduct problems		
Exner-Cortens et al., (2020).	Pre-post test, randomised control trial	N = 212; 9th and 10th Grade students. **Two groups**: treatment (*k* = 108, m = 15.5 yrs) and control (*k* = 104, m = 15.5 yrs). High school students. 67% female; 75.9% white.	A medium-sized city Canada	**Adverse Childhood Experiences (ACEs)** questionnaire. Dichotomised such that students with a history of four or more ACEs were identified as at-risk. • Physical abuse • Sexual abuse • Emotional abuse • Neglect • Death or severe illness of caregiver • Domestic drug use • Imprisonment of a family member • Divorce or separation of caregivers • Witnessed violence	The only sig. effect of the treatment condition was on bullying victimization at T4: treatment group participants had 0.34 times the odds of bullying victimization 1 year following the program (Table 2). No main effects of the program on positive mental health, bullying perpetration, or substance misuse regardless of history of ACEs.	Participation significantly lower odds of physical bullying victimization one year later, mediated by increased likelihood to seek help from a mental health professional following the program. No impact on bullying perpetration, but potentially due to small number of youth who reported perpetration at baseline (k = 19).

Study & Location	Design	Sample	Setting	Measure(s) ACEs and behaviour	Trauma and behaviour outcomes	Authors' conclusions
				Bullying Evaluation and Strategies Tool (BEST; PREVNet, 2014). • Bullying perpetrated • Bullying experienced **Youth Risk Behavioral Surveillance Survey** (Centers for Disease Control and Prevention, 2011). • Binge drinking • Marijuana use		
Grijalva, F., & Vasquez, M. (2021).	Quasi-experimental (archival), post-test only, using non-equivalent groups	N = 63; aged 12-18 (m = 15.5). **Two groups:** experimental (*k* = 28) and control (*k* = 35). Midwest adolescents. 28.6% female; 78.6% white, 14.3% Black, 3.6% Hispanic, and 3.6% other.	A residential programme for behaviour and mental health. United States.	**Youth Risk Behavior Survey (YRBS)** Rating of frequency in the past three months: • Assaults on peers or staff • Events requiring emergency medical attention • Non-emergency medical events • Suicidal behaviour • Self-harm • Unintentional physical injuries	Non-emergency medical visit and self-harm sig. reduced in members of the experimental group.	Observed changes may be related to the body-based practices that promoted relationship and trust building. Participants may have felt more connected and less isolated.
Habib, M., Labruna, V., &	Pre-post, uncontrolled case series	N = 24; aged 14-21 years (m = 17).	A residential care facility	**UCLA Post-Traumatic Stress Disorder Reaction**	Sig. improvement in the YOQ-SR Total Score, as well as all subscales, with	Improvements in anxiety and depressive symptoms, physical complaints, social relationships,

Study & Location	Design	Sample	Setting	Measure(s) ACEs and behaviour	Trauma and behaviour outcomes	Authors' conclusions
Newman, J. (2013).		75% female; 43% white, 17% Black, 17% Hispanic, and 5% other.	United States.	**Index** (UCLA PTSD RI) (Pynoos et al. 1998) • Total symptoms • Re-experiencing • Avoidance • Hyperarousal **Adolescent Trauma History Checklist & Interview** (THCI) (Habib & Labruna, 2006) • Witnessed and directly experienced PTEs as defined by the DSM-IV-TR **Youth Outcome Questionnaire-Self Report** (YOQ-SR) (Burlingame et al., 2001) • Intrapersonal distress (i.e., internalising) • Somatic • Interpersonal relations • Social problems (i.e., conduct issues) • Behavioural dysfunction (i.e., attention and impulsivity) • Critical items – includes high-risk behaviours	the exception of Social Problems. Similar improvements in scores were found on the overall severity score of the UCLA PTSD Reaction Index, as well as the severity scores for the B, C, and D criteria.	attention and impulsivity, and high-risk behaviours.

Study & Location	Design	Sample	Setting	Measure(s) ACEs and behaviour	Trauma and behaviour outcomes	Authors' conclusions
Hebert et al., 2010.	Pre-post test, non-randomised control trial with non-equivalent groups	N = 90; aged 6-12 years (m = 8.7). **Two groups:** intervention (*k* = 51) and community control (*k* = 39). Sexually abused children. 80% female; 89.5% French-Canadian, 7.8% European, 2.6% Haitian.	Community assistance agency specialising in sexual abuse. Canada	**History of Victimization Form** (HVF; Wolfe, Gentile, & Bourdeau, 1987) was used to codify contextual and abuse-related variables from case files. type of abuse (intrafamilial or extrafamilial), frequency, and severity. **Children's Impact of Traumatic Events Scale - II** (CITES-II; Wolfe, 2002). • Re-experiencing symptoms (e.g., nightmares), • Avoidant behaviors (e.g., social withdrawal), • Hyperarousal problems **Self-Report Coping Scale** (SRCS; Causey & Dubow, 1992). • Approach and avoidance strategies **Child Behaviour Checklist** • Rule-breaking • Aggressive behaviour • Internalizing behaviour • Externalizing behaviour	All subscales except somatic complaints indicated sig. reduction compared to control. Externalising, including individual scores for both rule-breaking and aggressive behaviour, was sig. lower in the experimental group. Posttraumatic distress symptoms (i.e., reexperiencing, avoidance, and hypervigilance) and dissociation also sig. lowered.	Group participation appears to be associated with reduced externalising behaviour issues and posttraumatic stress symptoms.

Study & Location	Design	Sample	Setting	Measure(s) ACEs and behaviour	Trauma and behaviour outcomes	Authors' conclusions
Jaycox et al., (2009).	Pre-post test, randomised control trial	N = 76; 6th and 7th Grade students (m = 11.5 yrs). **Two groups:** control (*k* = 37; m = 11.5 yrs) and experimental (*k* = 39, m = 11.4 yrs) Middle school students. 51.3% female; 96.05% Hispanic, 3.95% other	Low-income area school. United States.	**Modified Life Experiences Survey (LES**; Singer et al., 1995; Singer, Miller, Guo, Slovak, & Frierson, 1998) • Experience of severe violence in the prior year **Child PTSD Symptom Scale** (**CPSS**; Foa, Treadwell, Johnson, & Feeny, 2001) • Identified a "high symptoms" group who had a score of 18 or higher ***Strengths and Difficulties Questionnaire—Parent Report, and Teacher Report*** (SDQ, Goodman, 1997; Goodman, Meltzer, & Bailey, 1998). • Emotional symptoms • Conduct problems • Hyperactivity/ inattention • Peer relationship problems	Decreases in PTSD scores among treatment group; changes in parent-reported behaviour problems insignificant. Changes in teacher reports showed a small effect size Immediate intervention group had slight decreases whereas the delayed intervention group showed minor increases in behaviour problems. High-symptom group demonstrated more pronounced intervention effect.	Small effects on self-reported PTSD and depressive symptoms, along with teacher reported behaviour problems. It was extremely difficult to contact parents and for them to return signed consent forms.
Johnston, J.R. (2003).	Pre-post test, uncontrolled, cohort, case series	N = 223; aged 5-14. 47.5% female; 42% white, 36% Hispanic, 10% Black, 12% other.	Family service agencies or elementary schools in high-risk	**Family Wellbeing Checklist** Lifetime and past six months family history of: • Health problems • Housing problems • Employment/Financial problems	Teacher-reported behaviour problems decreased and social competence increased sig.	Whole-school approach is more acceptable to parents and to school personnel - less likely to result in resistance to treatment. While effects were sig., absence of a no-treatment control group

Study & Location	Design	Sample	Setting	Measure(s) ACEs and behaviour	Trauma and behaviour outcomes	Authors' conclusions
			neighbour-hoods. United States.	• Separation and loss • Neighbourhood violence • Parenting difficulties • Other stressful life events **Teacher Rating Scale** • Behaviour problems • Social competence **Child Behaviour Checklist** • Internalising behaviour • Externalising behaviour	Boys tended to be rated as more behaviourally difficult than girls. Parents rated children as having fewer emotional and behavioural difficulties at follow-up (20%-25% improvement).	limits conclusions. Subject attrition – follow-up data for about half the children were not available.
Mendelson et al., (2015).	Pre-post, semi-randomised control trial	N = 49; aged 12-15 years. **Two groups:** experimental (*k* = 29) and control (*k* = 20). Seventh and eighth grade students. 63.2% female; 94% Black	Two public schools in disadvan-taged neighbour-hoods United States.	**Strengths and Difficulties Questionnaire (SDQ)** • Total score **Academic Competence Evaluation Scale (ACES)** (DiPerna & Elliott, 1999) – reduced version • Disciplinary sanctions for misbehaviour	No significant difference in SDQ scores or disciplinary sanctions overall. Students identified to have low baseline depression symptoms did show significantly reduced sanctions.	Focused on the significant findings in other areas (e.g., dysregulation, social and academic competence). Suggestion that the improvements seen in low baseline depression students supports the value of a universal approach to programme delivery.
Misurell et al., 2011	Pre-post, uncontrolled case series	N = 60; aged 5-10 years (m = 7.28). Clinical outpatients.	Abuse and maltreatment -focused, hospital-based	**Trauma Symptom Checklist for Children** (TSCC; Briere, 1996) • Posttraumatic stress	Participants had lower externalising behaviour scores across measures scores at time two. The effect size was in the small range (*d* = .32).	Game-Based-CBT program also showed some promise in reducing externalizing behaviors.

Study & Location	Design	Sample	Setting	Measure(s) ACEs and behaviour	Trauma and behaviour outcomes	Authors' conclusions
		37 F and 18 M; African American (77.1%), with Latinos comprising the second largest group (18.8%).	outpatient clinic. United States.	**Child Behavior Checklist** (CBCL – age 1.5-5 version or age 6-18 version depending on the child's age; Achenbach, 1991) • Internalising behaviour • Externalising behaviour • Total behaviour problems **Child Sexual Behaviour Inventory** (CSBI; Friedrich, 1997; Friedrich et al., 1992) • Total CBSI scale **Social Skills Rating System – Parent Form** (SSRS-PF – preschool or elementary school version depending on the child's age; Gresham & Elliott, 1990) • Problematic behaviours	Clinical significance testing revealed that between 62% and 100% of the symptomatic children demonstrated improvement on externalising and total behaviour problems as well sexually inappropriate behaviours	Demonstrated that GB-CBT might help to reduce the frequency of sexually inappropriate behaviour. Results should be interpreted with caution since the effect size for this finding was in the small range. Lack of a comparison group and parent and caretaker involvement.
O'Callaghan, et al., (2013).	Cohort (pre-post-and follow-up) randomised control trial	N = 52; aged 12-17 years (m = 16.0). **Two groups:** experimental (*k* = 24) and waitlist control (*k* = 28). War-affected girls.	Beni	**UCLA PTSD Reaction Index (Revised)** 22 Interviewed re: symptom frequency in past week • Hyper-arousal • Intrusion • Avoidance	TF-CBT treatment group had a highly sig. reduction in trauma symptoms with a very large effect size, sig. reduction in conduct problems with a large effect size, and a sig. increase in prosocial behaviour with a medium effect size	TF-CBT can be applied successfully by trained local facilitators without a mental health or medical background. Can be adapted to work effectively in a population that is culturally very different from its original target population and used to reduce psychological distress caused by varied

Study & Location	Design	Sample	Setting	Measure(s) ACEs and behaviour	Trauma and behaviour outcomes	Authors' conclusions
		100% female; 100% Congolese		**African Youth Psychosocial Assessment Instrument (AYPA)** • Depression and anxiety-like symptoms • Socially unacceptable behaviour (i.e., conduct) • Somatic complaints • Prosocial behaviours		traumatic events. Group-based format of delivery is a viable alternative to individual therapy. Only self-report measures of psychological distress and psycho-social difficulties were used in the study and the sample size was small.
Overbeek et al. (2014)	Pre-post, uncontrolled, randomised with two experimental conditions	N = 155; aged 6-12 (m = 9.22). **Two groups:** experimental (*k* = 90) and control (*k* = 50). Children who had previously witnessed intimate partner violence (IPV) 44.5% female; 43% "Dutch," 19% Turkish/ Moroccan, 20% Antillies/ Suriname, 18% other.	IPV organisations across urban and rural settings The Netherlands	**Trauma Symptom Checklist for Young Children** • Parental separation or divorce **Trauma Symptom Checklist for Children** (TSCC; Briere, 1996) **Child Behavior Checklist** (6–18) (CBCL Dutch version; Achenbach & Edelbrock, 2001; Verhulst, van der Ende, & Koot, 1996) • Internalising behaviour • Externalising behaviour	Children improved over time in their clinical classification of internalising problems, externalising problems, and posttraumatic stress symptoms. All children decreased sig. over time in internalising and externalising problems as well as posttraumatic stress symptoms. Children in common factors intervention had a greater reduction in posttraumatic stress symptoms than children in the IPV-focused intervention condition.	Children exposed to risk factors besides IPV showed more recovery after participation in intervention than children exposed to only IPV. Children of parents experiencing high levels of parenting stress showed more recovery in externalising problems than children of parents with low levels of parenting stress. Overall, sig. reduction in symptoms. Strong apparent impact of parallel parenting support.

Study & Location	Design	Sample	Setting	Measure(s) ACEs and behaviour	Trauma and behaviour outcomes	Authors' conclusions
Powell & Davis, (2019).	Pre-post, uncontrolled case series	N = 112; aged 4-9 years Elementary school children living in poverty. 48.2% female; 74.1% white, 6.2% Hispanic, 6.2% other, 3.5% Black, 1.7% American Indian, 8.0% did not disclose.	An afterschool program in a rural area. United States	**Strengths and Difficulties Questionnaire (SDQ)** • Emotional problems • Hyperactivity • Conduct problems • Peer problems • Peer prosocial behaviours **Child Behaviour Scale (CBS)** • Aggressive with peers • Prosocial with peers	No sig. differences and small effect sizes over time for emotional problems, peer problems, and total distress symptoms Mean differences and small to medium effect sizes between time points for conduct problems, hyperactivity, and peer prosocial behaviours. From post-intervention to six-month follow-up, there were sig. increases in conduct problems Sig. difference over time for prosocial and reduction in aggressive behaviours. Heightened levels from post-treatment to six-month follow-up.	Participation appears to aid in reducing conduct problems, hyperactivity, and aggressive behaviours while also improving peer prosocial behaviours. Unfortunately, within six months children appeared to return to baseline levels. Future studies should include larger samples with a control group. Subsequent studies may want to triangulate the data, incorporating parent ratings.
Rivard et al., (2005). Rivard et al., (2003).	Pre-post, cluster randomised control with non-equivalent groups	N = 111; aged 12-20 (m = 15.4); **Two groups:** experimental (m = 15.0 yrs) and control (m = 15.7 yrs)	Residential treatment programmes for emotional and behavioural issues.	**Youth Coping Index** (YCI; McCubbin et al., 1996) • Incendiary communication/tension scale	No sig. differences between baseline and 3-month measures of outcomes. However, comparing baseline and 6-month outcomes, differences were found.	Results suggest that Sanctuary Model, if implemented with greater fidelity and with more time can benefit youth. Fewer changes observed in youth outcomes than were hoped for.

Study & Location	Design	Sample	Setting	Measure(s) ACEs and behaviour	Trauma and behaviour outcomes	Authors' conclusions
		27% female; 50.5% Black non-Hispanic, 33.3% Hispanic, 10.8% white non-Hispanic, 1.6% Asian or Pacific Islander, 1.8% biracial, 1.6% other	United States.	**Social Problem Solving Questionnaire** (Sewel et al., 1996) • Verbal aggression **Child Behavior Checklist (CBCL; Achenbach, 1991)** • Externalising behaviour **Maltreatment Classification System (MCS)** • Physical abuse • Sexual abuse • Emotional abuse • Neglect **My Exposure to Violence (**My-ETV; Buka et al., 1997) self report regarding: • Witnessing household or community violence	Youth in experimental group sig. decreased over time whereas youth in the Standard Residential Services increased in incendiary communication/ tension Sanctuary youth become more internalising, indicating a greater sense of control over their lives. They also decreased slightly on verbal aggression, whereas control increased.	
Runyon et al., (2009).	Pre-post, uncontrolled case series	N = 21; aged 4-14 (m = 8.1). 61.9% female; 52.4% Black, 19% Hispanic, 19% white, and 9.5% biracial	Medical school programme for children at risk of or having had experienced physical abuse.	**Kiddie Schedule for Affective Disorders and Schizophrenia for School Aged Children Posttraumatic Stress Disorder Interview (K-SADS PTSD)** • Presence or absence of PTSD symptoms	Externalising behaviour subscale decreased sig. from pre- to posttreatment. Overall PTSD symptoms decreased sig. from pre- to posttreatment.	Demonstrated feasibility of including the child in the parent's treatment. Effect sizes suggest that this is a promising treatment for improving children and parents' emotional and behavioural functioning.

Study & Location	Design	Sample	Setting	Measure(s) ACEs and behaviour	Trauma and behaviour outcomes	Authors' conclusions
			United States	**Achenbach Child Behavior Checklist (CBCL)** (Achenbach & Edelbrock, 1991; Achenbach & Rescorla, 2001) • Internalising behaviour • Externalising behaviour		Limited sample size, lack of random assignment, and lack of a comparison group. The sample may not be representative of this population
Runyon, et al., (2010).	Pre-post, uncontrolled, randomised w two experimental conditions	N = 60; aged 7-13 years (m = 9.88). **Two groups:** CBT with parents and child (*k* = 34; m = 9.96 yrs) and CBT with just parents (*k* = 26; m = 9.82 yrs). Children who had been physically abused by their caregiver. 44.3% female; 100% Black	United States	**Kiddie Schedule for Affective Disorders and Schizophrenia for School Aged Children Posttraumatic Stress Disorder Interview (K-SADS PTSD)** • Presence or absence of PTSD symptoms **Achenbach Child Behavior Checklist (CBCL)** (Achenbach & Edelbrock, 1991; Achenbach & Rescorla, 2001) • Internalising behaviour Externalising behaviour	Both groups demonstrated sig. pre to post-test improvements on total number of PTSD symptoms, and parent's reports on children's internalising behaviour. Sig. improvement on externalising scores found only for those in the parent-only CBT group Changes found at the end of treatment remained 3 months after in participants who completed follow-up evaluations.	Results suggest that group CBT involving the parent and child or treating the parent alone are promising for addressing needs of families. Children included in treatment demonstrated greater improvements in PTSD symptoms than those who did not. When children participated, parents reported significantly greater improvements in positive parenting. A larger sample would allow examination of possible mechanisms of change.
Salloum & Overstreet (2012).	Pre-post, cohort, uncontrolled, randomised w two	N = 70; aged 6-12 years (m = 9.6). **Two groups:**	United States	**Things I Have Seen and Heard** survey • Heard guns being shot	Parents reported internalising changed over time for both treatment conditions, but externalising did not.	Despite the differences in the treatments, children in both groups demonstrated sig. improvements in distress related symptoms, which, with the

Study & Location	Design	Sample	Setting	Measure(s) ACEs and behaviour	Trauma and behaviour outcomes	Authors' conclusions
	experimental conditions	Grief and Trauma Intervention with coping skills and narrative construction (GTI-CN; k = 37) and GTI with coping skills (GTI-C; k = 33) Elementary school children w. moderate PTSD symptoms following Hurricane Katrina. 44.3% female; 100% Black		• Seen somebody being beat up, get stabbed, get shot • Seen a dead body outside or in home • Seen somebody in home get shot or stabbed **UCLA Posttraumatic Stress Disorder Index** (UCLA PTSD RI) • Total symptoms • Re-experiencing • Avoidance • Hyperarousal **Achenbach Child Behavior Checklist (CBCL)** (Achenbach & Edelbrock, 1991; Achenbach & Rescorla, 2001) • Internalising behaviour • Externalising behaviour	Sig. main effects for time for all dependent variables except for externalising. A time - treatment interaction was observed for externalising. Post-hoc analyses indicated sig. decreases from pre-treatment to post-treatment, to 3 month, and to 12 month follow-up, suggesting initial improvements were maintained.	exception of externalising symptoms, were maintained at 3 and 12 months. Results call into question necessity of children processing trauma for improvement in symptoms. Active coping skills to address grief and trauma may be mechanisms of change in treatment. Possible that treatments were not different enough, and that both groups processed traumatic events to some degree. Only 26% of the children were within the reported clinical range for internalising and externalising behaviours - less opportunity to observe change in these specific symptoms
Sibinga et al., (2016).	Pre-post, randomised control trial	N = 300; Grade 5-8. **Two groups:** Mindfulness-Based Stress Reduction (MBSR)	Low-income area of Baltimore, Maryland. United States.	**Aggression scale** • General aggression **State Trait Anger Expression Inventory** (STAXI-2)	Treatment group showed sig. lower levels of posttraumatic stress symptoms. No sig. impact on aggression or anger expressivity.	MBSR program may be an effective primary prevention for negative effects of toxic stress and trauma. Limitations include variability of engagement and attendance, no information regarding

Study & Location	Design	Sample	Setting	Measure(s) ACEs and behaviour	Trauma and behaviour outcomes	Authors' conclusions
		experimental and a health education control group. Elementary and middle school students. 50.7% female; 99.7% Black		• Temperamental expressivity • Reactive expressivity **Children's Post-Traumatic Symptom Severity Checklist** (CPSS)		mindfulness exposure and/or practice, missing data, variability in school and teacher support for programs.
Springer et al., (2012)	Pre-post, uncontrolled case series	N = 91; aged 6-10 years (m = 7.93). 57 female and 34 male. Youth who had involvement with Youth and Family Services. African American (76.9%), Latino (14.3%), and the Caucasian American, biracial, or other (8.8%)	Abuse and maltreatment -focused, hospital-based outpatient clinic. United States	**Trauma Symptom Checklist for Children** (TSCC; Briere, 1996) • Posttraumatic stress **Child Behavior Checklist** (CBCL – age 1.5-5 version or age 6-18 version depending on the child's age; Achenbach, 1991) • Internalising behaviour • Externalising behaviour • Total behaviour problems **Child Sexual Behaviour Inventory** (CSBI; Friedrich, 1997; Friedrich et al., 1992) • Total CBSI scale **Social Skills Rating System – Parent Form** (SSRS-PF –	Participants had lower externalising scores on the CBCL/6–18, Total Problems scale, and the SSRS-PF-Elementary form problematic behaviours scale at Time 2. Participants improved at each measurement point. Participants showed sig. improvement between Time 1 and Time 2 for the CSBI total scale.	GB-CBT is effective in improving trauma symptoms, externalising problems, total behavioural problems, and sexually inappropriate behaviours immediately following treatment. May be an alternative treatment to traditional interventions for CSA. Sample size for three-month follow-up data was relatively small. Participant attrition was largely due to the barriers to treatment participation. A considerable limitation was the lack of a comparison group.

Study & Location	Design	Sample	Setting	Measure(s) ACEs and behaviour	Trauma and behaviour outcomes	Authors' conclusions
				preschool or elementary school version depending on the child's age; Gresham & Elliott, 1990) • Problematic behaviours		
Stein et al., (2003).	Cohort randomised control trial	N = 126; Grade Six students. **Two groups:** early intervention (*k* = 61, m = 11.0 yrs) and delayed intervention (*k* = 65, m = 10.9 yrs). Middle school students who had sig. exposure to violence. Early intervention: 54% female, no ethnicity info Delayed intervention: 58% female, no ethnicity info	United States	**34-item Life Events Scale** • Physical abuse • Emotional abuse • Sexual abuse • Neglect • Multiple types **17-item Child PTSD Symptom Scale (CPSS**) • Posttraumatic stress **35 item Paediatric Symptom Checklist (PSC)** (parent-rated) • Emotional problems • Behavioural problems **6 item Teacher-Child Rating Scale** • Shyness/ Anxiousness • Learning problems • Acting out behaviours	At three-month follow-up, early intervention students had significantly lower self-reported PTSD symptoms. At 6 months after comparison group had treatment, a difference no longer existed. Depression scores also lower at three months and comparable at six. Psychosocial dysfunction demonstrated the same trend. Teachers did not report significant differences on behaviour, anxiousness/ shyness, or learning problems.	Findings demonstrate that a community-based intervention can sig. reduce symptoms of PTSD in the short term. No implications for behaviour. Looked only at short-term (up to six months past end of intervention) effectiveness. No information about exposure to additional violence after baseline measures. Trials were not blinded and thus parents and teachers might have given more attention to students on wait list for treatment. May have rated children who had the intervention more positively.

Study & Location	Design	Sample	Setting	Measure(s) ACEs and behaviour	Trauma and behaviour outcomes	Authors' conclusions
Tol et al., (2008).	Pre-post, cluster randomized control trial	N = 403; aged 7-15 years (m = 9.94) War-affected students. 48.6% female; 100% Indonesian	Secondary school. Indonesia	**Child Posttraumatic Stress Scale** • Pains • Fainting • Dizziness • Trembling • Stiffness • Fevers **Children's Aggression Scale for Parents** • Verbal aggression • Aggression against objects and animals • Physical aggression • Use of weapons	Sig. differences on child-rated measures but not on parent-rated measures. found on all PTSD and behavioural symptoms. No sig. differences in scores between the first and the second follow-ups. At six-month follow-up, changes remained, though magnitude was smaller. Sig. effect of treatment on changes over time for PTSD symptoms	Moderate reduction in PTSD symptoms and function impairment for girls compared to a wait-listed condition between baseline, one-week, and six-month follow-up. Sex influenced both changes in PTSD symptoms and function impairment - girls benefitted more than boys. Assessors were not blinded to treatment status. Results are only generalizable to school-going Indonesian children.
Tol et al., (2012).	Pre-post, cluster randomized trial	N = 399; aged 9-12 years. **Two groups:** treatment (*k* = 200) and waitlist control (*k* = 199). War-affected students. 38.6% female; 100% Sri Lankan	School. Northern Sri Lanka.	**Child PTSD Symptom Scale** (CPSS) **Child Trauma Questionnaire, Short Form** (CTQ-SF) • Physical abuse • Emotional abuse • Sexual abuse Dichotomous (yes/no) rating scale with **10 items reflecting past war exposure** • seeing bomb blast	Participants in the intervention condition showed greater decrease in conduct problems over time than participants in the waitlist condition. Sig. interaction of study condition and age for conduct problems - younger children showed more improvement than older children.	Main effect on conduct problems, with stronger intervention benefits for younger children. Effects identified for children experiencing lower levels of war-related daily stressors (PTSD, anxiety, function impairment), boys (PTSD and anxiety complaints), and younger children (pro-social behaviour).

Study & Location	Design	Sample	Setting	Measure(s) ACEs and behaviour	Trauma and behaviour outcomes	Authors' conclusions
				• witnessing murders • experiencing or witnessing torture • sexual violence • neglect **11 items assessing exposure to current war-related daily stressors** seeing bomb blast • basic needs not being met • domestic violence • alcohol abuse • separation from family members • displacement **Strengths and Difficulties Questionnaire** • Conduct problems	Gender significantly moderated PTSD symptoms, such that boys in the intervention condition showed more improvement over time than boys in the waitlist control condition. For girls, waitlist showed larger improvements in PTSD symptoms than the intervention condition	Girls in the waitlist condition showed more improvements over time on PTSD symptoms than the intervention condition. Possible that experience of current war-related daily stressors was different for boys and girls. Not able to control possible disclosure of study condition by children participating in the study. Outcome measures for PTSD had unknown local validity.
Tourigny et al., (2005).	Pre-post, quasi-experimental (dropouts or ineligible for control), non-randomised control with non-equivalent groups	N = 42; aged 13-17 years (m = 14.6). **Two groups:** treatment (k = 27) and control (k = 15). 100% female; 41 French-Canadian and 1 Russian; no ethnicity	Sexual abuse centre (Centre d'Intervention en abus sexuels pour la famille [CIASF]) Canada	**Sexual Abuse Rating Scale** (SARS; Friedrich, 1992) **Trauma Symptoms Checklist for Children** (TSC-C; Briere, 1996) • Posttraumatic stress • Dissociation **Youth Self-Report and Profile** (YSRP; Achenbach, 1991) • Delinquent behaviour	Participation associated with a sig. reduction in post-traumatic stress symptoms for all subscales of the TSC-C except for sexual preoccupations. Adolescents reported significantly fewer behavioural problems relative to the control group, limited to social problems and attention	Sig. improvements in participants, mainly in posttraumatic stress symptoms, and internalising behaviour. Most externalising measures did not evidence sig. changes. Suggests that group therapy might be efficient to enhance psychological health of adolescent girls that have been sexually abused.

Study & Location	Design	Sample	Setting	Measure(s) ACEs and behaviour	Trauma and behaviour outcomes	Authors' conclusions
		information reported		• Aggressive behaviour • Social problems • Attention problems **Self-Injurious Behaviors Questionnaire** (SIBQ; Sadowsky, 1995) • Dangerous behaviours that can provoke injuries	problems. Aggressive behaviour and delinquent behaviour were not impacted.	Triangulation of data from several sources (e.g., parents, teachers, other significant adults) could provide a more insight.

6.7.2 Sampling Demographics

Samples were largely from diverse and high-risk populations. Clinical samples included outpatients of sexual and physical abuse clinics (*k* = 7) (Hebert et al., 2010; Misurell et al., 2011; Overbeek et al., 2014; Runyon et al., 2009; 2010; Springer et al., 2012; Tourigny et al., 2005), youth receiving school or community mental health services (*k* = 2) (Beltran et al., 2016; Brown et al., 2006), participants in a residential programme for behaviour and mental health (*k* = 2) (Grijalva & Vasquez, 2021; Rivard et al., 2005), and care facility tenants (*k* = 1) (Habib et al., 2013). Community samples spanned elementary and middle-school students in high-risk areas or who had known exposure to violence (*k* = 7) (Carbonell & Parteleno-Barehim, 1999; Jaycox et al., 2009; Johnston, 2003; Mendelson et al., 2015; Powell & Davis, 2019; Sibinga et al., 2016; Stein et al., 2003), war or disaster-affected youth (*k* = 5) (Ehntholt et al., 2005; O'Callaghan et al., 2013; Salloum & Overstreet, 2012; Tol et al., 2008; Tol et al., 2012), social services clients (*k* = 2) (De Luca et al., 1995; Johnston, 2003 – included two sample types), and one general population sample of urban high school students (*k* = 1) (Exner-Cortens et al., 2020).

Sample sizes and characteristics varied significantly. The total number of participants involved in all studies was 2,903. Sizes ranged from 10 to 403, with just under one third having fewer than 50 participants (*k* = 7), nearly half ranging between 51 and 91 (*k* = 10), and a final third including 111 to 403 participants (*k* = 9). Importantly, most of the research designs required dividing the sample into two groups (e.g., experimental and waitlist control), meaning that the treatment samples were around half the size of the total sample (*k* = 16). The most common demographics documented were the age, sex, ethnicity, economic status, and the nature of past exposure to various ACEs. Four studies recruited only females (Carbonell & Parteleno-Barehmi, 1999; De Luca et al., 1995; O'Callaghan et

al., 2013; Tourigny et al., 2005). In rationalising this approach, De Luca and colleagues (1995) emphasised the importance of making adolescent girls feel comfortable sharing and reducing potentially confounding variables. Only one study involved solely male participants (Beltran et al., 2016), identifying them as being at higher risk of maladaptive coping. The remainder involved mixed gender samples (k = 21). Ehntholt and colleagues (2005) spoke to the value of mixed-gendered groups, suggesting that girls' emotional openness provided a model for boys, who were typically hesitant to share.

The samples were ethnically diverse overall, but within each study there was generally a significantly higher number of participants from one ethnic group. Nearly half of the studies included between 50-100% Black participants (k = 10), about one fifth included 43-78% White participants in their samples (k = 4), and in two studies, Hispanic participants made up 54% (Carbonell & Parteleno-Barehmi, 1999) and 96.1% (Jaycox et al., 2009) of the sample. Johnston (2003) reported the most ethnically diverse sample, with 42% of participants identifying as White, 36% as Hispanic, 10% as Black, and 10% as other. Some described participants by nationality rather than ethnicity (k = 5 ; Ehntholt et al., 2005 (42.3% Kosovan, 38.5% Sierra Leonean, 11.5% Turkish, 0.04% Afghani, and 0.04% Somalian); Hebert et al., 2010 (89.5% French-Canadian, 7.8% European, and 2.6% Haitian) Tol et al., 2008 (100% Indonesian); Tol et al., 2012 (100% Sri Lankan); O'Callagan (100% Congolese); Tourigny et al., 2005 (97.6% French Canadian and 2.4% Russian)) and others omitted this information (k = 2; De Luca et al., 1995; Stein et al., 2003). Notably, even though most interventions occurred in countries with substantial Indigenous populations (i.e., Canada and the United States; k = 21), only one demographic questionnaire included a category representing these participants (i.e., *American Indian* in Powell & Davis, 2019).

The age of participants ranged between four and 21. Nearly half of studies involved children aged four to 12 (k = 11) with an additional quarter including children up to age 14 (k = 7). Approximately the remaining third of programmes included older participants from 15 to 21 years old (k = 8). There did not seem to be a pattern insofar as the age of the participant and the effectiveness of the intervention in altering externalising behaviour, as non-significant outcomes were spread very evenly among the child-focused (i.e., four to 12; k = 3; Salloum & Overstreet, 2012; Stein, 2003; Tol et al, 2012), early adolescent (i.e., to 14 years; k = 3; Brown et al., 2006; Carbonell & Parteleno-Barehim, 1999; Sibinga et al., 2016), and later adolescence/young adulthood (i.e., to 21 years; k = 2; Exner-Cortens et al., 2020; Mendelson et al., 2015) samples.

6.7.3 Measures of Trauma History

Measures including clinical interviews, self-report surveys, and checklists were used to determine participants' trauma history. Formal self-report questionnaires or checklists were used in about one third of studies (k = 8) (Ehntholt et al., 2005; Exner-Cortens, 2020; Jaycox et al., 2009; Johnston, 2003; Misurell et al., 2011; Salloum & Overstreet, 2012; Stein et al., 2003; Tol et al., 2012). Structured interview questionnaires or file review protocols were utilised in approximately one sixth of designs (k = 4) (Brown et al., 2006; Habib et al., 2013; Hebert et al., 2010; Rivard et al., 2005), while clinical histories without an associated measure were gathered by two researcher teams (Beltran et al., 2016; Carbonell & Parteleno-Barehmi, 1999). Interestingly, three groups chose not to formally screen participants for trauma history, though they sampled from populations assumed to have high exposure (k = 3; sexual abuse victims in De Luca et al., 1995; inner-city youth in Mendelson et al., 2015; and children from a high-poverty, rural community in

Powell & Davis, 2019). While the approaches to gathering this information varied, all tools and processes essentially dichotomised the resulting data (e.g., present/not present).

6.7.4 Summary of Behavioural Measures

Externalising behaviour was operationalised and measured using a variety of self-report instruments. Specific types of externalising measured included sexual behaviours (Misurell et al., 2011; Springer et al., 2012) and verbal aggression (Misurell et al., 2011; Rivard et al., 2005; Springer et al., 2012). Very broad (e.g., conduct issues) and narrow forms (e.g., bullying, self-harm) of externalising behaviour were targeted. Though the small sample of studies reviewed was not conducive to observing more nuanced patterns of effectiveness, in evaluations wherein measures of both a general and specific type of externalising were used *(k* = 3; Misurell et al., 2011; Springer et al., 2012; Rivard et al., 2005), all showed consistency across both instruments. That is, if significance was reached on a broad measure it was mirrored on the more specific measure, suggesting that the programme was effective across subtypes of behaviour.

Around half of studies (*k* = 12) included questionnaires from the Achenbach System of Empirically Based Assessment (ASEBA; Achenbach & Rescorla, 2004), namely the Child Behavior Checklist (CBCL) and Youth Self-Report. A quarter (*k* = 5) used the Strengths and Difficulties Questionnaire (SDQ; Goodman, 1994;1997; Goodman et al., 1998). Both the ASEBA and SDQ tools have subscales for general externalising behaviour. Other measures used to examine this construct were the Behavior Assessment System for Children (BASC; Reynolds & Kamphaus, 1992) the Self-Report Coping Scale (SRCS; Causey & Dubow, 1992), African Youth Psychosocial Assessment Instrument (AYPA; Betancourt et al., 2009); Teacher-Child Rating Scale (Hightower et al., 1986), Youth Outcome Questionnaire-Self Report (YOQ-SR; Wells et al. 1999), Pediatric Symptom

Checklist (PSC; Jellinek et al., 1999), and the Social Skills Rating Parent Form (SSRS-PF; Gresham & Elliott, 1990).

Aggression measures were used in nearly a fifth of studies (k = 4) and included the Children's Aggression Scale for Parents (multi-domain aggression; Halperin et al., 2002), Child Behaviour Scale (CBS; Ladd & Profilet, 1996), State-Trait Anger Expression Inventory – Second Edition (STAXI-2; anger expressivity; Spielberger, 1988), and the Social Problem-Solving Questionnaire (verbal aggression; Sewel et al., 1996), and Youth Coping Index (YCI; incendiary communication; McCubbin et al., 1996). Other measures included the Youth Risk Behavioral Surveillance Survey (YRBSS; illicit substance use; self-harm; assaults on peers/staff; Centers for Disease Control and Prevention, 2011), Self-Injurious Behaviors Questionnaire (SIBQ; Sadowsky, 1995), Child Sexual Behavior Inventory (CSBI; Friedrich et al., 1991), Academic Competence Evaluation Scale (ACES; measured disciplinary sanctions for behaviour; DiPerna & Elliott, 1999), and Bullying Evaluation and Strategies Tool (BEST; bullying perpetration; PREVNet, 2014).

Of note is that only four of the included studies sought more than one perspective on the child's behaviour (Beltran et al., 2016; Hebert et al, 2010; Jaycox at al., 2009, & Johnston, 2003) and the fact that while nearly two thirds of researchers (k = 15) utilised only broad measures of externalising behaviour, the remainder (k = 11) sought to target more specific behaviours. For instance, verbal or physical aggression (e.g., Misurell et al., 2011; Springer et al., 2003; Tol et al., 2008), sexual behaviours (Misurell et al., 2011; Springer et al., 2003), or bullying (Exner-Cortens et al., 2020).

6.8 Interventions: Activities, Delivery, Structure, and Parent or Community Involvement

The 26 papers reviewed evaluated the implementation of 22 unique interventions (see Appendix C for a comprehensive summary). There were eight papers that featured distinct applications of four programmes (i.e., Tol et al., 2008 and Tol et al., 2012; Jaycox et al., 2009 and Stein et al., 2003; Misurell et al., 2011 and Springer & Misurell, 2012; and Runyon et al., 2009 and Runyon et al., 2010). To account for this overlap, these interventions were only counted once in the sections below when categorising them and describing activities, group structure, and delivery. Thus, any total provided should be read as out of a possible 22 interventions.

The interventions were described using nine labels: cognitive behavioural, psychoeducational, mindfulness, psychodrama, social skills, attachment, art, play, and somatic. As psychoeducation is a common feature of cognitive behavioural interventions, a distinction was made to separate out programmes where the psychoeducation was purely informational and seemingly independent of a CBT framework. Thus, interventions categorised as cognitive behavioural are assumed to have a psychoeducational element while those characterised as psychoeducational did not appear to involve other CBT concepts (e.g., thought distortions, cognitive reframing). Interventions were often multi-modal, and more than one label was applied in these cases.

Categorisation was based on the authors' descriptions of theories referenced in the development of the interventions and the focus of the therapeutic activities. For example, encouraging a child to write out a trauma narrative during one session would not prompt application of the *art* label. However, if drawing or storytelling were a part of most or every session, the term *art* was applied even if the author did not specifically describe their

approach as art or narrative therapy. On the contrary, if an author specified mindfulness as a core factor underlying the development of their intervention, that label was applied regardless of the number of mindfulness activities involved. Most programmes featured *psychoeducation* (*k* = 10) and *social skills* (*k* = 10) followed closely by *cognitive behavioural* components (*k* = 9). *Mindfulness* (*k* = 5), *art* (*k* = 4), and *psychodrama* (*k* = 4) were the next most common. The rarest components included *play* (*k* = 3), *attachment* (*k* = 3), and *somatic* (*k* = 2).

6.8.1 Activities

Several common activities emerged across interventions. Approximately one quarter of researchers described an early session focus being the development of group norms, rules, and/or cohesion (*k* = 6). Activities focused on the processing or regulation of emotion were explicitly listed in over half of the interventions (*k* = 13). The development of trauma narratives or group processing of traumatic memories were included in nearly half of the programmes (e.g., writing stories, drawing, or re-enactment; *k* = 9) as were relaxation exercises (e.g., use of a safe space protocol, progressive muscle relaxation; *k* = 9). Almost one quarter of the programmes included psychoeducation specific to the way that stress manifests in the body (*k* = 5). Roleplaying was used in around one fifth of the programmes, typically to practice social skills, such as assertiveness (*k* = 4). Boundaries, both physical and emotional, were discussed in about one fifth of the groups (*k* = 4).

Strategies less frequently employed included yoga or bodily awareness exercises (*k* = 2) (Beltran et al., 2016, Sibinga et al., 2016), graded exposure (e.g., creation and exploration of fear hierarchies) (*k* = 2) (Ehntholt et al., 2005; Jaycox et al., 2009; Stein et al., 2003), development of a safety plan (i.e., specific to situations of abuse) (*k* = 2) (Brown et al., 2006, Springer et al., 2012, Misurell et al., 2011), and the teaching of Eye-Movement

Desensitisation and Reprocessing (EMDR) techniques involving bilateral stimulation or dual-attention tasks (k = 1) (Ehntholt et al., 2005). Finally, just over a third of the programmes ended with transition planning or a graduation celebration (k = 8).

6.8.2 Programme Delivery

Information about the number of facilitators, their qualifications, and the setting of the intervention was aggregated. Over half of the interventions were led by mental health clinicians (i.e., psychologists, social workers, school counsellors, or trainees within these professions) (k = 16). Approximately one fifth of the programmes were facilitated by a non-mental health professional (e.g., teacher, residential staff, or someone with a bachelor's degree in a social science) (k = 5). One study did not include information about the facilitator (Beltran et al., 2016). Co-facilitation was a common feature, with nearly half of the programmes being run by two or more leaders simultaneously (k = 12). Schools (k = 8) and community organisations (k = 7) represented two thirds of the contexts in which interventions took place. The remaining third of the programmes occurred either in both school and community settings (k = 4) or in residential institutions (k = 3).

6.8.3 Structure

The interventions were compared based on the number and length of sessions as well as the size of the groups. Sizes ranged from five to twenty-four children (i.e., a whole-class intervention), though, remarkably, nearly half of the intervention descriptions omitted this information (k = 10). Of the remaining 12, just over half divided children into groups of five to eight students (k = 7), one third worked with between 10 and 15 children at once (k = 4), and one intervention was utilised with groups as large as 24 students (i.e., whole class; Brown et al., 2006). Session length ranged between 45 and 120 minutes. This information, too, was omitted by a marked number of researchers – nearly one fifth (k = 5).

Intervention sessions where lengths were reported were mostly between 90 and 120 minutes long (k = 10) while the others fell between 45 and 60 minutes (k = 7). The number of sessions, which all researchers reported, also varied, from a minimum of six to a maximum of 20. Nearly one third of programmes spanned between six and 10 sessions (k = 7), another third extended from 12 to 14 (k = 7), and the final third involved 15 to 20 (k = 8). No pattern emerged between number and length of sessions (e.g., 16 sessions, 120 minutes each; Runyon et al., 2009; 2010; up to 20 sessions, 60 minutes each, Habib et al., 2013) or between these characteristics and effectiveness. While all programs found not to have a significant impact had 15 or fewer sessions and were 60 minutes or shorter, there were programmes with a similar session length and fewer sessions that were effective.

6.8.4 Caregiver or Community Involvement

Roles for caregiver and community members were outlined in fewer than half of the programme descriptions (k = 8). The most integrated formats included concurrent caregiver and child groups with joint, dyadic time each session to practice learned skills (Runyon et al., 2009; 2010) and groups with parallel caregiver sessions for psychoeducation and parenting support (Overbeek et al., 2014). Other arrangements included inviting parents to the first four group sessions (Hebert et al, 2010), offering three caregiver sessions to share psychoeducation and positive parenting strategies (O'Callaghan et al., 2013), having a monthly or weekly psychoeducational group for caregivers (Johnston, 2003), and offering one psychoeducational parent session (Salloum, 2012). The two programmes that featured community involvement included Tol and colleagues' group facilitation by trained community members (2008; 2012) and Powell et al.'s single session on the topic of contextualising emotional responses within the community (2019).

6.8.5 Quality and Design Criticisms

As was highlighted above, most articles (k = 23) scored above the 75% quality threshold suggested by Kmet and colleagues (2004). Common findings in the areas in which a score of 1 or less was awarded were as follows:

- *Comparison group selection and randomisation.* Of the 17 studies that included a control or alternative treatment group, just over half (*k* = 9) did not randomly assign participants to each condition (Ehntholt et al., 2005; Tourigny et al., 2005), only partially randomised groups (e.g., cluster randomisation in Tol et al., 2008 and 2012; separation of certain students at the request of teachers in Mendelson et al., 2015), or provided no information about their selection process for the comparison group (e.g., Carbonell & Parteleno-Barehmi, 1999; de Luca et al., 1995; Hebert et al., 2010; Runyon et al., 2010). Nearly one third of those who included a comparison sample in their research design reported that groups differed significantly on at least one outcome variable prior to participating in the intervention (*k* = 5; Rivard et al., 2005; Tourigny et al, 2005; De Luca et al., 1995; Hebert et al.; 2010; Grijalva et al., 2021). Notably, though it did not count toward their quality assessment, over one third of the researchers chose a design that did not involve a comparison group at all (*k* = 9).
- *Blinding.* Almost no study designs involved the blinding of researchers to the treatment conditions (*k* = 4 of a possible 17) and none blinded participants.
- *Limitations in behaviour assessment.* Behaviour measurement was generally limited to ratings or observations from only one informer (i.e., a teacher, parent, or youth self-report) (*k* = 23).

- *Variance.* Many researchers failed to provide estimates of variance, such as confidence intervals or standard deviations (*k* = 10 of a possible 25).
- *Sampling*. Nearly half the research teams pointed to small sample size as a limitation (*k* = 11) and the importance of future studies involving more participants.
- *Lack of follow-up data.* Just over half provided follow-up data beyond the end of treatment (*k* = 12). Thus, the longevity of intervention impact was often unknown.
- *Cultural inclusivity.* Over half of the interventions involved multi-cultural (*k* = 14) or cultural minority populations (*k* = 4), but only six outlined ways in which interventions were developed or adapted with consideration for cultural differences (Johnston, 2003; Tol et al., 2008; 2012; Jaycox et al., 2009; O'Callaghan et al., 2013; Stein et al., 2003).

6.9 Intervention Efficacy Across Studies

Around three-quarters of the studies demonstrated a significant decrease in the externalising behaviours measured immediately following the intervention (*k* = 18). The content coverage of the programmes found to be effective spanned psychoeducation (Beltran et al., 2016; de Luca; Ehntholt et al., 2005; Hebert; Jaycox et al., 2009; O'Callaghan; Overbeek et al., 2014; Powell; Rivard; Runyon et al., 2009; 2010), cognitive behavioural skills (Ehntholt et al., 2005; Jaycox et al., 2009; Misurell et al., 2011; O'Callaghan; Runyon, 2009; 2010; Springer et al., 2012), mindfulness (Beltran et al., 2016; Habib et al., 2013), social skills (Grijalva & Vasquez, 2021; Misurell et al., 2011; Powell & Davis, 2019); art (Hebert et al., 2010; Johnston, 2003), and play therapy (Springer et al., 2012; Tol 2012). Effectiveness was apparent using a wide array of measurable outcomes, such as general externalising behaviour (e.g., as measured by the CBCL or SDQ; Beltran et

al., 2016; De Luca et al., 1995; Jaycox et al., 2009; Johnston, 2003; Misurell et al., 2011; Overbeek et al., 2014; Runyon et al., 2009; 2010; Springer et al., 2012), conduct problems or peer relationship issues (Ehntholt et al., 2005; O'Callaghan et al., 2013; Tol et al., 2012), self-harm (Grijalva & Vasquez, 2021), high risk behaviours (Habib et al., 2013), rule-breaking or aggression (Hebert et al., 2010; Powell & Davis, 2019), verbal aggression (Rivard et al., 2005), and sexually inappropriate behaviour (Misurell et al., 2011). Of note, Runyon and colleagues (2010) observed significant behavioural improvement only among children whose caregivers took part in a parents-only group as opposed to those who were intervened with directly. Reinforcing the potential value of multiple raters, Jaycox and colleagues found that teachers evaluated student behaviour as improving significantly while parents did not (2009), while Stein et al. (2003) reported the contrary – parents observed significant changes and teachers did not. Powell and Davis's (2019) findings indicated only partial significance, with the CBCL results demonstrating no change in general externalising behaviours.

The eight research groups that found no significant change in externalising behaviour also varied in their foci. General externalising behaviours (Brown et al., 2006; Mendelson et al., 2015; Salloum & Overstreet, 2012; Stein et al., 2003); aggression or delinquency (Carbonell & Pareleno-Barehmi, 1999); bullying, binge drinking, or marijuana use (Exner-Cortens et al., 2020); aggression or anger expressivity (Sibinga et al., 2016); and specific subsets of aggressive behaviour (e.g., verbal or physical aggression, aggression against animals or objects, or the use of weapons; Tol et al., 2012) were all represented.

6.10 Thematic Discussion

Five themes were established: 1) externalising behaviour as a poorly defined construct, 2) effective approaches to address externalising behaviours in trauma-affected youth vary, 3) a lack of reference to trauma theory, and 4) limitations to cultural inclusivity.

Externalising behaviour as a poorly defined construct. The diversity of instruments used to measure externalising behaviour reflected the array of definitions applied throughout the reviewed research. Broad concepts like high-risk behaviour, delinquency, externalising, or conduct problems were used in tandem with more specific definitions such as bullying, binge drinking, marijuana use, weapon use, sexually inappropriate behaviour, rule-breaking, aggression, and self-harm. This definitional variety has been noted in the literature as a challenge when operationalising the concept for measurement (e.g., Kerig & Becker, 2010). This diversity may also be symptomatic of disputes regarding the efficacy of interventions for specific types of externalising behaviour (see Hale et al., 2014 for a relevant review), and a desire to test more specific connections between intervention and individual behaviour types.

All but four studies (Beltran et al., 2016; Hebert et al, 2010; Jaycox at al., 2009, & Johnston, 2003) included only one observer's input when gathering behavioural information. As mentioned in Chapter Five, single-source behavioural assessment contravenes best practice in psychological assessment (NASP, 2020) and could result in either under or overreporting of change, as both environmental factors and rater reliability are probable confounds. This is of particular concern given that researchers rarely blinded either participants or raters to participants' treatment condition. This creates obvious concerns related to bias in responses from both the treatment groups and evaluators (e.g., participant effect, confirmatory bias) and a strong potential for confounding. The veracity

of this criticism is supported by the fact that of the three studies that included raters from more than one context (e.g., a parent and a teacher), two found that the raters' evaluations were different, with one or the other observing significantly more behavioural change (Jaycox et al., 2009; Stein et al., 2003).

Effective approaches to address externalising behaviours in trauma-affected youth vary. Eighteen of the reviewed interventions resulted in significant improvement on the measured behavioural outcomes. All documented intervention types were represented among those found effective: psychoeducation (Beltran et al., 2016; de Luca; Ehntholt et al., 2005; Hebert; Jaycox et al., 2009; O'Callaghan; Overbeek et al., 2014; Powell; Rivard; Runyon et al., 2009; 2010), cognitive behavioural (Ehntholt et al., 2005; Jaycox et al., 2009; Misurell et al., 2011; O'Callaghan; Runyon, 2009; 2010; Springer et al., 2012), mindfulness (Beltran et al., 2016; Habib et al., 2013), social skills (Grijalva & Vasquez, 2021; Misurell et al., 2011; Powell & Davis, 2019); art (Hebert et al., 2010; Johnston, 2003), and play therapy (Springer et al., 2012; Tol 2012). Further, the number of sessions was not reliably shown to have a consistent impact on outcome, as examples of effective interventions ranged from six, representing the fewest sessions in the data set, to twenty sessions in length. These findings add to a mounting body of evidence demonstrating that there are many effective approaches to addressing the impacts of trauma (e.g., van der Kolk, 2014).

A lack of reference to trauma theory. While many authors mentioned the idea of being trauma-informed, there were very few references to trauma-related theories. These findings align with previous studies demonstrating problematic variability in both what it means to be trauma-informed (Hanson & Lang, 2016) and the measurement of trauma exposure (Karstoft & Armour, 2022). Only three papers directly described a connection to

trauma theory (Grijalva & Vazquez, 2021; Habib et al., 2013; Overbeek et al., 2014) and identified how the intervention might address trauma-specific symptoms. The theory most cited by interventionists was cognitive behavioural (CBT), with nearly half of authors indicating that their intervention was based on this framework (k = 9). Comparatively few papers mentioned attachment (k = 3; Grijalva & Vazquez, 2021; Johnston, 2003; Rivard et al., 2005) and social cognitive theory (k = 2; Exner-Cortens et al., 2020; Powell et al., 2019), despite many interventions involving common strategies associated with those approaches (e.g., social skills training, roleplaying). Though all ostensibly focused on the improvement of symptoms related to trauma, there seemed to be little footing in the broader literature or explicit descriptions of the elements of the interventions themselves that made them trauma-informed. Attachment, trauma, and social cognitive theories (i.e., social learning), all of which are commonly referred to in the discussion of developmental trauma, were only mentioned in little more than a quarter of the programme evaluations (*k* = 8; e.g., Exner-Cortens et al., 2020; Grijalva & Vazquez, 2021), suggesting that there was limited consideration of them in the development of the treatments. The focus instead seemed to be evaluation of the efficacy of a variety of activities and techniques without consideration for the potential mechanism of action.

Limitations to cultural inclusivity. Though culturally adaptive programming is lionised in the literature, only six of the reviewed studies outlined a clear strategy for achieving this goal. For example, training facilitators from the same cultural and linguistic background as participants (Johnston, 2003; Tol et al., 2008; 2012) and including culturally relevant terms and content (Jaycox et al., 2009; O'Callaghan et al., 2013). However, other authors stated that their programme was intended to be adapted for use with multicultural clients but offered no explanation of what this would entail (e.g., Stein et al., 2003) while

one programme designed for use with refugees and asylum-seekers was limited to English-only delivery (e.g., Ehntholt et al., 2005). On the contrary, more robust examples of adaptations were provided by two research groups that described extensive consultation with the cultural groups they were supporting and involving community members as key facilitators or content creators (O'Callaghan et al., 2013; Tol et al., 2008; 2012). However, these surface-level changes occurred while underlying structures of the treatments (e.g., Trauma-Focused CBT) were retained, a representation of the cultural 'dressing up' of Western approaches criticised previously (Gone, 2009). Finally, only one of the reviewed interventions explicitly included Indigenous participants in their samples, despite recruitment occurring primarily within the United States and Canada. Overall, given the cultural heterogeneity of youth seeking trauma treatment in most Western contexts (e.g., cultural minority citizens, refugees, asylum-seekers, or immigrants), these are considerable limitations that should be addressed by those developing this type of programming.

6.10.1 Limitations

There were several limitations to this review. First, by excluding articles where a there was no quantitative measure of behaviour, important insight may have been missed. For instance, studies involving Indigenous interventions are often conducted with a qualitative design (Linklater, 2017). A review of articles excluded for being 'qualitative only,' however, did not reveal any Indigenous-focused papers that would have otherwise met criteria. A second limitation would be that the use of more culturally inclusive terminology, such as 'healing' or 'historical trauma' could have pulled relevant studies focusing on multicultural and Indigenous samples. However, it was thought unlikely that papers including those terms would not also refer to treatment, ACEs, or abuse – terms that were included. Another potential limitation was publication bias, as there was no grey

literature accessed for this review. In addition to the unpublished articles that may have been available through academic databases, interventions at the community level may have outcomes reported in an informal format organisationally or locally. Time and resource limitations prevented exploration of this possibility. Finally, a second researcher should participate in each stage of a systematic review, to reduce the likelihood of error or bias. Interrater review of 10% of the included articles was sought to mitigate this risk.

6.11 Conclusions

The present review summarised ways in which trauma-informed, group interventions have been utilised with children and youth and the impact on externalising behaviour. While most groups were psychoeducational or cognitive behavioural in nature, no discrete feature or activity type emerged as a prerequisite to effectiveness. Authors frequently described teaching concepts related to physical and emotional stress responses, cognitive distortions/scripts, communication of boundaries, social skill development, and mindfulness. Whether programmes primarily involved psychodrama, play, social skill development, or mindfulness, there were examples in each category of significant reductions in a form of externalising behaviour. Researchers included multiple techniques in their interventions, limiting conclusions as to which, if any, was the strongest predictor of symptom reduction. However, this is in keeping with previous meta-analytic findings highlighting the benefits of combining elements such as psychoeducation, emotional regulation, exposure, cognitive processing, and problem solving (Dorsey et al., 2017).

Overall, the findings demonstrated that there are many routes to effective treatment of behavioural concerns in trauma-affected children and youth. Most of the reviewed studies indicated significant reduction of measured externalising behaviour. However, sampling issues, methodological oversights, and a limited integration of theory left gaps for

future research to address. Findings of primary interest from this review were the diversity of effective approaches to intervention, a lack of information about Indigenous populations, and the absence of information in most studies as to how cultural diversity was considered for in the design and implementation. Given the dearth of information evidenced throughout the two systematic reviews and literature captured in Chapter Three, Chapter Seven describes a Delphi study designed to acquire insight into the firsthand, real-world application of trauma-informed, culturally relevant behavioural intervention with youth.

CHAPTER SEVEN:

A DELPHI SURVEY OF CURRENT PRACTICES AND CULTURAL ADAPTATIONS IN TREATMENT OF EXTERNALISING BEHAVIOUR IN ACE-AFFECTED CHILDREN AND YOUTH

7.1 Structure of the Chapter

The purpose of the study was to expand on information gathered through the systematic literature reviews, particularly related to cultural adaptations in trauma-informed behavioural treatment. The guiding questions were as follows: 1) what working definitions were being applied to culture and externalising behaviours, 2) how externalising behaviour was being treated in trauma-exposed young people generally, and 3) what, if anything, changed when working with young people from cultural backgrounds that differed from their own. The chapter opens with a rationale for the use of the Delphi method. Next, results are presented from three rounds of surveys designed to obtain a consensus on key topics. A general discussion of the findings, limitations, and implications for research and practice closes the chapter.

7.2 Rationale for Use of the Delphi Method

The systematic reviews outlined in Chapter Five and Six provided evidence for several potential concepts related to the robust connection between ACEs and externalising behaviour in youth as well as the trends in group-based interventions being used to address these behaviours. Further, these reviews pointed to semantic differences in working definitions of externalising and antisocial behaviour as well as varied targets when it came to cultural adaptation of programming (e.g., language, social norms). There were overall remarkably few examples of approaches to cultural modification of programming noted, but those present included recruitment of local facilitators (Johnston, 2003; Tol et al., 2008;

2012), translation services (e.g., O'Callaghan et al., 2013; Tol et al., 2008; 2012), or altering content (Jaycox et al., 2009; O'Callaghan et al., 2013).

Similar challenges have been noted in the assessment literature, and strategies, such as Flanagan and colleagues' Cultural-Linguistic Interpretive Matrix (C-LIM; 2007), have been developed to adapt mainstream assessments to better serve culturally and linguistically diverse populations. The C-LIM is an interpretation framework meant to be applied to standardised testing (e.g., Weschler Intelligence Scale for Children; Weschler Individual Achievement Test) that accounts for the cultural and linguistic "loading" of each subtest and index. The rationale is that children from culturally and linguistically diverse backgrounds will be likely to score poorly on Western tests that have a high loading on these abilities. By applying the framework, a practitioner can ostensibly tell whether a child has a learning or developmental disability or is simply unable to demonstrate their ability due to language or culture differences. However, efficacy of this tool is debated (e.g., Styck & Watkins, 2013), with studies demonstrating that the framework is too simplistic to capture the breadth of difference that disadvantages these children when completing such assessments (e.g., differences in behavioural expectations in an academic environment). In applying this understanding to an intervention context, the overarching aim of this study was to survey the common approaches of researchers and practitioners presently working with culturally diverse youth around behavioural issues, and whether the available literature reflected real-world practices.

Delphi studies are often utilised in health settings to determine consensus from known experts on different aspects of care (e.g., Howarth et al., 2018). They involve multiple rounds of anonymised surveys wherein the goal is to reach agreement among professionals on a series of statements, definitions, or best practices (Jorm, 2015). At the

time of writing, no Delphi studies had specifically addressed best practices in treatment of externalising behaviours in trauma-exposed, culturally diverse young people. Delphi methodology has been effectively applied to similar, more specific practices, such as cultural adaptation of mental health first aid training (Mendes et al., 2022) and, more recently, culturally relevant forensic mental health assessment (Fanniff et al., 2023). Given the lack of prior studies of this kind and the present topic, a Delphi was appropriate.

7.3 Methodology

7.3.1 Participants

Recruitment resulted in 15 consenting participants. Of these, 10 completed the first-round Delphi questionnaire. Three identified as researchers or practitioner-researchers (i.e., two researcher/psychologists) while seven were practitioners (i.e., three psychologists, two therapists, counsellors, or psychotherapists, one social worker, and one psychiatrist). Though the sample was small, there was a diverse representation of professions. The sample was deemed too small to collect demographic information beyond that related to profession, as further information (e.g., ethnicity) may have compromised anonymity. Given that responses were anonymised, emails about the Delphi continued to be sent to all eligible and consenting participants throughout the study unless the researcher was contacted directly about withdrawal from the study. No withdrawal requests were received.

7.3.2 Procedure

Recruitment was purposive and advertising was intended to engage academics and practitioners with specialisation in the treatment of behavioural issues with trauma-exposed young people. Solicitation focused on researchers who had published at least twice on the topic or practitioners who self-identified as competent and having recent experience in treating such clients. Given the specificity of these requirements, a threshold number of

years of experience was not stipulated as to not further reduce the potential participant pool. Initial recruitment efforts targeted individuals whose work was included in the second systematic review as well as members of advocacy and regulatory bodies for psychology, counselling, psychotherapy, and social work in the UK, Canada, and the United States. Snowball sampling was employed, with potential participants asked to pass along the study information to colleagues who could also qualify to participate.

Recruitment efforts were extensive. Sixty-seven individual researchers and practitioners were contacted via email or messaging services using the information provided in their papers, on university bio pages, or through *ResearchGate*. Of these, 48 did not respond, 13 declined, and six agreed to participate. Requests were also sent to 101 state, provincial, and national fraternal and regulatory bodies for psychology, social work, psychotherapy, and counselling to distribute the research advertisement to their members. Forty-six of these organisations declined to respond, thirty were unable to permit advertising for various reasons (e.g., only allowing members to share research opportunities), and five asked for advertising fees that exceeded what was considered feasible for this study. Twenty organisations agreed to distribute the advertisement among their membership and/or host it on their website. Basic information about these organisations can be found in Appendix D (Table D.1).

Participation involved a series of online questionnaires administered in three rounds over approximately 13 weeks. Each was expected to take no more than 20 minutes to complete. The initial round involved a series of open-ended and multiple choice questions about terminology, theories, assessment, treatment, and barriers to practice (see Table 7.1 for details). In round two, feedback from the first round was synthesized and participants were asked to indicate their agreement with the conclusions. Following the example of

other treatment-focused studies (e.g., Howarth et al., 2018), any questions that reached an 80% agreement level were accepted as having reached consensus and removed from the third round questionnaire. The final round offered the opportunity for participants to review the aggregate responses of their peers and decide whether to amend their answers. Participants were given three weeks to complete each round with a two-week break between them.

7.4 Delphi Round One

7.4.1 Questionnaire Development

The content of the questionnaire was based on both the theory reviewed in Chapter Two and on findings from the second systematic review, presented in Chapter Six, which looked at trauma-informed intervention research focusing on externalising behaviour in youth. Questions were divided into four foci: terminology, theories or conceptual frameworks, culturally responsive practice, and essential characteristics of treatment, as can be seen in Table 7.1 below. Discrepancies in the literature in defining or operationalising the terms externalising behaviour and recognition of cultural differences were addressed through an open-ended question asking participants to add, remove, or change provided definitions. A ranking approach was used to encourage participants to select the theoretical and conceptual models most relevant to their practice as well as intervention components they felt were essential (Kobus & Westner, 2015). At each stage, participants were asked to reflect on how their approach would change when working with clients from a cultural background different from their own. A list of common barriers to treatment among cultural minority groups was also provided and participants were asked to assess its comprehensiveness. Finally, open-ended questions provided the opportunity for participants to share any views on the topic that they felt were not covered within.

Table 7.1

*Questionnaire Items from Delphi Round One**

Terminology

1. Is there anything you would change in the provided definition of cultural?

Cultural: Pertaining to the unique worldview, traditions, customs, and behavioural norms of a given group of people.

2. Is there anything you would change in the provided definition of externalising behaviour?

Externalising behaviour: As defined by the American Psychological Association, behaviours "characterized primarily by actions in the external world, such as acting out, antisocial behavior, hostility, and aggression."

Theories or Conceptual Frameworks

3. There are numerous theories and conceptual frameworks that may inform the assessment and treatment of ACEs and externalising behaviours in young people. Some of these are listed below:

    Theory of Planned Behavior (Ajzen)
    Social Information Processing Theory (Dodge & Crick)
    Cognitive Behavioural Theory (Beck)
    Developmental Trauma (van der Kolk)
    Attachment Theory (Bowlby, Ainsworth)
    Social Cognitive/Learning Theory (Bandura, Akers)
    Emotional Processing Theory (Foa)
    Adaptive Information Processing Theory (Shapiro)
    Biosocial Model (Linehan)

    a. Which do you find to be the most relevant to your own work? (choose a maximum of three)

    b. If not included above, which theories or conceptual frameworks most inform your approach to assessing or treating externalizing behaviours in ACE-exposed young people?

Culturally Responsive Practice

4. Does the cultural background of your client affect which conceptual frameworks or theories you refer to? (Yes/No)

    (IF yes) Which theories or frameworks do you most often refer to in these cases?

5. The following are potential ways that cultural differences can be considered for when assessing externalizing behaviours among ACE-exposed young people:

   Open discussion with the young person and/or their caregiver about their cultural background

   Researching relevant cultural norms prior to the assessment

   Referring the young person to a practitioner of the same cultural background
   Access to language supports when needed (e.g., an interpreter; translated questionnaires)

   Use of behavioural measures that have been normed with people from similar backgrounds

   Consultation with someone who has expertise or experience with the young person's cultural background (e.g., asking about behavioural expectations)

   a. What are the most effective? (choose a maximum of three)

   b. What are the least effective? (choose a maximum of three)

   c. What, if anything, would you add, remove, or change from this list?

6. The following are potential barriers to delivering effective treatment when working with ACE exposed young people from minority cultural groups who are demonstrating externalizing behaviours:

   - Historical trauma related to mental health and medical services
   - Lack of accessible transportation
   - Inadequate access to complementary services (e.g., poor availability of paediatricians, child psychiatrists, etc.)
   - Lack of culturally appropriate supports offered locally (e.g., traditional medicines or healing practices)
   - Expressive and receptive language differences
   - Poor literacy in the dominant language
   - Transience/No fixed address
   - Finances/Poverty

   What, if anything, would you add, remove, or change from this list?

7. How does the practitioner's own cultural identity impact the effectiveness of a behavioural intervention for ACE-exposed children and youth of other cultural backgrounds, if at all?

8. Would your list of essential components change when working with young people of cultural backgrounds different from your own? (Yes/No)

(IF yes) what would be added, removed, or changed?

Essential Characteristics of Treatment

9. The following are possible components of interventions for reducing externalising behaviour in ACE-exposed young people:

    - Dyadic sessions involving caregiver and young person
    - Mindfulness and relaxation training (e.g., meditation, grounding, breathwork)
    - Psychoeducation focused on biopsychosocial responses to trauma
    - Development of a trauma narrative
    - Imaginal exposure
    - Social problem-solving skill development and practice
    - Concurrent parenting/caregiver groups
    - Peer mentoring

    What, if anything, would you add, remove, or change from this list?

10. What do you consider to be essential components of these interventions? (choose three including from own response to Q9)

11. Are there any important factors or considerations when assessing or treating ACE-exposed young people from culturally diverse backgrounds that were not covered by the questions above?

*****Questions are organised here by theme rather than in the order they were presented to participants

7.4.2 Administration

The questionnaire was administered using the *Qualtrics* online survey platform throughout all three rounds. Participants were asked for a variety feedback types including ranking (e.g., choosing up to three most and least important or effective approaches), yes/no, and short response. The use of ranking has been found in prior studies to reduce cognitive loading for participants, which can increase retention, as well as facilitating consensus (Kobus & Westner, 2015).

7.4.3 Analysis

Round one analysis was comprised of basic tallying of multiple-choice answers and thematic analysis (Braun & Clark, 2006) of qualitative responses into points for evaluation

in later rounds. For instance, feedback about key theories, essential intervention components, approaches to adapting intervention based on cultural differences, and common treatment barriers for cultural minority groups were coded, compared, and integrated. Additions and changes to definitions and responses to open-ended questions (e.g., How does the practitioners' own cultural identity impact the effectiveness of a behavioural intervention…?*)* were integrated or summarised and redistributed in round two.

7.4.4 Results

Distinct areas of consensus and disagreement emerged in the first round. Participants were asked to choose the three theories most relevant to treatment of ACEs and externalising behaviours in young people from ten options, including 'none of these.' Preference was quite evenly distributed among five theories: Cognitive Behavioural Theory (Beck, 1979) (k = 5), Developmental Trauma (van der Kolk, 2005) (k = 6), Attachment Theory (Ainsworth et al., 2015; Bowlby, 1969), Social Cognitive/Learning Theory (Bandura, 1986), and Emotional Processing Theory (Foa, 2006). Participants rated Adaptive Information Processing Theory (Shapiro, 1994) (k = 4), Theory of Planned Behaviour (Ajzen, 1991) (k = 4), and the Biosocial Model (Linehan, 1993) (k = 3) as being least relevant. Three participants selected 'none of these' in response to the 'least relevant' prompt. Additional theories and approaches identified by participants as useful included *Conservation of Resources*[4] (Hobfoll, 1989), *Risk Factor Caravans*[5] (Layne et al., 2009 as cited in Layne et al., 2014), positive behaviour intervention and supports (a school-based

[4] A stress-related behavioural model that conceptualises energy, personal skills and traits, objects, relationships, and certain achievements as resources. Behaviour within this model is thought to be motivated by the desire to acquire and retain these resources.

[5] A conceptual model to describe the way in which risk factors for negative developmental trajectories (e.g., externalising behaviour, criminality, academic underachievement) are cumulative, co-occurring, and tend to 'travel' with young people throughout the lifespan.

framework of skill-building and positive reinforcement of desired behaviour), positive psychology, and general structural approaches (e.g., anti-oppression).

In response to whether their theoretical scope changed dependent on their client's cultural background, a third of the sample (k = 3) responded 'no.' For those who selected 'yes,' Cognitive Behavioural Theory (k = 2), Social Cognitive/Learning Theory (k = 2), Developmental Trauma (k = 1), Social Information Processing Theory (k = 1), Attachment Theory (k = 1), Emotional Processing Theory (k = 1), *Social and Emotional Wellbeing Model* (SEWM; Gee et al., 2014) (k =1), and *Compassionate Inquiry*[6] *(Mate, n.d.)* (k = 1) were selected as more relevant when working with clients from other cultural backgrounds. Notably, the SEWM, an Indigenous framework for mental health and wellness (Gee et al., 2014), represented the only non-Western approach cited. Rooted in the experiences of Aboriginal and Torres Strait Islanders of Australia, this model emphasises the shared Indigenous values of holistic health, cultural awareness, recognising the impact of historic trauma and discrimination, centering of family and community connections, and strengths-based interventions.

The information gathered through this section of the survey was very useful for acquiring an understanding of theory that informs practice in this area, but responses varied widely enough that consensus appeared unlikely. A key observation was that practitoners and researchers reported little engagement with non-Western approaches to intervention and assessment, even when working with culturally diverse populations. However, responses highlighted the value of referring to multiple theories to inform practice. In a qualitative response regarding their approach to working with externalising clients, one

[6] A person-centred, trauma-informed, relational, and reflective approach to psychotherapy built on the belief that maladaptive behaviours and psychopathology are fundamentally based in disconnection from self and others.

participant responded, “Believing that all tested theories can be useful and practical, the eclectic approach has favorable response from patients.” Alongside the multiple-choice responses of participants, who cited a broad range of Western theories, this feedback suggested that pursuing this line of questioning further may not be of value. That is, participants evidently valued client-centred adaptation in their clinical approach, but this was mostly limited to Western models of practice, and this in itself was a form of consensus. For these reasons, this topic was dropped from subsequent rounds.

Participants were more closely aligned in their ratings regarding the effectiveness of several methods for adapting assessment and treatment based on cultural differences and essential components of intervention. ‘Consultation with someone who has expertise or experience with the young person’s cultural background (e.g., asking about behavioural expectations)’ was most frequently selected (k = 9). When rating the least effective approaches, ‘use of behavioural measures that have been normed with people from similar backgrounds’ was voted the least helpful (k = 4). Four participants chose ‘none of these’ in response to this question, implying all listed options were perceived as somewhat useful. Regarding intervention essentials, three features were favoured: mindfulness and relaxation training (k = 6), psychoeducation focused on biopsychosocial responses to trauma (k = 6), and social problem-solving skill development and practice (k = 5). Most participants said that the components they rated essential would not change when working with a young person of another background (k = 7). One participant shared that their involvement of parents or caregivers may shift in response to the cultural norms of their client.

Responses to the two optional, open-ended questions, regarding how a practitioner’s cultural identity impacts the effectiveness of behavioural intervention and any important information not covered by the survey, provided rich insight into participants’ views.

Several participants emphasised work the practitioner should do related to their own competence or presentation of their beliefs to limit the impacts of cultural differences (k = 3). One stated, “A practitioner should compartmentalise one’s ‘self’ from those to whom they provide services. If not, issues can arise due to conflicting viewpoints. We must be aware of how our identities can act as a catalyst or barrier for growth.” A second respondent also encouraged proactive action, saying, “The effectiveness of the intervention should not be changed, as steps should be taken in advance to mitigate the impact.” Some mentioned the potential role of ethnocentrism[7], demonstrated either by the clients or the practitioner (k = 3), with one writing, “It can be problematic if the practitioner believes their world view is the 'right' one and does not consider the view of their client.” Focusing on the client’s contribution to this dynamic, a participant stated, “If the parents and child deem the practitioner’s views or attitudes about treatment as being too foreign, it may limit their engagement.” One participant touched on the value of a shared cultural background between client and practitioner, saying, “In cases where there is a shared cultural background, effectiveness would be increased as there will likely be more acceptance/ understanding/buy-in from the practitioner.” One participant chose to respond to the ‘additional information’ prompt, adding, “It is important to acknowledge the limitations of translation and interpretation. Linguistic differences go beyond word usage and involve the understanding of meaning of language within sociocultural context.” All responses generated were included in round two to determine the level of group agreement.

[7] Ethnocentrism refers to viewing ones own ethnic and cultural practices as somehow innately superior to that of others’.

7.5 Delphi Rounds Two and Three

7.5.1 Round Two

Participants in round two were asked to rate their agreement on a variety of definitions, best practices, barriers, and statements derived from the round one responses. In round one, participants were asked for their views on definitions of 'cultural' and 'externalising behaviour,' to revise a list of potential service barriers when working with cultural minority groups, and to respond to open-ended prompts regarding considerations when providing behaviour-focused services to potentially traumatised youth with cultural backgrounds different from their own. Responses were collated, integrated, and circulated in round two. Ratings ranged from 0 (completely disagree) to 10 (completely agree).

Participants. The 15 people who had originally consented to participate were sent the link to complete the round two questionnaire. Nine completed questionnaires were received within the provided three-week timeline, a potential retention rate of 90%. However, as previously mentioned, the anonymity of the respondants meant that it was not possible to link completed questionnaires to individual participants. Thus, consistency in participation could not be confirmed.

Consensus. Consensus was calculated based on the number of respondents who rated their agreement as seven or higher. The 80% threshold was reached in only four of the 17 items. A summary, which includes both the items and consensus ratings, can be found in Table 7.2. Eight items were removed at this time, as agreement levels were below 60% and considered unlikely to reach consensus based on qualitative feedback from participants.

7.5.2 Round Three

In this final round, participants were provided with the overall consensus ratings for the four remaining items that had not reached 80% agreement. They were given the

opportunity to respond to the items again in light of this information. Optionally, participants could respond to an open question at the end of the survey asking them to define what cultural competence meant to them as it pertained to clinical practice.

Participants. Seven participants completed the final round of the study (78% retention rate). Participants were again asked about their professional background and experience. There was one psychologist, one psychiatrist, one academic/researcher, and two participants who identified as counsellors, psychotherapists, or therapists. Two participants identified as both researchers and mental health practitioners (i.e., a counsellor or psychologist). Participants were also asked what percentage of their caseload was comprised of youth under the age of 21 (range 20-100; m=71.4, sd=26.7) and people of a different cultural background from their own (range 50-100; m = 67.1, sd=18.0).

7.5.3 Consensus Results and Qualitative Feedback

In round three, agreement reached 100% on all four of the remaining items and participants were given the option of providing a qualitative response to the prompt 'What does cultural competence mean to you as a practitioner or as it applies to clinical practice?' Five participants chose to respond. Four identified the importance of professional development, learning, and consultation. One participant emphasised "Having sufficient training and competency in the delivery of culturally safe practice, recognising when you are at the limit of your competency to provide culturally safe and sensitive practice to a client" and suggested accomplishing this through "…actively seeking out ways to best support the client moving forward be that through your own upskilling, through consultation, [or] bringing onboard an appropriate cultural support advocate…" Another said, "Actively working to learn more about cultures different from your own - most often this is work to be done by dominant group members (White practitioners/researchers)."

Two mentioned maintaining curiosity about the views and experiences of their clients and asking directly about the role of culture in their lives. One participant framed this as, "Having acceptance and curiosity how healing relates to them and how it pertains collectively in the culture." Touching on the limits of culturally responsive treatment, another participant shared,

> I prefer the term cultural humility. Competence suggests that one can master an orientation to another's culture, and check off that box. For me, it is about a stance of curiosity and respect, inviting the client to continually weigh in on the impact of their culture on their current situation, and continually checking in my assumptions.

These outcomes are contextualised in the Discussion section below.

7.6 Overall Findings

There were nine items spanning terminology, best practices, barriers, impact of one's own culture, and general considerations on which participants reached consensus (see Table 7.2 for a summary). There were a total of 26 questionnaire responses received over the course of three rounds. Agreement was most readily achieved regarding terminology, the most effective approaches in accounting for cultural differences, and barriers to access affecting members of cultural minority groups. Participants' qualitative feedback suggested that it was difficult to settle on key theory or core aspects of interventions more broadly because of client-centred orientations wherein a practitioner adapts their approach to the needs of each individual client.

Table 7.2

Delphi Round Two (n = 9) and Three (n = 7) Consensus Information

Item	Agree %	Consensus Round
Definitions		
Cultural: Pertaining to the unique worldview, traditions, customs (e.g., clothing), identity, language, activities, symbols, art (e.g., literature), and behavioural or social norms of a given group of people. It may also refer to religious or spiritual beliefs, morals, values, and/or guiding principles.	**100**	Two
Externalising behaviour: Behaviour directed outwardly toward others or the environment in response to external or internal stimuli that may be a result of low self-control, a lack of alternative coping strategies, an attempt to communicate one's needs, or as a form of emotional processing. These may be rule-breaking or harm-causing behaviours or actions that violate social norms. Examples include physical or verbal aggression, defiance, hostility, or self-harm.	**100**	Two
Cultural service adaptations		
Most effective: Open discussion with the young person and/or their caregiver about their cultural background, access to language supports when needed, and consultation with someone who has expertise or experience with the young person's cultural background.	**89**	Two
Least effective: Use of behavioural measures that have been normed with people from similar backgrounds	55	
Essential intervention components		
Essential: Mindfulness and relaxation training, psychoeducation focused on biopsychosocial responses to trauma, and social problem-solving skill development and practice.	**100**	Three
Barriers – Is this list comprehensive?		
• Historical trauma related to mental health and medical services • Systemic racism at the policy and individual levels • Lack of accessible transportation • Population health outcomes (e.g., genetic susceptibility to disease or illness, beliefs and behaviours related to physical and psychological	**89**	Two

well-being, and accessibility or effectiveness of local healthcare services) • Poor access to health-supportive technology • Inadequate access to complementary services (e.g., poor availability of paediatricians, child psychiatrists, etc.) • Lack of culturally appropriate supports offered locally (e.g., traditional medicines or healing practices) • Expressive and receptive language differences • Poor literacy in the dominant language • Transience/No fixed address; lack of stable housing options • Immigration or legal issues and stressors (e.g., risk of deportation) • Finances/Poverty		
Impact of own cultural identity (generated in Round 1)		
Cultural competence is essential.	**100**	Three
It can be problematic if the practitioner believes their world view is the 'right' one and does not consider the view of their client.	**100**	Three
It is important to recognise and respect cultural differences as well as create a safe space to generate understanding of how culture is influencing or impacting young people.	**100**	Three
The client's past negative experience being in the system maybe projected onto the new working therapist.	56	
If the parents and child deem the practitioner's views or attitudes about treatment as being too foreign, it may limit their engagement.	56	
The practitioner's own beliefs in the effectiveness of one type of intervention over the other, which are culturally rooted, may impact the type of intervention delivered and the emphases placed on these interventions.	56	
A practitioner should compartmentalise one's "self" from those to whom they provide services. If not, issues can arise due to conflicting viewpoints. We must be aware of how our identities can act as a catalyst or barrier for growth.	44	
In cases where there is a shared cultural background, effectiveness would be increased as there will likely be more acceptance/understanding/buy-in from the practitioner.	44	

The effectiveness of the intervention should not be changed, as steps should be taken in advance to mitigate the impact.	56
Additional considerations	
It is important to acknowledge the limitations of translation and interpretation. Linguistic differences go beyond word usage and involve the understanding of meaning of language within sociocultural context.	44

7.7 Discussion

As predicted, this Delphi provided insight into current mental health practices when providing behaviourally focused treatment to culturally diverse, ACE-affected youth. First, the revisions to the definitions of *cultural* and *externalising behaviour* demonstrated a holistic view of these factors among those surveyed. For instance, contributors emphasised the addition of identity, religiosity, and morality to the definition of cultural, underscoring the importance of evaluating behaviour in the context of cultural norms (Kirmayer, 2007). Similarly, the definition of externalising behaviour was altered to convey that it is also a form of communication that can be used when a young person lacks the ability to express their emotions or meet their needs in more adaptive ways. This is a common understanding adopted in behavioural intervention models such as Ross Greene's *Collaborative and Proactive Solutions* (CPS; Greene & Winkler, 2019). The CPS model encourages practitioners and parents to recognise that behaviour, whether positive or negative, is ultimately an attempt to have a need met. In doing so, a less adversarial relationship can often be facilitated between caregivers, interventionists, or educators and the struggling young person. This, in turn, increases the effectiveness of intervention which, instead of focusing on deterrents and punishments, encourages the development of lagging skills and increasing coping abilities.

While a consensus on the most and least relevant theories was not obtained, participants repeatedly mentioned the value of adapting practice to the needs of the individual clients. It therefore follows that having a working knowledge of and appreciation for numerous theoretical models would be common. With only one exception, however, the eclectic approaches of the participants did not explicitly include reference to any non-Western theories or knowledges. One participant referred to Gee and colleagues' (2014) Social and Emotional Wellbeing Model (SEWM). The SEWM recommends addressing mental health holistically, with roles for physical, spiritual, ancestral, familial, emotional, and psychological factors. These factors are akin to the four quadrants of the Medicine Wheel (Acoose, 2012; Linklater, 2017), which is more commonly applied in North American Indigenous contexts. This is a promising start, but the overall dearth of reference to non-Western theory aligns with the substantial evidence of Eurocentrism in the provision of mental health care (Gone, 2009; Linklater, 2017; Sasakamoose et al., 2017).

Though the earlier systematic review highlighted a lack of presence of theory in the intervention literature, it was predicted that clear preferences may emerge when experts were directly asked, but this was not realised. However, as outlined in Chapter Three, many behavioural models incorporate similar core features. Similar understandings of the underlying mechanisms of both trauma and behavioural sequelae are likely embodied in the clearer consensus on essential treatment components. That is, even when theories differ, the associated therapeutic techniques are often similar in both focus and execution. The three strategies most consistently rated as essential to behavioural intervention for trauma-affected young people were mindfulness and relaxation training, psychoeducation focused on biopsychosocial responses to trauma, and social problem-solving skill development and practice. These components are important, recurring concepts reflected in the literature

reviewed in Chapter Six. Further, common treatments such as Trauma-Focused Cognitive Behavioural Therapy (TF-CBT; de Arellano et al., 2014), along with many derivative interventions (see Chapter Six for examples), target these areas of skill development and awareness. Researchers and practitioners evidently agree on many core tenets (e.g., neurobiological underpinnings of traumatic stress [van der Kolk, 2005; Tronick & Perry, 2015], effectiveness of exposure elements in overcoming anxiety responses [Shapiro, 2009; Foa & Kozack, 2006], key aspects of behavioural learning [Ajzen, 1991; Bandura, 1986]), and therefore acknowledge the value of similar methods in addressing these issues.

Participants were reticent to agree on or even select a 'least effective' option from the provided list. Though not reaching consensus, referring a client on to a practitioner of the same cultural background or using measures that had been normed on diverse populations seemed to be unpopular options among this sample. This was a somewhat surprising outcome, as previous research has demonstrated that shared cultural background or even simply a practitioner being from another non-majority cultural or ethnic group can be perceived as a form of cultural competence (e.g., Gruber, 2015; Linklater, 2017). Notably, despite rating it low in effectiveness during round one, when responding qualitatively, participants indicated that it was indeed valuable to use assessments normed on culturally diverse populations. It could be speculated that their initial responding reflected the actual availability of these kinds of tools, as this is a well-known issue within psychological assessment. As was reviewed previously, concerns have been raised (Styck & Watkins, 2013) about approaches, such as use of the C-LIM (Flanagan et al., 2007), designed to ameliorate these problems, and the creation and implementation of truly trans-cultural assessments is a formidable aim. It is possible that a similar scepticism was applied to the option of finding a practitioner of the same cultural background to refer the client on

to. If a client is from a cultural minority background, it may be unrealistic to expect to find a suitable cultural match who is also qualified to provide the required service.

A strong pattern of support was observed regarding ways in which cultural differences could be addressed in the context of intervention. The sample endorsed open discussion with the young person and/or their caregiver about their cultural background, consultation with someone who has expertise or experience with the young person's cultural background, and access to language supports. Linguistic accommodation, in some ways, is fundamentally necessary to the adequate provision of mental health services. However, as previous research has outlined, language and culture are intricately tied and it may not always be possible to simply translate psychological concepts or experiences (e.g., O'Callaghan et al., 2013; Kovach, 2020). It is important for practitioners to be aware of the possible limits of "translation" services. When it comes to asking members of cultural groups directly about their background, this approach is supported by some writers who would suggest that it is important to tailor these kinds of changes to actual individuals rather than make broad assumptions based on cultural stereotypes (Gone, 2009; Linklater, 2017). It is also possible that having to educate a practitioner on cultural norms or traditions that pertain to them could be viewed as a barrier to access. Nonetheless, there is arguably a middle ground, whereby practitioners can educate themselves and consult the client or family regarding which aspects of the known cultural framework truly apply to the client's life or worldview (Jackson et al., 2020). Qualitative responses provided a more optimistic outlook on the state of practice in this regard.

Responses to prompts regarding the impact of the practitioner's own cultural differences indicated self-awareness as to the necessity and inherent limitations of cultural competency. Participants acknowledged the need to create a safe space for cultural

expression and the way in which ethnocentrism can block development of a therapeutic alliance. They agreed on the immutable importance of cultural competence but also pointed out that this understanding can never be complete.

7.7.1 Limitations

There were several limitations to the present study. First, despite strong recruitment efforts, the response rate was low. It is possible that the description of scope of practice was too narrow and discouraged participants who felt they did not have enough experience in one of trauma-focused, behavioural, or multi-cultural interventions with young people. Selection bias was certainly a factor, as researchers and practitioners least concerned about adapting their practices based on cultural differences may have chosen not to participate. A larger sample could have also addressed the inability to collect and amalgamate demographic information about the respondents and to ensure that the same respondents participated throughout because of concern for compromising anonymity. While it is unlikely that those who did not respond to the first round would have joined in at a later point, this was a methodological weakness that prevented accurate tracking. A final limitation was a lack of inclusion of non-Western models of wellness in the initial options for theoretical frameworks informing intervention. Though participants were given the opportunity to input alternative options as a text-based response (and several did so), they may have been unduly influenced to select or suggest only Western approaches by the options provided. Nonetheless, the results of this study increased awareness of limits to current practice in this area and revealed many paths for future exploration.

7.8 Conclusions

This Delphi provided offered an overview of common practices among a subset of experts working with ACE-exposed, culturally diverse youth to treat externalising

behaviours. Common definitions of the terms ‘culture’ and ‘externalising behaviour’ were developed. A list of barriers to access specific to culturally diverse populations were also agreed upon. Core components of treatment were identified, with few participants noting differences in these based on the cultural background of their clients. However, participants held shared views regarding strategies for learning about and adapting for cultural differences. The term *cultural humility*, used by one participant to describe their relationship with inter-cultural practice seems apt in capturing the balance between educating oneself and recognising the limits of our understanding (Kirmayer, 2007; Linklater, 2017). While all clients are viewed as experts of their own experience, awareness of this knowledge differential is of particular importance when working with clients whose world views and lived experiences differ considerably from our own.

While this study demonstrated awareness of the need for cultural adaptation among practitioners, it was another example of a near absence of non-Western and Indigenous knowledge and cultural consideration in mainstream research and practice in colonial contexts. Practitioners can outline effective ways to adapt their practice to culturally diverse groups, but the Delphi suggested this process may be restricted by a lack of awareness of non-Western conceptualisations of healing and trauma. Identifying a conceptual theme of the value of cultural expertise, the limited role of Indigenous worldviews and perspectives evidenced across both theory (Chapters Five and Six) and practice settings needs to be addressed. Building on this, Chapter Eight outlines a study designed to integrate the voices of First Nations people directly.

CHAPTER EIGHT:

AN INQUIRY INTO BEHAVIOURAL CONCERNS, ACES, AND HEALING IN FIRST NATIONS AND NON-INDIGENOUS POPULATIONS

8.1 Structure of the chapter

This chapter describes the integration of data collected from psychoeducational assessment records (i.e., clinical histories and behavioural questionnaires) and interviews with Cree, Dene, and non-Indigenous educators into the emerging conceptual framework (Birks & Mills, 2023). The collected data was diverse, rich, and exploratory in nature. Indigenous methodology as described by Kovach (2020) was consulted in its collection and interpretation. However, this study cannot accurately be identified as fully applying this method, as is explained below. Rationale and an outline of the methodology and participant characteristics opens the chapter. This is followed by presentation of psychoeducational assessment data alongside unexpected barriers. The data collection expands into a reflexive thematic analysis of interview material and the chapter closes with a discussion of implications for future research and practice.

8.2 Rationale for the Inquiry

Thus far, the two systematic reviews and Delphi demonstrated a consistent lack of representation of Indigenous populations and non-Western models of wellness related to the treatment of ACEs and externalising behaviour in culturally diverse youth. It was concluded from the first systematic review that information about the relationship between ACEs and externalising behaviour from Indigenous samples was very limited (Watts & Iratzoqui, 2019; Cain, 2020). The Delphi highlighted common approaches and theoretical lenses informing behavioural treatment for trauma-exposed youth with only one non-Western framework cited (i.e., SEWM; Gee et al., 2014). However, qualitative responses

demonstrated that practitioners and researchers had a comprehensive view of what constituted cultural differences and several strategies for integrating cultural information (e.g., involving cultural consultants; working with translators or Knowledge Keepers; asking clients directly) to adapt their practice. Thus, it seems that while there is openness to learn, the prevalent theories and approaches referenced remained Eurocentric regardless of the treatment population.

Overall, the lack of data about Indigenous people and absence of non-Western worldviews was pervasive throughout the research conducted to this point. This study was therefore intentionally developed to centre Indigenous perspectives and experiences related to ACEs and externalising behaviour in children and youth. This involved both an exploration of the connection between ACEs and externalising behaviours in a First Nations youth sample and comparing First Nations and non-Indigenous perspectives on assessment and intervention. This study involved connecting with communities through the Meadow Lake Tribal Council (MLTC), a First Nations council that I have been contracting with for several years. More specifically, it entailed the review of psychoeducational assessment records that included behavioural and developmental information, such as ACEs, and interviews with people living in Indigenous and non-Indigenous communities in rural Saskatchewan who work with children. The focus of the interviews was the way in which behavioural assessment is currently conducted and opinions on how best to meet the needs of local, trauma-affected young people. Though GT data collection and synthesis strategies continued to be utilised (Charmaz, 2006), the need for cultural adaptation was clear. Engagement with First Nations communities to inquire about their views regarding current services and how to best meet the mental health needs of local young people was a goal best pursued through integration of Indigenous methodology (Kovach, 2020).

The application of Indigenous methodology has several implications, including embodying an ethics of relationality and reciprocity. Further, it entailed seeking deeper understanding of historical trauma alongside the cultural and epistemological differences introduced in previous chapters. This shift informed my data collection and analysis and will continue into future dissemination of findings and practice within these communities (Gone, 2009; Linklater, 2017; Kovach, 2020). As my understanding increased gradually, this ethos most informed the interview portion of the study, both in the development of interview and the way I engaged with participants. However, it was also the lens that informed interpretation of all presented data. This chapter's shift from standard, academic prose to a first-person narrative, as apparent here, reflects the influence of Indigenous methodology, has a basis in previous studies, (e.g., Acoose, 2012; Gone, 2009; Hansen, 2010; Linklater, 2017; Kovach, 2020), and is described further in the following section.

8.3 Methodology

8.3.1 Indigenous Methodology

"Is it possible to have understandings across cultures? Yet, for a compassionate world to prevail, seek to understand we must" (Kovach, 2020, p. 24). It was within this framing that this study evolved. Kovach (2020, p. 51) outlines a six-part *Nêhiyaw* (Cree) conceptual and research framework:

a) Nêhiyaw kiskeyihtamowin (Cree epistemology)
b) Decolonising ethics
c) Researcher preparation (spiritual and cultural protocols)
d) Research preparation (involving qualitative design)
e) Action and meaning making (from knowledges gathered), and
f) Giving back

In working through each of these steps, I recognised I had not approached this research with the level of cultural and self-reflection that a true Indigenous methodology would require. However, in continuing, I knew it was important to try and adhere to the principles as best I could. Each is addressed in turn below, outlining my own learning and understanding of First Nations epistemology, review of the psychoeducational data, construction of the interview, analysis of the findings, and plan for dissemination.

Nêhiyaw Kiskeyihtamowin (Cree Epistemology). Being Cree/Saulteaux, tribes whose homelands extend across much of Saskatchewan, Kovach refers to Indigenous epistemologies from a Cree (Nêhiyaw) perspective. First Nations groups currenting living in Northern Saskatchewan are predominantly of Cree, Dene, and Métis heritage (Burrage et al., 2021; Sasakamoose et al., 2017). Métis is a term used to refer to a legally recognised group of mixed Indigenous and European descent. As seen in much of the literature reviewed to this point (e.g., Burrage et al., 2022; Gone, 2023; Linklater, 2017; Sasakamoose et al., 2017), while acknowledging culture-specific idiosyncrasies, similarities are apparent among Indigenous belief systems. Reviewed in more detail in Chapter Three, Indigenous epistemologies diverge from Western in a multitude of ways. While Western empiricism privileges the observable and measurable, Indigenous knowledge is rooted in individual experiences and the interplay between external, internal, intuitive, and spiritual ways of knowing (Acoose, 2012; Burrage et al., 2022; Gone et al., 2020; Kirmayer, 2007). It would be a life-long process to approach a true understanding of Indigenous epistemology, if even possible as a settler. However, in aspiring to two-eyed seeing (Bartlett et al., 2012), I reflected on my motivations, connections, and moving forward relationally.

Decolonising ethics. Relationships are at the core of Indigenous research methodology as they are at the core of Indigenous cultures (Kovach, 2020; Gone, 2023). Based on the considerations outlined by Kovach (2020), the focus of my reflection was how to maintain integrity and trustworthiness in my relationships and ensure that there was transparency and reciprocity throughout the process as well as when it came to sharing the findings. In both phases of this study, I was keenly aware of the possibility that people would feel obligated to participate because of my role in the community as a service provider. I had to be clear in my communication that services were not tied to participation. Simultaneously, I wanted to honour those connections, ensuring that the people who spoke with me felt they, their perspectives, and their communities were well-represented by what was shared. For this reason, there needed to be multiple opportunities for people to revise or withdraw their contributions.

As touched on in Chapter Four, another ethical consideration at the time of the initial data collection was COVID-19 precautions. Many of the communities served by MLTC had been determined to be at high risk in cases of local outbreak because of a lack of healthcare providers. Anyone who became seriously ill would typically need to be transferred to an urban centre that could be more than 250km away. Thus, a COVID-19 specific risk assessment was required to be completed and reviewed by the ethics committee before approving the data collection. Further, special permission to enter the reserve communities had to be provided by MLTC. In addition to these approvals, I did daily COVID-19 lateral flow testing before entering the schools as well as adhering to the standard precautions at the time (i.e., masking and a minimum of two meters distance between myself and any participants).

Deficiency theorising was a concept I considered often throughout this process (Kovach, 2020). That is, the tendency of research to focus on risk factors and suffering of people which, in the case of First Nations people, can lead to the reinforcement of negative stereotypes and white saviourism (Gone, 2023). Recognition of this tendency highlighted the shortcomings of solely looking at correlations between trauma and externalising behaviours in the psychoeducational data, as it was very unlikely to lead to a strengths-based conclusion. While it may be impossible to discuss this topic without acknowledging challenges, the interview questions needed to encourage participants to share the strengths of their communities rather than only what was lacking.

Researcher Preparation. Preparation in Indigenous methodology involves the exploration of "motivations, purpose, [and] inward knowing" (Kovach, 2020; p. 36). In reflecting on my relational ethics, a first point of consideration was whether I should be doing this research at all – was it my place? I had to be transparent with myself and others about my motivations, which spanned my own educational and professional goals as well as a sense of duty. I knew, for instance, that it was not the job of a settler researcher to explore and expound on the ways that traditional healing practices improve outcomes for First Nations youth. I was fundamentally an outsider and recognised it was not my place (or that I was not in a place spiritually) to ask local Elders and Knowledge Keepers about their healing practices. Nonetheless, given shortages of First Nations psychologists, and the fact that formalised behavioural assessment are required by law in order to access certain intervention and resources, settler psychologists will continue to be called upon to provide these services. Thus, I concluded that it was valuable to use this opportunity to 1) try to identify the flaws and barriers in the current assessment process and 2) gain insight to be

able to provide more meaningful recommendations and advocate for long-term solutions that could, ideally, alter or eliminate the role of settler psychology.

8.3.2 Action: Psychoeducational Assessment Data Collection

Participants. Eighteen parents and caregivers consented to the inclusion of their children's data in this study, resulting in 20 reports being reviewed. Students' ages ranged from five to eighteen years (m = 8.75, sd = 3.34), with all but one student falling between ages five and 14. Participants were of Cree, Dene, and Métis background and 90% male (k = 18). Reviewed assessments were completed between 2014 and 2021.

Materials. Psychoeducational reports were reviewed including referral information, developmental history, and behavioural questionnaire responses, and information collated. Referral for psychoeducational assessment in MLTC schools generally occurs when a child is struggling behaviourally or academically, and standard, school-based intervention efforts have not been effective. As outlined in Chapter Two, they are required for schools to be eligible for funding for the supports offered through Indigenous Services Canada's High-Cost Special Education Program (e.g., assistive technology, educational assistants). A typical psychoeducational assessment will include developmental, cognitive, behavioural, and academic components. Behavioural measures included the Behavior Assessment System for Children - Second and Third Editions (BASC-2 and BASC-3; Reynolds & Kamphaus, 2004; Reynolds et al., 2015) and the Conners Third Edition (Conners 3rd Edition; Conners, 2008) Initially, documents were coded for any reference to one of the 10 identified ACEs (i.e., physical, sexual, or emotional abuse; mental health/addictions issues in the home; divorce/separation or death of caregiver; witnessing violence or abuse; imprisonment of household member; physical or emotional neglect) and behaviour measures were flagged for the presence of externalising behaviours (i.e., operationalised on

these measures as scores of 70 or higher on scales involving aggression or conduct problems) occurring at *clinically significant* levels. Because the BASC-2 and BASC-3 identify hyperactivity as an externalising behaviour as well, clinically significant scores on these scales were documented. Following the first review of the data, two additional stressors thought to be potentially related to historical trauma (Gone, 2009) were noted and coded for thereafter: inequitable or limited access to healthcare (i.e., primarily related to vision and hearing screening) and linguistic alienation (i.e., cases where the report mentioned that a child's primary language differed from that of close family members).

Procedure. Approval for this study was sought through both the Meadow Lake Tribal Council (MLTC) and the UCLan ethics board. MLTC approval was composed of two phases: first, a written research proposal was presented by the Superintendent of Education to the Board of Education, consisting of a mix of Chiefs and community members from each of nine First Nations, on my behalf. Next, I sought consent from the school administrators directly, who approved me recruiting participants from their schools. UCLan ethics approval was then applied for and acquired.

Recruitment took place in two Northern Saskatchewan schools in March of 2022. The schools were located on a Cree and Dene reserve, respectively, and recruitment focused on parents or caregivers of children who had psychoeducational assessments because of behavioural, cognitive, and/or academic difficulties between 2010 and 2021. Caregivers were given the option to meet with the researcher in person at the school, adhering to government-mandated social distancing and masking COVID-19 precautions at the time, or to discuss the research over the phone. Potential participants were offered the option of a Dene or Cree translator being present during the informed consent process. No one requested this service.

Recruitment was much more difficult than anticipated. The researcher was aware of transience in and out of Northern reserves being common, as people would gravitate to urban centres for employment or other reasons, but the COVID-19 pandemic had increased movement significantly. Contact information was pulled from the referral documents or the reports themselves. If they differed, the information from the report was assumed more recent and thus tried first. At least three attempts were made to contact each person. Of the numbers pulled from the files, 28 were found to be missing from the file, incorrect, or disconnected upon calling. Because of how small the towns are, in some cases, people who answered shared an alternative number or offered to pass along the message (often via Facebook messenger) to contact the researcher at the school. School administrative staff were consulted with and helped to retrieve updated contact information for families who were known to still be residing in the community.

There were 65 potential participants, but only 24 were able to be reached to share information about the study. While it was not possible to determine how much of the movement was directly attributable to COVID-19, it was common knowledge on the reserves that people had left during that time for a variety of reasons. Two asked for further information by email and did not respond to further contact. Eighteen ultimately consented to having their child's data analysed as a part of this study, representing 20 unique student files. This represented a 75% consent rate among those reached. There were 16 potential participants who did not answer or call back in response to left messages. It was exceptionally difficult to contact some participants who work in other municipalities or spend extended time doing activities in the 'bush' (i.e., checking traplines, ice fishing). The difference in communication norms within the community as well as the level of transience was an unanticipated and formidable barrier to recruitment.

It was clear from looking at the background information in the psychoeducational records, usually gathered through a structured referral form, that it was insufficient to understand the strengths and needs of the communities. It also suggested that the way assessment was being conducted was not conducive to acquiring a comprehensive understanding of what could be contributing to a child's difficulties and might be most helpful in addressing them. This was the impetus for the addition of the interviews.

8.3.3 Action: Semi-structured Interviews

Participants. Seven people agreed to participate in the interviews – four of whom the researcher had connected with directly, two who were recruited by another participant, and one who responded to the email advertisement. Three identified as Cree, one as Dene, and three as non-Indigenous with all identifying as female. Two were student services teachers (i.e., providing academic and behavioural supports), three were classroom teachers, one was a half-time teacher and half-time administrator, and one was an itinerant behaviour consultant. All First Nations participants lived and worked on-reserve in Northern Saskatchewan and all non-Indigenous participants lived and worked in rural communities in Central and Southern Saskatchewan. As the communities sampled are very small and close-knit, no additional demographic details were recorded to ensure the anonymity of all involved. Based on the information collected, no significant demographic differences besides location and ethnicity were noted.

Research Preparation: Semi-structured Interview Development.

Reflecting on my approach within an Indigenous framework, it was obvious that I needed to work relationally (Kovach, 2020; Linklater, 2017; Sasakamoose et al., 2017). It was culturally appropriate to directly ask community members who I had pre-existing connections with what they wanted to see in terms of supports for local young people. In

Cree and Dene cultures, oral transmission of knowledge is privileged over written and so the use of conversational, qualitative data collection is a more culturally relevant research strategy (Kovach, 2020). When composing my interview questions, I referenced past conversations with educators and parents on reserve as well as the views of my colleagues who also provided services to First Nations communities.

The interview focused broadly on four topics: the way behaviour is assessed, barriers to local families and young people engaging with mental health workers and other professionals, community perspectives on what constitutes trauma, and views on local supports including services, traditions, community events, or other activities. A casual and collaborative style was adopted in the interviews, in keeping with examples outlined in previous Indigenous research (e.g., Acoose, 2012; Gone et al., 2020; Hansen, 2010; Linklater, 2017). Engaging with authenticity was important for both building rapport and reducing the perceived power imbalance in my role as 'interviewer' and service provider. I hoped minimising formality would increase the participants' comfort in sharing. The full interview protocol can be found in Appendix E.

Procedure. Recruitment consisted of two phases. First, contacts that the researcher had developed rapport with through work in the school division were asked directly if they would be open to participating. While not a typical approach in Western research models, for fear of introducing bias or confounds, relationships and trust are essential components of Indigenous methodologies (Acoose, 2012; Kovach, 2020). It was important to be transparent about my identity as a settler, mental health professional, and person with a vested interest in supporting local youth. Next, an introduction and accompanying advertisement (see Appendix F) were circulated via email to the staff of the same two schools that had agreed to take part in the research initially. The staff mailing lists were

accessed by contacting the administrative assistant from each school. The email invited the recipient to participate in the interviews as well as encouraging them to share the information with any community members who worked with young people. Interested readers were asked to contact the lead researcher directly to participate.

To provide a comparison group, educators from non-Indigenous rural communities in the same province were also recruited. This was thought helpful to pick up on factors that may be unique to on-reserve populations versus those that could be shared among rural contexts more broadly (e.g., limited local resources and services). This recruitment took place over *Facebook* using a modified version of the advertisement sent to the MLTC staff mailing list. The advertisement asked any educators working in rural Saskatchewan (i.e., in centres of fewer than 10,000 people) who were interested in sharing their views on supporting young people in their communities to participate.

Recording and Transcription. Interviews took place between April and August 2023 and were hosted on *Microsoft Teams*. The original plan was to hold interviews in-person, as would have been more aligned with best practices in Indigenous research (Gone, 2009; Kovach, 2020), but unforeseen delays in ethics approval prevented this. Adherence to Western timelines was a further imposition in applying Indigenous methodology.

Interviews were audio recorded and transcribed. *Microsoft Teams* has a built-in recording option which was used to audio-record. The recording was first processed using the transcription feature of *Microsoft Word 365* and then I reviewed the transcript against the recording for accuracy. Transcription focused primarily on content, but some basic conventions, loosely based on those outlined by Jefferson (2004), were applied to identify pauses, overlapping or unintelligible speech, and laughter. Full transcripts and a list of conventions utilised can be found in Appendix E. Transcripts refer to the speakers as

interviewer and *participant,* with numbers used to identify each. Participants were given the opportunity to read and revise their transcribed interviews at the point of transcription and in the context of this write-up. All agreed to their contributions being included.

8.4 Meaning making: Analysis and Discussion

8.4.1 Psychoeducational Assessment Results

In response to findings from the first systematic review, analysis of the assessment data involved comparing groups based on the presence of specific ACEs and behaviours (e.g., aggression, conduct, and hyperactivity). All ten ACE categories were utilised when coding the data (Felitti et al., 1998) and behavioural observations were based on the categories of the measures utilised, including hyperactivity, aggression, and conduct problems. However, as less data was collected than expected, behaviour was collapsed into two groupings: externalising (which included both aggression and conduct problems) and hyperactivity. A summary of the findings can be found in Table 8.2 below.

Table 8.2

Psychoeducational Reports: Presence of Externalising Behaviour, Hyperactivity, and ACEs

Variable	Any ACEs # (%)	Divorced/ Separated Caregivers # (%)	Death of/ Separation from Caregiver # (%)	Violence Exposure # (%)	n	% of sample
Gender						
Male	13 (72)	7 (39)	8 (44)	2 (12)	18	80
Female	0 (0)	0 (0)	0 (0)	0 (0)	2	20
Behav.						
Ext.[a]	6 (67)	4 (44)	3 (33)	1 (11)	9	45
Hyper.[b]	6 (60)	3 (30)	3 (30)	1 (10)	10	50
Total	13 (65)	7 (35)	8 (40)	2 (10)	20	100

[a]Externalising behaviour
[b]Hyperactivity

The collected data provided several insights. Background information revealed that 65% of children had a reported history of at least one ACE (k = 13), usually related to the divorce or separation of their caregivers, removal from the home, or absence of at least one parent. One child had a caregiver die, and two others had experienced either domestic or peer violence. Of note, all children who had lost or been separated from a caregiver were residing with another custodial family member (e.g., grandparent) during the assessment. Just under half of the assessments identified externalising behaviour occurring at clinical levels (k = 9), of which 67% (k = 6) had also reported a prior ACE. Of the 10 children showing clinically significant hyperactivity, just over half had documentation of at least one ACE (k = 6). However, nearly identical numbers of students who were *not* identified as demonstrating externalising or hyperactive behaviours had experienced ACEs (k = 5).

Not included in the ACE calculations, it was noted that nearly three-quarters of reports mentioned inequitable access to healthcare or inability for the child to communicate with members of the family who spoke a traditional language (k = 14). The data gathered from the psychoeducational assessments provided a limited window into the experiences, behavioural challenges, and needs of the communities involved.

8.4.2 Interview Results and Discussion

Considerations related to Indigenous epistemology and methodology outlined by Kovach (2020) were consulted alongside guidelines for reflexive thematic analysis (Braun & Clarke, 2006; 2021). This step toward two-eyed seeing (Bartlett et al., 2012) involved both more typical thematic analysis steps (i.e., immersing oneself in the data, generating initial codes, searching those codes for themes, reviewing the themes, reporting findings) alongside reflections on my own motives and seeing myself as both influencing and influenced by the research process. Both frameworks encourage the researcher to be aware

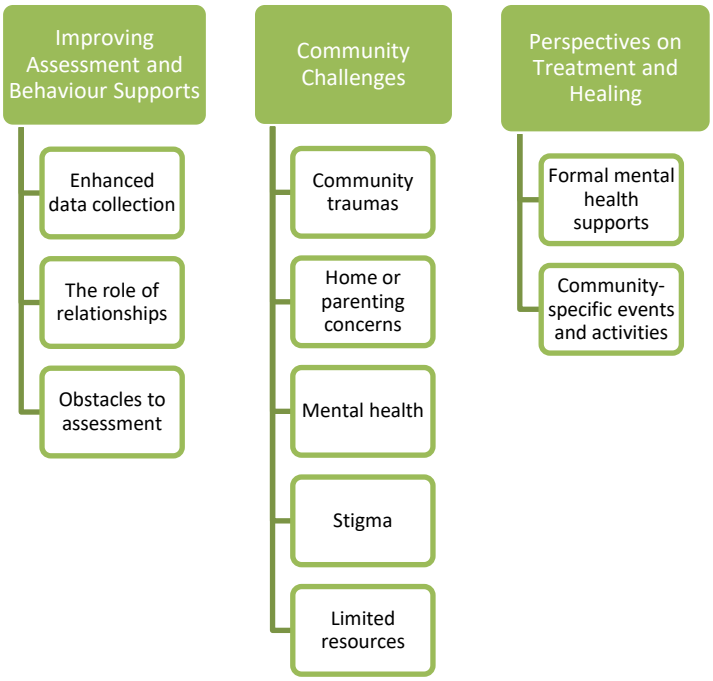
of what they bring to the analyses in terms of biases and preconceived notions, with the Western perspective highlighting the impact of exposure to concepts and theories while the Indigenous view emphasises relationality and responsibility to the community. Both are flexible and well-suited to integrating the narrative data collected using a conversational interview format (Braun & Clarke, 2019; Burrage et al., 2022; Kovach, 2020).

Following interpretation, participants were given a second opportunity to review the interview material in the context of the analysis. All included information was approved in context by the contributing participant. This is an important step, especially in research involving First Nations populations, to ensure that meanings are accurately represented and that the content reflects what participants intended to share (Kovach, 2020). As a settler, I have an additional duty of care in not disseminating the information shared with me in a way that disrespects the First Nations communities or individuals who participated. For clarity, participants one through four were Cree and Dene educators who lived and worked on reserve in Northern Saskatchewan while participants five through seven were non-Indigenous and living in rural Central or Southern Saskatchewan.

Three superordinate themes, or categories, were identified in the interviews: 1) improvements to assessment and behaviour supports, 2) community challenges, and 3) perspectives on treatment and healing. Subthemes that were captured under theme one related to enhancing data collection practices, the role of relationships, and obstacles to assessment. Community challenges fell into the subcategories of community traumas, home or parenting concerns, mental health, stigma, and limited resources. Treatment and healing topics spanned community-specific events and activities as well as formal mental health supports.

Figure 8.1

Study Two Interviews: Summary of Superordinate and Subordinate Themes



8.4.3 Superordinate Theme One: Improving Assessment and Behaviour Supports.

Participants shared several ways to improve assessment and behaviour supports, spanning data collection itself, relationship building, and identification of assessment obstacles.

Subtheme One: Enhanced Data Collection. Five participants mentioned changes to data collection, with three participants suggesting speaking to the children directly about their behaviour and motivations. Participant three said, “You have to be able to consider how they’re feeling mentally, physically, you know?... We don’t know where the child is coming from.” Two participants emphasised the importance of repeated classroom observations, with participant six saying, “I think – like classroom observations are great, but one observation is just a super small picture of what maybe happens on a daily basis.”

These responses reflect the importance of multi-faceted assessment practices, such as those outlined by the National Association of School Psychology, which emphasises the value of both formal and informal assessment[8].

Subtheme Two: Obstacles to Assessment. Multiple potential barriers to assessment were identified by participants. Two First Nations participants shared concerns about parent perceptions that assessment was intended to evaluate their parenting, with participant four saying, *"*A lot of people were offended by certain things, right? Like that one lady said, 'You're trying to take away my kid!' I'm like, no. We're trying to help your kid, if anything." The historical traumas related to Indigenous children being removed from their families through residential schools and injustice of social services practices on reserve play a role in the kind of anxiety described here (Linklater, 2017; Gone, 2023). This is important context for practitioners to consider when working in these communities.

Three participants emphasised cultural considerations related to the assessments. Participant one, speaking to her experience in a Northern Saskatchewan Dene community, said, "Questionnaires aren't culturally relevant […] sometimes they [caregivers] don't understand the questionnaire," emphasising further that, "That form [the BASC-3] is pretty daunting." Participant four, also working within the Dene context, focused on the content of standardised assessments said, "So a lot of the things I guess when you do assessments, um, don't pertain to our – to where we live?" Coming from a Southern Saskatchewan rural community, participant six shared similar thoughts, saying,

> Well, […] we definitely have traditionally in education been very Eurocentric. And so as we start seeing more students coming in, you know, with traumatic pasts, like

[8] The four pillars of assessment intended to inform sound clinical judgement when providing psychoeducational services include history taking, observation, formal, and informal assessments (NASP, 2020).

> […] refugees, different languages being spoken. In the past, I feel like a lot of assessments have really negated those experiences or made them not as significant or like not valued them as much […] yet there are so many things that could be-that we might be missing just even on a cultural level.[…] you know, who created these tests? With whom in mind? (Participant six)

Formal assessment tools commonly used in psychoeducational assessments, such as the Weschler Intelligence Scale for Children (WISC), Weschler Individual Achievement Test (WIAT), and Woodcock-Johnson (WJ), have been criticized as containing content that culturally and linguistically disadvantages children from cultural minority backgrounds (Flanagan et al., 2007; Ortiz, 2008). This is a clear barrier in gathering valid information to inform intervention in these communities.

Subtheme Three: The Role of Relationships. Building and maintaining relationships was touched on by five participants. Participant one said, "They need to have a good working relationship with the whole school, not just with one teacher," and, "[…] building relationships with the - within the families in the community, like, positively would be a good way." Participant four emphasised spending more time with families, recommending, "More engagement – because it takes a while for them to even like – warm up to you," suggesting, "Maybe we could have like a evening where you bring them in […] bring dessert or supper or, you know?" Beyond Western rapport building, this reflects a more communal, informal style of connecting with communities that would embrace cultural norms when working with Indigenous populations (Linklater, 2017).

Relationships can also interfere with the provision of Western-style services. Participant three, speaking to the struggle of providing mental health services in one's own community said,"…sometimes as a community guidance counsellor, you're from the

community, you're working with your people. You don't wanna – um – ruffle any feathers, maybe? Or open a can of worms [laughing], and it's kind of – it depends on – because you're related to everybody, right?" Participant two noted this challenge as well, saying, "…if a student wanted to go talk to the counsellor and they're like, 'Oh, I don't - I don't get along with that person,' or 'I don't like their family,' or something - they don't have any other options." These comments evidence the strain between Western systems (e.g., mental health support as a specialised skill with a designated person who children are referred to) and the collectivist, kinship relationships common to Indigenous communities (Kirmayer, 2007; Linklater, 2017). Dual relationships, something psychologists are meant to avoid, are more typical in on-reserve communities (Linklater, 2017). Even when living in urban contexts, Cree and Dene people who attend traditional or spiritual events make up a small, often close-knit subgroup and may have shared relations or know each other from ceremonial settings. Collectivist bonds can be compromised by the rigidity and disconnection of formalised processes that surround Western assessment and counselling.

8.4.4 Superordinate Theme Two: Community Challenges.

A wide variety of community challenges were shared, including experiences of community trauma, the role of home or parenting concerns, mental health challenges, fears related to stigma, and a lack of access to resources.

Subtheme One: Community Traumas. The three non-Indigenous contributors all mentioned community traumas being a significant concern, participant six commenting,

> "Like in my community specifically we have lost a number of students […] it was interesting because a small school, right? So everybody knows everybody, the people that were really close to him were obviously feeling it, but even people who

> maybe weren't super close with him, but were like, 'Wow, he was in my class.'" (Participant six)

It was notable that only one participant mentioned the residential school impact, or any community traumas, with participant four, saying, "…would residential school trauma go under that?" This may speak to hesitation in sharing about these topics with an outsider. Alternatively, it may indicate differing perspectives around the use of the descriptor "trauma." It could also reflect the sort of common understanding of the existence of historical trauma within these communities – such that the impact of residential school 'goes without saying.'

Subtheme Two: Home or Parenting Concerns. Difficulties related to home life and parenting were described by all four participants based on reserve and one of those working in another area of rural Saskatchewan.

> "[…] you go back to their family, one of them was just dealing with separation - their parents separating, and the other one they have really lots of people in their house and it's like overcrowded, and they don't get enough attention." (Participant two)

In Northern Saskatchewan multi-generational households are not uncommon and, cultural differences aside, housing shortages can exacerbate overcrowding. Participant three spoke to parenting challenges including a lack of attention or supervision, saying,

> "… a lot of students go-go home after school and they have nothing to eat or they're not given routines, they're not expected to do chores or expected to, uh, you know? They're just - they just go back home and they're on their iPad or on their game and that's it […] Like they're on there for the rest of the night, and nobody's really caring about it."

She went on to focus on the prevalence of substance misuse, saying,

> "…there's a lot of drugs and alcohol and stuff, and most families, probably, I would say 75% of our families in our community are probably affected by drugs and alcohol, and gangs […] it's not like something that you throw under the carpet. It's a factor, it's realistic […] it's like an everyday thing. 'Oh, my parents are doing this. They're drinking all night last night,' and, you know?"

Previous research has demonstrated correlations between what have been termed "chaotic" home environments (Bonner et al., 2020), poorer quality housing (Powell & Davis, 2019), and increased externalising behaviour. Longstanding systemic inequities are likely culprits in creating circumstances that increase risk of such behaviour among Indigenous youth (Gone, 2023). Combined with a lack of local supports, resources, and services, it is easy to see how these conditions are perpetuated. These are vital community-level issues to consider in addressing these issues.

Subtheme Three: Mental Health. Two participants from non-Indigenous communities mentioned mental health concerns. Participant five explained,

> "…we are seeing more behaviour because kids are coming with more anxiety, and however that anxiety is brought on, if that's they're not good at school or they have-have a diagnosis and the teachers are unaware of it, so they're not making the adaptations that are needed. Or kids are undiagnosed and teachers are not making adaptations." (Participant five)

Participant seven reinforced this perspective, saying,

> "The one thing that is on my heart and mind is the-the high level of-of variety of types of anxiety from all of our students. It starts in grades three, like our grade 3, 4,

> 5, 6 class was like - oh my gosh. I've never seen levels of anxiety like that ever before!" (Participant seven)

Again, this was a notable distinction between Indigenous and non-Indigenous contributors: those from non-Indigenous communities were more likely to point out individual psychopathology. A reduced focus on psychological factors and increased consideration of community, family, and environmental influences aligns with the collectivist, non-clinical view of wellness that is more prevalent within Indigenous cultures (Linklater, 2017; Burrage et al., 2022). Service providers should be mindful of this difference when making recommendations for intervention.

Subtheme Four: Stigma. Stigma was a topic brought up by three participants, two of whom were non-Indigenous. Participant two succinctly said, "There's like a stigma around getting help. They don't see it as an actual health problem." Participant five spoke to the hesitation of some parents in consenting to an assessment, saying,

> "the fact that other members in the community will know that their kid saw the psychologist, and for some reason there are lots of people who see that as a really bad thing […] in rural settings, um people are really protective of their privacy in-in some ways. So - and in a small community, now everybody knows your kid's seeing the psychologist. And they feel that's a stigma."

Participant six concurred, saying, "I think stigma is still a thing […] but there doesn't seem to be as much of a stigma. […] I would say the older generation, that would still be some stigma about going and accessing a psychologist." This aligns with previous findings on increased stigma related to mental health care and awareness in rural versus urban settings (e.g., Schroeder et al., 2021).

Subtheme Five: Limited Resources. Limited or lacking resources was a pervasive issue mentioned by all seven participants. The availability of professional services in general was of particular concern, with participant one sharing, “No, there's not much resources in town. We live in a small area […] same with anybody that - resources too, I guess, right? Like even doctors.” Discussing the counselling resources available, participant two said, “It’s that one person. Otherwise, they’d have to travel to the city.” Participant three spoke to the challenges associated with even trying to pull resources from other centres, saying, “…then when you try to make an appointment with mental health or somebody in [City 1] or [City 2], it takes weeks.” Participant seven also noted this, saying, “I think very similar in rural Saskatchewan as it is in the North, right? We're-we're very isolated and supports are not nearby.” Stability of local resources was an issue outlined by participant four, who said, “…having somebody who's actually […] there for the kids, like if they don't switch their jobs - there's too much of a turnover. And sometimes there's even like vacancy.” Participant five similarly noted, “…the students in schools typically have access to counsellors, but I do not have a school that has a full-time counsellor […] the most counselling I see in any of the schools, the nine schools I go to, would be four out of five days.” School supports being strained by diverse needs in an environment lacking in resources was highlighted by participant six who said about educational assistants, “that's - yeah, that's more so what they're doing. Or that need to be, like, changed - like a diaper or help in the bathroom? And so I know some schools like they're-the EA's are delivering insulin.” Tight education and health budgets are not a hurdle unique to Saskatchewan, but it is an important consideration when many of Canada’s rural communities are facing ongoing crises of suicidality and distress (Mental Health Commission of Canada, 2017).

Cree and Dene participants also commented on the lack of availability of cultural activities and resources. Participant one said, “Just culture week and then that's it for the, uh - for 30 weeks, we're in school, but only one week is culture week, you know what I mean?” Participant three spoke to disappointment in the limited run of these events as well, saying,

> “I think it's a positive thing that they plan these activities, but they only go through these activities maybe once or twice and then they're done and the rest of the time - it's - I don't know, lost? […] During the school year, they have those activities maybe once a month.” (Participant three)

While these communities continue to reclaim pieces of cultural and spiritual tradition that were lost to colonisation, there are significant barriers to full integration. Elders and local Knowledge Keepers who can lead or pass on the traditions are themselves a scarce resource (Linklater, 2017). The impact of forced residential school cultural and religious conversion and nearly 100 years of prohibition of ceremonial events under the *Indian Act* cannot be overstated (Hanson, 2009). The decolonisation of mental health in Indigenous contexts should arguably prioritise revitalisation of these practices over increased Western mental health services (Gone, 2023). In participant four’s words, “if we're dealing with First Nations children, maybe we should try to bring back our own ways.”

8.4.5 Superordinate Theme Three: Perspectives on Treatment and Healing

Building on the above, participants were enthusiastic in sharing views on how to support youth in their communities. This included both formal mental health supports and community-specific activities and events.

Subtheme One: Formal Mental Health Supports. Four participants outlined a need for and benefit of counselling services. Participant two emphasised the value of online

counselling, citing the value of "[…] just having somebody to talk to and some coping tools to have." Online counselling can be a way to manage issues related to privacy and stigma in small communities where confidentiality and multiple relationships are a concern. Further, it could increase accessibility of services from mental health professionals of similar cultural backgrounds. Participant three emphasised the value of art therapy in her Cree community, saying that, "students are open, more open to him." Art therapy, being a less cognitively driven approach, may be viewed as more aligned with First Nations wellness (Linklater, 2017). Participant seven also spoke to the value of therapy to youth in her non-Indigenous setting but noted that currently they needed to travel between 30 and 50 minutes away to access it, reinforcing the impact of limited resources in these communities.

Subtheme Two: Community-specific Events and Activities. Participant one first drew on somatic approaches, saying, "I think it's mostly being hands on, working with your hands. Because you heal – with your hands – you're healing your mind through keeping your hands busy…" Participant two, who had personal experience with somatic therapy, expanded on this idea, specifically mentioning the role of the land,

> "When they go to the school cabin and stuff, they seem to really enjoy that and I feel like that's therapy without being therapy. [laughing] You know what I mean? Like doing stuff with your hands and, I guess, connecting with your body and with the land and stuff, it's kind of - it's healing in its own way."

Participant four also shared her interest in somatic approaches, citing a recent training she had attended about *Swing Therapy*. The swing has traditional significance within Cree culture, as it is said that the swing was provided by a grandmother spirit to support a young mother in soothing her baby (Auger in conversation with Linklater, 2017). In this therapeutic context, an adult-size swing is used ceremonially to encourage reprocessing of

attachment and other traumatic experiences. As described by participant four, "…they're saying that if you use this swing we could actually, um, bring ourselves back to our childhoods and begin to repair, um, basically I guess what we lost along the way, as children." These contributions underscore the body-spirit connection, which is heavily emphasized in Indigenous teachings and is central to many ceremonial and healing practices (Linklater, 2017; Gone et al., 2020).

All three non-Indigenous participants mentioned sports, with two focusing on the social benefits. Participant five said, "that is a good connection because it often puts them in contact with a - with another safe adult. […] Often kids who are going through trauma develop a really strong relationship with their coach." Participant six reiterated the social advantages, saying, "…a lot of people also go to [nearby city] to play their sports. Uh, to have something that might give them a sense of belonging that might help with behaviour?" While both groups saw the benefits of physical activity, the less somatic focus of the non-Indigenous participants seems aligned with the known Westernised tendency to focus on more cognitive solutions to mental health challenges (Gone, 2009; Linklater, 2017).

Several participants highlighted the important role Elders or grandparents could play in supporting young people. Participant one said, "Like a cultural area too […] Elder support or an Elder room […] kids coming in, just visiting, knowing that there's someone there that's available to help talk to them." This less formal approach was also endorsed by participant three who said,

> "The other thing that, um, I think maybe we're gonna try is maybe have them talk to Elders about it. More like (.) a visit type of way instead of, 'OK, I'm on the hot seat here. I'm with a mental health counsellor and I'm not going to say whatever, I'm going to watch what I say.'" (Participant three)

Participant four also reinforced this idea, saying,

> "…maybe having a full-time grandma or grandpa in the building might be a-a good thing too for our kids. Because a lot of them don't have it, for whatever reasons, going back to, uh, residential school again, right? Have a lot of loss of parenting." (Participant four)

She continued, sharing her own experience,

> "I guess it'd probably be one of the more important ones, because they're the ones that actually teach children - cause I was raised by my grandparents. They taught me my language, my culture, respect - respect the land. Yeah, so they did everything for me. They gave me a sense of security." (Participant four)

Cross-generational supports and the importance of broader family relationships is a consistently observed feature of Indigenous cultures (e.g., Burrage et al., 2022; Choate et al., 2020). Inviting collaboration from these individuals and facilitating their bonds with young people is a way that psychologists and other mental health providers can contribute to the goals of decolonisation and wellness when working with Indigenous communities.

Five of the participants described cultural or community events and supports that were available locally or that they would like to see more of. For example, the school cabin, a feature of the Dene community, was identified as a place of cultural healing. Participant four mentioned, "They have a sweat lodge there - they bring the kids in there too. So I guess we're turning back to ceremony and our traditional ways is one way." Participant two said of the Dene community more generally,

> "…everybody's always doing stuff together and it's nice. And the clinic is always putting on stuff for the kids like they have toddler gym night, they have - they have kids, night for the kids, they do hangouts and stuff, and last night they had men's

night. […] They have the community kitchen here too, and they do, like, cooking they have like themes every week…" (Participant two)

She also described a programme in another Northern community that she thought would be useful to emulate where adolescent boys would work with mentors to do acts of service around the community. She explained,

> "…they like, cut wood and stuff for the Elders and they just find stuff to do. They go and ask Elders if they need anything done in their yard and they all just show up there and do work, and they do that throughout the summer." (Participant two)

Participant three, focusing on the local youth centre in her community, expressed some concerns, saying,

> "…the youth centre here is open for them, but there's not really any routine or anything for them to follow or rules, I don't think because they-they're free to go in and out and there's, uh, there might be activities planned, but nothing is structured." (Participant three)

In a non-Indigenous rural community, participant five described the unstructured nature of youth centres in more positive terms, saying, "I think-I think that's good for kids, you know, just to be able to go and hang out together in a different place that's not manned by teachers telling them what to do?" Participant six described the school itself as acting as a resource hub during times of crisis, saying, "…they'll [the school division] send out counsellors, open up the school to have a safe place for people to go and just talk through things."

Across rural contexts, resources for young people who may be struggling are extremely limited. This is a known issue that is unfortunately confirmed by these findings (Mental Health Commission of Canada, 2017). Youth centres, mentioned by both

Indigenous and non-Indigenous participants, can provide a safe, supervised place for young people to gather and socialise. Having spaces that are community funded, secular, and not activity driven enhances accessibility to those who may not have financial resources or ability to participate in sports or other organised activities. Further, the community events and initiatives described by participants two and four may be a good model to draw on when serving Indigenous populations. Offering diverse programmes that span physical (e.g., cooking, nutrition, gathering wood), spiritual, emotional, and mental health is in keeping with the holistic teachings represented through the Medicine Wheel (Acoose, 2012; Linklater, 2017).

8.5 Giving Back: Discussion

Findings were organised into categories spanning three topics: 1) improving assessment and intervention in First Nations communities, 2) contextualising ACEs among First Nations youth, and 3) understanding shared and divergent needs of First Nations and non-Indigenous youth in rural Saskatchewan. These are expanded on in turn below.

8.5.1 Improving Assessment and Intervention in First Nations Communities

A key finding from this study was that community transience and communication differences are important considerations when conducting research or providing psychological services with Cree and Dene populations in Northern Saskatchewan. This was a barrier in contacting families to participate in the research but also has implications for following through on recommendations outlined in psychoeducational reports. This issue of transience is represented in previous research involving on-reserve communities, as socioeconomic stressors, the lack of resources and opportunities, and variable living conditions on reserve often necessitate moving back and forth from larger urban settings (e.g., Gone, 2023; Linklater, 2017). This creates obvious barriers in the provision of

consistent interventions following assessment. It may be necessary for supports to be provided in such a way that moving to another community does not equate to a discontinuation of services. As touched on by one First Nations participant, online mental health services could play a role in this. However, as internet access may be inconsistent among some lower income families, a province-wide, adaptive mental health care network would also be valuable. These conclusions replicate previous studies affirming the importance of local understanding and collaborative development of supports with First Nations groups to enhance quality of both research and supports (e.g., Linklater, 2017; Sasakamoose et al., 2017). It may be that in these contexts mental health practitioners and researchers act as advocates rather than leaders (Kovach, 2020; Payne et al., 2013; Sasakamoose et al., 2017).

Psychoeducational report and interview data evidenced that clinicians and researchers working with First Nations people should allocate substantial time to building relationships with caregivers and families. For example, it was noted during recruitment and informed consent conversations that caregivers often wished to disclose information beyond what had been shared during the assessment process. This is reinforced by the basic cultural norms of Indigenous groups – relationships are essential (e.g., Kovach, 2020; Linklater, 2017). It follows that some participants were able to develop that trust speaking to me directly in-person or over the phone more readily than when filling out the original assessment documents. However, this was not permitted within the ethical bounds of what had been approved, and such information was not included. Future researchers should consider alternative ways to connect with community members, such as hosting meet-and-greet events in community spaces or connecting through specific *Facebook* groups.

Further, qualitative data provides rich context for any quantitative information gathered. This is particularly important given the current state of formalised assessment and its known inadequacy in capturing the abilities of culturally and linguistically diverse populations (Flanagan et al., 2007; Ortiz, 2008). Assessors should be flexible and ensure they gather as much alternative format information as possible to inform conclusions, diagnosis, or recommendations.

8.5.2 Contextualising ACEs among First Nations Youth

Both the psychoeducational and interview data suggested a substantial frequency of ACEs among First Nations youth but must be interpreted within context. The reports and interviews indicated a strong presence of ACEs, which reinforces previous findings suggesting a high occurrence of ACEs among Indigenous populations (Richards et al., 2021). However, the level of detail in the background information provided within the reports was limited, likely by the method of collection (i.e., referral forms and structured questionnaires) and mistrust of the institutions requesting the information (Gone, 2023). Further, because the referral forms did not ask specifically about each ACE, and instead referred broadly to 'traumatic past events' that could have affected the mother or child, the reported ACEs are thought unlikely to be comprehensive. However, First Nation interviewees expressed significant concerns about potentially traumatic events happening within the community (e.g., addictions, mental health difficulties, gang violence), implying that they were occurring with more frequency than reported. Most documented ACEs were the divorce or separation of caregivers or being separated from a parent. Notably, those living away from parents were residing with a family member at the time of the assessment. As outlined in Chapter Two, familial systems in Indigenous cultures tend to involve extended family members (Choate et al., 2020). Therefore, attachment relationships may

look different than in non-Indigenous populations. It perhaps cannot be assumed that First Nations and non-Indigenous children would be equally impacted by being separated from their parent but living with another family member. As discussed in Chapter Two, ACEs cannot be assumed to have identical cross-cultural impacts (e.g., Choate et al., 2020). Also of relevance, most reports reviewed indicated examples of a lack of access to healthcare or language. This concern was reinforced in the interviews with First Nations participants, as they expressed frustration with the lack of support services in their communities and limited cultural resources. This unfortunately confirmed predictions about a lack of resources within these communities as well as prior research related to the lasting impacts of historical trauma (Acoose, 2012; Gone et al., 2020; Linklater, 2017).

8.5.3 Understanding Shared and Divergent Needs of First Nations and Non-Indigenous Youth in Rural Saskatchewan

At the systems level, this study drew attention to some shared and unique challenges within First Nations and non-Indigenous rural communities. For instance, certain formal process, such as those related to incident reports or service referrals, may be alienating to caregivers and create tension in tightly knit social networks both on and off-reserve. Concerns about confidentiality and stigma were noted in both contexts, meaning alternative approaches or enhanced normalisation of seeking support could be necessary across settings. If a school or mental health counsellor in a rural environment is unavailable, closely connected, or simply not a suitable option for a child, there need to be other supports in place. Non-Indigenous participants highlighted the potential for a sports coach or other safe adult to step into this role. In reserve communities, First Nations participants identified the value of connection with an Elder or grandparent, aligning with previous studies on the topic (Lindstrom et al., 2016). Rigidity around professional roles

and referrals can run especially contrary to cultural norms in Indigenous communities, however, where expertise is traditionally associated with spiritual factors rather than academic or credential-based (e.g., Linklater, 2017; Sasakamoose et al., 2017). A lack of resources means that, even in other rural settings, adults in positions of trust ought to be provided skill-building opportunities to this effect. Ideally training would include information about non-Western conceptualisations of well-being, as multiculturalism in rural Saskatchewan continues to grow. This could help to address shortages in specialised services by ensuring more people are comfortable providing basic support to youth regardless of background.

Interviewees from both First Nations and non-Indigenous backgrounds identified barriers with caregivers related to students being referred for assessment and supports. While this was largely attributed to stigma and privacy concerns in non-Indigenous communities, First Nations participants spoke about parents who worried that the outcome of the assessment might affect custody of their children. A major divergence between First Nations and non-Indigenous groups is the baseline level of mistrust regarding the motives of educational and health professionals. Mistrust of these institutions among First Nations peoples in Canada is a well-known phenomenon with very clear roots in the transgressions of social services and healthcare institutions (Brave Heart & Debryun, 1998; Gone, 2023; Helgason, 2009). Two First Nations participants emphasised the worries parents expressed when approached to complete referrals for their children. When asked to speak to a psychologist about their children, particularly regarding histories of trauma, caregivers may be rightly hesitant for fear of putting their custody at risk. It takes more time to develop trust with individual professionals, who act as representatives of these systems, as they lack trust in the institutions themselves. While trust and acceptance of mental health or

behavioural needs is an issue that needs to be addressed across contexts, First Nations people are uniquely impacted by historical trauma related to large-scale institutional abuses in social services and healthcare (Linklater, 2017; Sasakamoose et al., 2017).

More awareness of the differences between Indigenous and non-Indigenous communities regarding the conceptualisation of mental health and behavioural struggles is also needed (Kirmayer, 2007; Linklater, 2017). First Nations interviewees tended to identify children's difficulties as a symptom of environmental or contextual difficulties while non-Indigenous participants mentioned individualised concerns (e.g., anxiety). This finding is supportive of previously reviewed differences in collectivist versus individualist worldviews (Yeh et al., 2006) and less egocentric conceptualisations of health and wellness (Kirmayer, 2007). As symbolised by the Medicine Wheel (e.g., Acoose, 2012; Burrage et al., 2022; Linklater, 2017), First Nations people may be more likely to identify the impacts of trauma as symptomatic of multifaceted imbalances in wellness rather than individual psychopathology. However, First Nations participants also emphasised the value of formal, individual mental health supports, suggesting that the potential influence of less egocentric worldviews is not absolute. Nonetheless, despite the systemic push for formal assessment and diagnosis (Indigenous Services Canada, 2015), practitioners and researchers should avoid projecting a pathologizing framework on Indigenous communities.

Differences also emerged regarding the types of activities First Nations and non-Indigenous participants felt would be helpful in supporting youth struggling with trauma and behaviour difficulties. While most participants saw the value in formal mental health services, First Nations participants were more likely to mention activities that involved somatic aspects, time spent in nature, or ceremonial or cultural practices (e.g., swing therapy; attending a sweat lodge). Notably, while non-Indigenous participants also shared

suggestions related to physical activity, their responses generally focused on sports, social belonging, and the role of a supportive coach. While First Nations participants' suggestions appeared to focus on the body-spirit connection and one's relationship to the land, non-Indigenous respondents identified more cognitive and emotional benefits of physical activity (e.g., Acoose, 2012; Burrage et al., 2022; Linklater, 2017). Again, this adds to a body of evidence reviewed regarding the differences between Indigenous and non-Indigenous views of wellness. Healing and ceremony in Indigenous culture often centres connection between body, spirit, and land (Burrage et al., 2022; Gone et al., 2020; Linklater, 2017). Previous work in this area has demonstrated the importance of these strategies for improving well-being and health in Indigenous populations (e.g., Burrage et al., 2022) and specifically for First Nations youth (e.g., Snowshoe et al., 2015). These types of culture and community-based initiatives should be supported. As service providers working in these communities, awareness of ongoing events and activities that support holistic wellness are paramount. Mental health practitioners can play a role through formally recommending these activities in their reports and supporting community members in acquiring funding to secure resources or space to host them. Integrating these resources and knowledge into the recommendations provided to families through the psychoeducational assessment process will help to ensuring that supports are as accessible and culturally appropriate as possible.

8.6 Limitations

There were several limitations to the current study. First was the restrictive scope of the referral and background interview information insofar as accounting for ACEs. From the reports, there was no structured inquiry about ACEs as a part of the assessment process. Reports were vague at times. For example, one report stated that the student had a

‘tumultuous home life,’ but no further detail was provided. Similarly, the behavioural assessments used, while highly structured, amalgamate information about externalising behaviour into few distinct categories, which limited differentiation of behaviour types. Further, parents with concerns about how their child may be perceived by non-community members may withhold key ACE and behavioural information. However, all children had behavioural reports from at least two observers, enhancing reliability. Generalisability was limited because of the nature of the sample, as students had been referred for specialised services due to academic or behavioural difficulties. Further, the psychoeducational report sample included only two females. Overall, the findings were not representative of the youth population in these communities. A final oversight was not directly consulting community members before finalising the interview protocol. At the time, I did not want to ask any more of local people than I already had. In hindsight, I was assuaging my own anxiety rather than adhering to an ethics of care within Indigenous methodology (Kovach, 2020). Researchers working with similar populations in the future should be sure to consult directly in the development of research and interview questions.

8.7 Conclusions

The results of this multi-modal study provided valuable insights for researchers and service providers when working with Northern Saskatchewan First Nations populations. Findings built on conceptual themes threaded through the research thus far regarding the occurrence of ACEs in First Nations communities. Further, they demonstrated overlaps and disparities when comparing the needs of youth in non-Indigenous communities. However, quantitative data was limited by quality and generalisability, and new avenues for inquiry were raised regarding the relationship between collectivism, individualism, preferences for different approaches to treatment, and the views of those from Indigenous and non-

Indigenous backgrounds who had experienced ACEs directly. Further insight in on these topics was the goal of the final study.

CHAPTER NINE:

A CROSS-CULTURAL COMPARISON OF ACES, BELIEFS, TRAUMA, AND TREATMENT PREFERENCES

9.1 Structure of the Chapter

This chapter outlines the development, execution, and analysis of findings of an online questionnaire designed to compare ACE exposure, intergenerational trauma, beliefs, and treatment preferences for behavioural concerns between ethnic groups. The rationale and predictions that guided the study open the chapter followed by an overview of the procedure, methodology, analysis, and results before concluding with discussion and limitations.

9.2 Rationale for an Online Cross-Cultural Comparison

Continuing in the application of GT, the codes and categories identified throughout the preceding research guided the design of this study (Birks & Mills, 2023). First, the results of systematic review one (Chapter Five) aligned with previous research demonstrating that ACEs and externalising behaviours are consistently linked (e.g., Miley et al., 2020) and that ACE exposure is significantly higher among cultural minority groups (e.g., Richards et al., 2021). The second systematic review and Delphi (Chapters Six and Seven) indicated that there are many effective approaches to treating trauma and externalising behaviour, but that, despite acknowledgement of their value, non-Western models of wellness are rarely referenced in the development or implementation of programmes or treatments (e.g., O'Callaghan et al., 2013; Payne et al., 2013). Interviews and file reviews conducted in Study Two (Chapter Eight) demonstrated the shortcomings of Western assessment and intervention when working with First Nations populations and the importance of adapting to cultural and community needs. Indigenous and non-Western

populations and worldviews had little representation across both systematic reviews and the Delphi, indicating a need for research focused on seeking out such perspectives.

Regarding the cultural adaptation of treatment, participants in the Delphi and interviews described shared and divergent perspectives on the types of support youth need to recover from trauma and develop more prosocial behaviours. There was professional consensus in the Delphi on the value of certain components, such as providing psychoeducation about the impacts of trauma, incorporating physical movement, teaching emotional regulation skills, social support, and access to mentorship or guidance. Practitioners and researchers expressed willingness to learn from their clients and those with cultural expertise but reported little reference to non-Western theory or models of practice. In community samples, important differences emerged between First Nations and non-Indigenous participants in the interviews insofar as how best to fulfil the treatment needs of local youth. For example, in meeting somatic needs, First Nations participants highlighted the importance of spending time on the land or having access to traditional and ceremonial practices (e.g., a sweat lodge) while non-Indigenous contributors emphasised the value of organised sports, pointing out both the physical and social (i.e., sense of belonging) qualities. In terms of more formal supports, non-Indigenous interviewees pointed to coaches and school counsellors as social support. Though First Nations participants also identified counsellors as potential supports, they also recommended more involvement of Elders and grandparents. More traditionally collectivist cultures, such as Indigenous and Latin American, are more likely to involve larger family and community circles when seeking guidance or participating in treatment related to traumatic experiences (Boss et al., 2009; Gone, 2009; Linklater, 2017; Hamby et al, 2020; Cedeño, 2021;

González et al., 2021). Consequently, differences in collectivist versus individualist belief systems were explored in the present study.

As was introduced in Chapter Three, Indigenous North Americans, are thought more likely to adhere to sociocentric, ecocentric, or cosmocentric worldviews, and to benefit more readily from mental health strategies that incorporate collectivist principles (Yeh et al., 2006; Burrage et al., 2022). Other studies have further demonstrated that people tend to have preferences in terms of the mechanism of action of a given affect-regulating behaviour. For instance, whether it is a diversion or engagement activity, either drawing attention to or away from the feeling being processed, or if it is more behavioural or cognitive, involving doing versus thinking (Parkinson & Totterdell, 1999). These are conceptualised as dichotomous characteristics. Findings from the interviews as well as previous research had demonstrated an affinity among First Nations surveyed for healing strategies focused on spending time on the land or in somatic and ceremonial practices. Previous studies have demonstrated that these may be more effective treatments for Indigenous groups than traditional talk therapies (e.g., Burrage et al., 2022; Linklater, 2017). Given the physical aspects of these activities, it could be speculated that they would be considered more physical and thus behavioural. However, the spiritual nature of these activities in cultural context calls into question how they would be perceived. Therefore, both the categorisation of activities and preference based on these characteristics were queried in the present study.

While the previous studies sampled professionals and community members with specific expertise, this was an opportunity to broaden the scope and seek views of experts by lived experience (i.e., potentially having had their own ACE or treatment experiences; cultural insiders) from a variety of Indigenous and non-Indigenous backgrounds. Ethnicity,

while not necessarily reflective of cultural identity, has been shown to have some association with individualism and collectivism in an American context (e.g., Oyserman et al., 2002), with differences emerging among Asian, Black, and White-European populations. Ethnicity was thus framed as an additional variable and expected to be broad enough to allow for comparison among groups.

Further, it is well-established women and girls, particularly those from Indigenous backgrounds, are at higher risk of victimisation in North America (Burnette & Renner, 2017; Evans-Campbell et al., 2006). Indigenous women were generally underrepresented in the research summarised and a minority of participants in the PhD studies, including four of the interviewees and only two of the students assessed for the psychoeducational reports. Therefore, gender was another variable of interest. The overall predictions and aims in the present study were as follows:

Aims

- To identify relationships between collectivist or individualist beliefs, ethnicity, gender, ACEs, and treatment or healing preferences.
- To explore the potential relationship between collectivist versus individualist beliefs and the categorisation of healing and treatment activities as diversion, engagement, behavioural, and cognitively based.

Predictions

1. Indigenous and female-identifying participants will have a significantly greater number of ACEs compared to other groups (e.g., Acoose, 2012; Richards et al., 2021).
2. Indigenous participants will score significantly higher on collectivist scales than White participants (e.g., Burrage et al., 2022; Kirmayer, 2007).

3. Higher collectivism scores will predict higher ratings of helpfulness for activities such as time spent in nature, physical activity, and community, traditional, or religious practices in treating trauma (e.g., Kirmayer, 2007) and a preference for group treatments (Kuo, 2013).

9.3 Procedure

Participants were recruited online using *Prolific*[9] and compensated for their time.[10] A brief summary advertisement of the focus of the study and the rate of pay was posted on their website. In addition to any reliability checks embedded in the measures, *Prolific* vets their participants to minimise the likelihood of bots or artificial intelligence responding. People in the United States and Canada who identified as Asian, Black, Indigenous (e.g., First Nations, Inuit, or Métis), White, or other were able to participate. All were given the choice when responding to questions about their gender or ethnicity to select the response 'I describe my ethnicity/gender another way,' and to provide a custom description.

The study ran from late November 2023 to February 2024. Embedded in the questionnaire were three attention test questions[11]. Average completion time ranged between 10 and 15 minutes, monitored both through *Prolific* and *Qualtrics*. Thus, as a further validity check, responses that were submitted in fewer than five minutes were manually reviewed for exclusion[12].

[9] *Prolific* is a paid participant pool that allows researchers to advertise to potential participants based on a variety of demographics including ethnicity, occupation, location, etc.
[10] This rate was determined based on *Prolific'*s guidelines for appropriate compensation.
[11] These asked participants to respond in a specific way to screen those who were simply clicking through the study. Those who responded incorrectly to at least two were excluded from the final analyses.
[12] *Prolific* guidance suggests that completion times that are more than two standard deviations below the mean are likely to be of poor quality and can be rejected. Therefore, any completions that took fewer than three minutes were rejected as well as responses that indicated no or very low variance in response choices (e.g., selecting all ones or all nines on the individualist-collectivist measure).

9.4 Ethical Approval

The University of Central Lancashire (UCLan) ethics committee reviewed and approved this study protocol. Participants were provided a digital information sheet that outlined the confidentiality and anonymity of their responses as well as the right to withdraw. Given this anonymity, however, participants were also advised that submissions could not be withdrawn after the point of submission. Questionnaire data was downloaded and placed in an *Excel* file on an encrypted and password protected OneDrive account.

9.5 Methodology

9.5.1 Materials

A three-part questionnaire was developed based on previous findings related to prevalence of ACEs among different ethnic groups and the role of worldview in developing and providing effective behaviour supports to youth. All participants were asked their age and ethnicity. The questionnaire was delivered using *Qualtrics*. Sections are summarised below, and the full questionnaire can be found in Appendix H.

ACEs. The first section captured participants' history regarding ACEs and intergenerational trauma. Ten ACEs were included based on the most up-to-date version of the measure utilised by the Center for Disease Control and Prevention (CDC, 2024). Racial and ethnic discrimination, as was discussed in Chapter Three, has been widely identified as a significant stressor with consequences comparable to other ACEs (Cronholm et al., 2015; Bernard et al., 2020). Given its relevance in the context of historical trauma (e.g., DeBruyn & Brave Heart, 1998), it was included. Participants checked off any ACEs that pertained to them including psychological, physical, and sexual abuse; physical and emotional neglect; the loss, separation, death, or divorce of a caregiver; a household member's imprisonment, addiction, or mental health difficulties; and racial or ethnic discrimination. Next,

participants were asked whether they considered themselves affected by intergenerational trauma. Participants who selected any ACEs were also asked if they had received treatment. More specific information, such as frequency or severity, was considered beyond the scope of an online project, wherein follow-up with participants, who may be upset by disclosing further details, would not be possible.

Treatment Ratings. This section was shaped by findings from the interviews and Delphi reviewed in Chapters Seven and Eight and focused on gathering information about participants' views on various trauma treatments or healing methods. Delphi participants indicated common treatment components (e.g., teaching emotional regulation skills, mindfulness) and First Nations interviewees offered suggestions such as participation in traditional activities and spending time in nature. Participants were asked to evaluate the following activities: spending time in nature; talk therapy or counselling; physical activity (e.g., going for a walk); skills training (e.g., social skills, parenting courses for caregivers); mindfulness, relaxation, or meditation; and participating in community events cultural activities, or religious ceremonies (e.g., beading, praying, reading sacred scripts). Participants first categorised each as either behaviourally or cognitively focused and involving engagement or diversion. This step was included based on preceding research which indicated differences between collectivist and individualist cultures insofar as their coping preferences, with more individualist groups finding activities with cognitive and engagement components (e.g., talk therapy) more helpful than those from collectivist groups (Burrage et al., 2021; Copping et al., 2010; Kirmayer, 2007; Linklater, 2017). Then they rated their perception of each activity's helpfulness on a three-point Likert scale where one was Unhelpful/Not supportive and three was Very helpful/supportive. For any activity rated as Very helpful/supportive, participants were asked whether they thought a group or

individual approach would be preferable. The last question allowed for a longform response and asked what kinds of resources might be helpful for young people in the participant's own community who had been affected by something traumatic.

Abridged Version of Triandis and Gelfand's (1998) Questionnaire. Next, participants completed a recently revised (Fatehi et al., 2020) 16-item version of Triandis and Gelfand's (1998) survey of horizontal and vertical individualist and collectivist (IND-COL) beliefs. As was described briefly in Chapter Two, collectivism and individualism are theorised to differ mainly insofar as to what extent people prioritise their own goals or preferences over those of the larger community or familial group (Singelis et al., 1995; Triandis & Gelfand, 1998). Behaviour among collectivists is therefore more likely to be dictated by social norms or a sense of duty to one's community while individualists are likely to prioritise their own attitudes and objectives or those of their immediate family. The horizontal and vertical attributes refer to the possibility that someone can prioritise hierarchy (i.e., vertical) or equality (i.e., horizontal) in either of these basic belief configurations. Shared characteristics that may be attributed to vertical individualism and collectivism, for instance, could include respect for rank or authority and belief in differentiation of the self. Contrarily, horizontal structures would prioritise basic equality among people and their access to material goods or services. The reliability of the four scales of Triandis and Gelfend's (1998) IND-COL measure have been shown to vary, with individualist scales ranging between a = 0.58 and 0.67 and collectivist scales between 0.70 and 0.76 (Fatehi et al., 2020). While individualist scales fall slightly below target in terms of reliability (i.e., a = 0.70), comparative analyses have pointed to it being more reliable than other commonly used measures (e.g., Singelis' Self-Construal scale, 1994; Paquet &

Kline, 2009) and factor analysis has evidenced discriminant construct validity in diverse samples (Fatehi et al., 2020).

The 16-item measure consists of four questions pertaining to each category: horizontal individualism (HI), vertical individualism (VI), horizontal collectivism (HC), and vertical individualism (VI). Participants rated their agreement with each statement (e.g., 'To me, pleasure is spending time with others.') on a nine-point Likert scale with one being 'Disagree/Seldom/Not at all' and nine being 'Complete agreement/Always.' The full measure can be found in Appendix H. Internal consistency ratings from the present data ranged from a = 0.23 for HC to a = 0.63 for VI. The exceptionally low consistency in the HC responses appeared to be most impacted by responses to the fourth HC item which was "I feel good when I cooperate with others." If this item was removed, the alpha rose to 0.42. Across all four scales, however, removal of the fourth item strengthened internal consistency scores. Given that these items were presented at the end of the measure, this suggests that testing fatigue may have been a factor.

9.6 Participants

A total of 405 people participated. Participants' disclosed ethnicities included Asian (k = 81), Black (k = 78), Indigenous (e.g., First Nations, Inuit, or Métis) (k = 96), White (k = 78), or "I describe my ethnicity another way" (k = 72). The majority who self-described their ethnicity specified that they were Latin American, Hispanic, or Mexican (k = 44 or 59%). Others identified as Arabian or North African (k = 9), Middle Eastern (k = 9), South Asian (k = 2), European (k = 2), mixed (k = 2), Armenian (k = 1), Dominican American (k = 1), Indo-Caribbean (k = 1), Egyptian (k = 1), and Ethiopian (k = 1). Within the Indigenous sample, membership from 40 distinct bands, tribes, or groups were reported (see Appendix H, Table H.1 for a detailed breakdown). The mean age of the sample was

34.8 (sd = 12.6) and ranged between 18 and 73 years. However, most of the sample (k = 301, or 74.3%) fell within the 18 to 40 range. Most of the participants identified as female (k = 196, or 48.4%) or male (k = 190, or 46.9%). The remaining participants identified as non-binary (k = 14) or selected "I describe my gender another way" (k = 2). The two participants who chose to self-identify their gender wrote *two-spirited*, which is a term used to describe non-gender conforming people that is typically associated with North American Indigenous cultures and belief systems. Table 9.1 below provides a summary of demographic details.

Table 9.1

Study Three: Age, Gender, and Ethnicity of Sample

Ethnicity	n	Age m (s.d.)	Female n (%)	Male n (%)	Non-binary or Two-Spirited n (%)	Prefer not to disclose n (%)	% of total
Asian	81	30.8 (9.1)	38 (50.6)	41 (46.9)	2 (2.5)	0 (0.0)	20.0
Black	79	44.8 (15.8)	36 (45.6)	41 (51.9)	0 (0.0)	2 (2.5)	19.5
FNIMI[a]	95	34.7 (11.7)	48 (50.5)	39 (41.1)	8 (8.4)	0 (0.0)	23.4
IDAW[b]	75	30.2 (9.5)	43 (57.3)	32 (47.2)	0 (0.0)	0 (0.0)	18.5
White	75	33.0 (10.2)	31 (41.3)	37 (49.3)	6 (8.0)	1 (1.3)	18.5

[a]First Nations, Inuit, Métis, or Indigenous
[b]Selected option *I describe my ethnicity another way*

9.7 Data Analysis

This section describes the process of analysing the data including the initial preparation, descriptive, and quantitative approaches employed. Questionnaire data was analysed using *SPSS* and the snowLatent (Seol, 2023) package for *Jamovi* (The jamovi project, 2022). Prior to analysis, data was visually reviewed for missing or incorrect values and outliers. Descriptive analysis was conducted followed by a comparison of categorical

ACE variables based on ethnicity and gender using Chi-Square analysis and an ANOVA applied to examine potential interaction effects. Latent Class Analysis (LCA) was conducted to further explore underlying relationships between participant characteristics and ACEs. One-way ANOVAs were utilised to examine the relationship between ethnicity and individualist versus collectivist beliefs. To account for multiple comparisons, a Bonferroni correction was applied to reduce the likelihood of Type I errors. The original alpha of 0.05 was divided by the number of comparisons (6), resulting in an adjusted alpha level of 0.01 (rounded from 0.008). Ordinal logistic regression was applied to the relationship between participant ethnicity, categorisation of activity types, and perceived effectiveness of a variety of treatments. Exploratory analyses included a correlation between ratings of treatment effectiveness and ACE exposure and ANOVAs to test for relationships between activity preferences and self-reported trauma exposure.

For analyses involving gender, some participants were excluded to ensure validity of statistical comparisons. Participants who chose not to disclose their gender identity (k= 3) and those identifying as nonbinary (k = 14) or two-spirited (k = 2) were too few to be reliably compared. For this reason, they were excluded from analyses related to gender, leaving 386 participants in those calculations.

9.7.1 Data Screening

Various strategies were utilised to ensure that the data collected and retained for analysis was of high quality and accurately represented the views of the sample recruited. The use of attention-check questions and manual review of questionnaires that were completed unusually quickly were designed to reduce the likelihood of including erroneous data. The submission requirements of the online questionnaire format ensured that no missing values were possible. In few cases, the option ‘Prefer not to disclose’ was selected

in response to questions about ACEs (k = 2) or gender identity (k = 3). One input error was found and corrected, as a participant had responded with their year of birth rather than their age. Visual outliers on continuous variables such as individualism-collectivism ratings and overall ACE scores were identified using histograms and scatterplots. Scores with frequencies of two or fewer were subject to a review of the participant-specific data to ensure variability in responding (i.e., that participants had not responded identically to each question within a given measure) and extreme responding bias. No responses were flagged for omission based on these reviews. Statistical outlier analysis involved use of Mahalanobis Distance to examine response patterns involving the four variables included in the later logistic regression. This included summary scores for the four collectivist-individualist scales and helpfulness ratings for cultural and community-based activities. Three participants' responses were found to be statistical outliers and reviewed manually. No clear errors were found. Given the large sample size, some extreme scores would be expected, and such a low number were determined unlikely to have an overall impact on the findings. Therefore, all submitted responses not rejected based on insufficient completion time or failed attention-checks were included in the analysis.

9.8 Results

9.8.1 Differences in Adverse Childhood Experiences by Ethnicity, and Gender

Table 9.2 shows the frequencies of any ACEs and four or more ACEs (i.e., polyvictimisation) across each gender and all ethnicities.

Table 9.2

Differences in Adverse Childhood Experiences (ACEs) by Ethnicity and Gender

		ACES Present		4≤ ACEs Present	
Ethnicity	Gender	Yes	No	Yes	No
Asian	F	35 (92.1)	3 (7.9)	10 (26.3)	28 (73.7)
	M	30 (73.1)	11 (26.7)	3 (7.3)	38 (92.7)
Black	F	32 (88.9)	4 (11.1)	8 (22.2)	28 (77.8)
	M	34 (82.9)	7 (17.1)	7 (17.1)	34 (82.9)
FNIMI[a]	F	47 (97.9)	1 (2.1)	36 (75.0)	12 (25.0)
	M	35 (89.7)	4 (10.3)	18 (46.2)	21 (53.8)
IDAW[b]	F	41 (95.3)	2 (4.7)	20 (46.5)	23 (53.5)
	M	29 (90.6)	3 (9.4)	8 (25.0)	24 (75.0)
White	F	29 (93.5)	2 (6.5)	6 (19.4)	25 (80.6)
	M	28 (75.7)	9 (24.3)	9 (24.3)	28 (75.7)

[a]First Nations, Inuit, Métis, or Indigenous
[b]Selected option *I describe my ethnicity another way*

Women ($\chi^2(1) = 13.22$, $p = < .001$) as well as FNIMI and those who chose I describe my ethnicity in another way (IDAW) ($\chi^2 (4) = 11.56$, $p = .021$) reported ACEs significantly more often. Polyvictimisation was also more common among women ($\chi^2(1) = 12.96$, $p = < .001$) and FNIMI or IDAW participants ($\chi^2(4) = 55.20$, $p = < .001$).

9.8.2 Chi-Square and ANOVA: Ethnicity, Gender, ACE Exposure, and Polyvictimisation

Chi-square analyses were applied to general ACE exposure, polyvictimisation (i.e., an ACE score of four or more), and each type of ACE individually. Patterns emerging within the results indicated that there may be value in conducting an ANOVA to assess for an interaction effect between gender and ethnicity.

A univariate ANOVA was used to assess for an interaction effect between gender and ethnicity. A significant (but small) interaction effect was found, F (4, 379) = 2.56, p = 0.04. Closer examination indicated that the relationship between ethnicity and increased number of ACEs was more evident among women, F (4,190) = 14.31, p = <.001, than men,

F (4,184) = 4.57, *p* = .002. A post-hoc Scheffé revealed that this was specific to Indigenous-identifying women as compared to all other ethnicities (i.e., Asian (*p* = <.001), Black (*p* = <.001), IDAW (*p* = .017), and White (*p* = <.001) and IDAW women as compared to Black women (*p* = 0.03), with both experiencing significantly more ACEs. Indigenous men reported significantly more ACEs than Asian (*p* = .002) or Black (*p* = .03) men while IDAW men indicated more ACEs than Asian (*p* = 0.04) men. Among women, ethnicity explained an estimated 23% of variance in occurrence of ACEs while accounting for only 9% in men.

Some types of ACEs were also found to be more likely based on gender and ethnicity. Table 9.3 below details findings across each type. Having a caregiver or household member who struggled with addictions or mental health, divorced or separated caregivers, psychological or emotional abuse, and physical neglect was significantly more common among FNIMI and female participants. Women, FNIMI, and IDAW participants were also more likely to have been affected by emotional neglect and sexual abuse. Physical abuse and witnessing violence were significantly more common among FNIMI and IDAW groups as well. Finally, racial or ethnic discrimination were reported more frequently by Asian, FNIMI, and IDAW than White or Black participants.

Table 9.3

Chi-squares Comparing ACEs, Ethnicity, and Gender

ACE	Chi-square Ethnicity	Chi-square Gender	Most affected
Caregiver imprisoned	Non sig.	Non sig.	-
Caregiver/Household mental health or addictions issues	χ^2 (4) = 57.89, p = <.001	χ^2 (1) = 14.59, p = < .001	FNIMI and female
Death of/Separation from caregiver	Non sig.	Non sig.	-
Divorce/Separation of caregivers	χ^2 (4) = 20.09, p = <.001	χ^2 (1) = 5.97, p = .015	FNIMI and female
Emotional neglect	χ^2 (4) = 25.79, p = <.001	χ^2 (1) = 14.48, p = < .001	FNIMI, IDAW, and female
Witnessing violence/ abuse	χ^2 (4) = 15.04, p = .005	Non sig.	FNIMI and IDAW
Physical abuse	χ^2 (4) = 21.89, p = <.001	Non sig.	FNIMI and IDAW
Racial/Ethnic discrimination	χ^2 (4) = 36.11, p = <.001	Non sig.	Asian, FNIMI, and IDAW
Physical neglect	χ^2 (4) = 11.56, p = .021	χ^2 (1) = 6.95, p = .008	FNIMI and female
Sexual abuse	χ^2 (4) = 36.41, p = <.001	χ^2 (1) = 12.54, p = <.001	FNIMI, IDAW, and female
Psychological/ Emotional abuse	χ^2 (4) = 35.45, p = <.001	χ^2 (1) = 13.49, p = <.001	FNIMI and female

[a]First Nations, Inuit, Métis, or Indigenous
[b]Selected option *I describe my ethnicity another way*

The frequencies of self-reported intergenerational trauma and treatment for ACEs are reported in Table 9.4 below.

Table 9.4

Intergenerational Trauma and Treatment by Ethnicity and Gender

		Intergenerational Trauma n (%)			Treatment (of those with ACEs) n (%)		
Ethnicity	Gender	Yes	No	Unsure	Yes	No	Unsure
Asian	F	14 (36.8)	15 (39.5)	9 (23.7)	17 (48.6)	16 (45.7)	2 (5.7)
	M	9 (22.0)	24 (58.5)	8 (19.5)	9 (30.0)	18 (60.0)	3 (10.0)
Black	F	11 (30.6)	19 (52.8)	6 (16.7)	12 (37.5)	15 (46.9)	5 (15.6)
	M	5 (12.2)	30 (73.2)	6 (14.6)	21 (61.8)	10 (29.4)	3 (8.8)
FNIMI[a]	F	35 (72.9)	5 (10.4)	8 (16.7)	17 (36.2)	27 (57.4)	3 (6.4)
	M	17 (43.6)	16 (41.0)	6 (15.4)	15 (42.9)	19 (54.3)	1 (2.9)
IDAW[b]	F	25 (58.1)	13 (30.2)	5 (11.6)	10 (24.4)	26 (63.4)	5 (12.2)
	M	13 (40.6)	15 (46.9)	4 (12.5)	14 (48.3)	12 (41.4)	3 (10.3)
White	F	13 (41.9)	12 (38.7)	6 (19.4)	14 (48.3)	13 (44.8)	2 (6.9)
	M	11 (29.7)	22 (59.5)	4 (10.8)	10 (35.7)	15 (53.6)	3 (10.7)

[a]First Nations, Inuit, Métis, or Indigenous
[b]Selected option *I describe my ethnicity another way*

FNIMI and IDAW respondents self-identified more often as being exposed to the effects of intergenerational trauma ($\chi^2(4) = 36.59$, $p = < .001$). No significant relationships between ethnicity and having received treatment for past ACEs were identified.

9.8.3 Latent Class Analysis of Ethnicity, Gender, and ACEs

A latent class analysis (LCA) was applied to the data to identify co-occurrence of various ACEs and whether they more commonly co-occurred with certain ethnicities or genders. Components of poLCA (Linzer & Lewis, 2021) and glca R (Kim & Chung, 2021) packages were used in *Jamovi* to run these analyses. As this was exploratory, variables and classes were added gradually, with the final class structure representing the best fit according to both the conventional statistical indices (e.g., Adjusted Bayesian Information Criterion) and theory. Entropy scores (i.e., ranging between 0 and 1, with higher scores being preferable) were also reviewed to determine the distinctiveness among classes.

Bootstrap resampling was utilised to determine significance of observed class fit in the form of a p-value (Langeheine et al., 1996). Random sampling from the original dataset was used to create 1,000 bootstrap samples. Parameter estimates were generated as the model was refitted based on each and p-values were calculated by examining the number of observed estimates that were as extreme as those in the original sample.

The LCA was run first only with ACE responses and then ethnicity and gender were added sequentially. The addition of the demographic variables was found to increase entropy scores, reflecting more distinction between classes and affirming the significant findings and interaction effect indicated by the ANOVAs. Adhering to best practice in LCA (Collins & Lanza, 2009), multiple models were assessed for fit, from two to six classes. A five-class model was determined most representative based on the values bolded in Table 9.5 through the decision-making process described below.

Table 9.5

LCA Statistics for Class Two to Six Models

Classes	AIC	BIC	ABIC	CAIC	Entropy	P
2	5924	6055	5950	6088	0.807	0.052
3	5897	6094	5936	6144	0.803	0.069
4	5874	6139	5926	6206	0.806	0.024
5	**5850**	**6182**	**5915**	**6266**	**0.836**	**0.033**
6	5840	6239	5918	6340	0.841	0.012

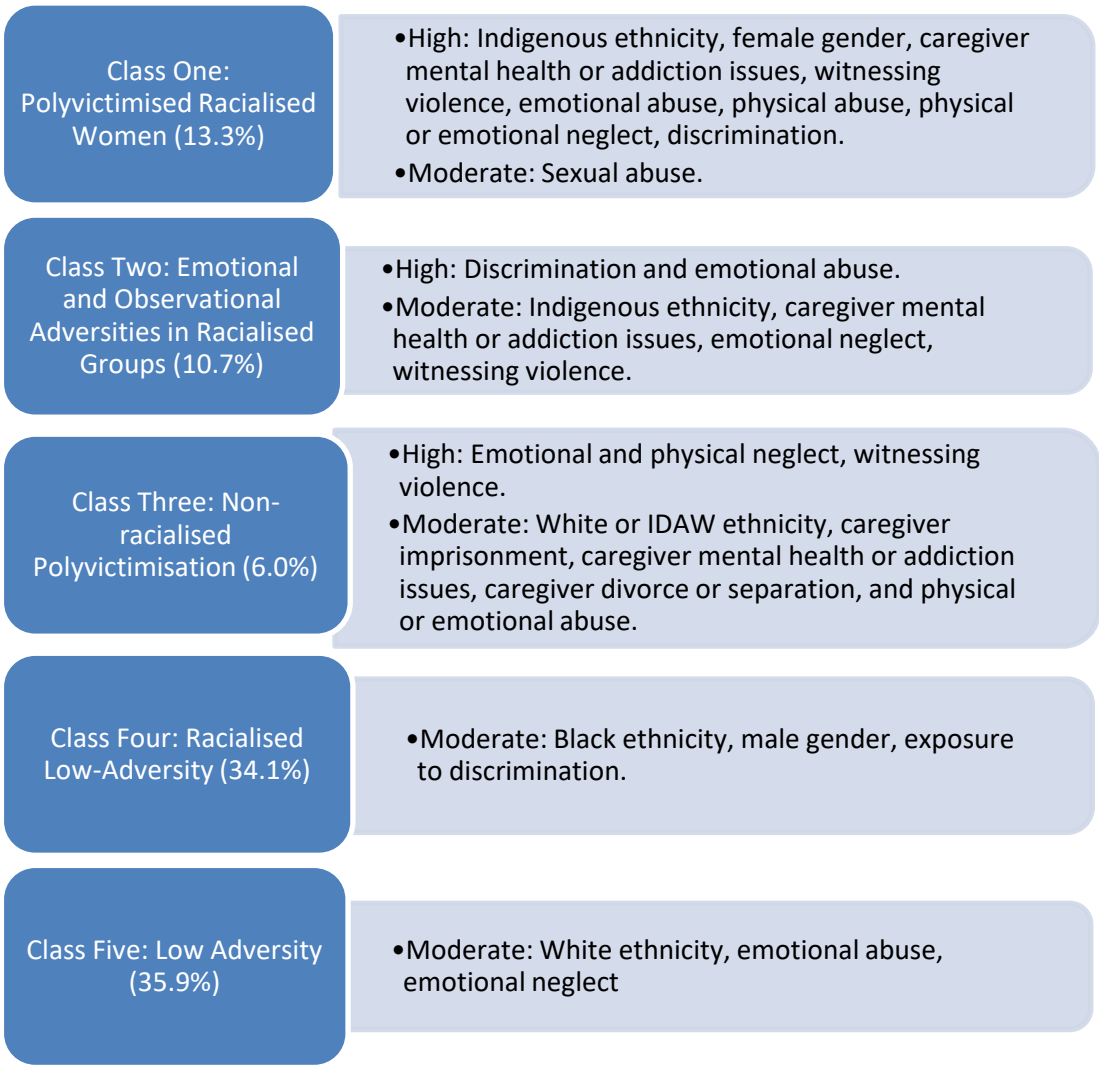
Typically, the lowest scores across AIC, BIC, ABIC, and CAIC are sought. However, as the models varied in terms of which achieved these outcomes across the measures, comparative decisions had to be made. The BIC has been shown to be "punitive" of models that may have heightened complexity (Schwarz, 1978), which the present model was, involving 13 categorical variables (101 parameters). ABIC and AIC have been

reported to be more accurate when accounting for complexity (Akaike, 1974). While a six-class model would have represented the lowest AIC score, the ABIC was lowest at the five-class point. Entropy also jumped between the four and five class models, suggesting more explanatory strength (Ramaswamy et al., 1993). The p-values reflected in the table are representative of the results of 1,000 bootstrap samples. The five-class model was significant ($p = .03$), suggesting that the class structure was unlikely to occur by chance. While significance and entropy increased somewhat at the six-class level, BIC, CAIC, and ABIC scores increased as well, indicating poorer fit. Further, adding too many classes can compromise interpretability. The five-class model was determined to be the model that best balanced parsimony, significance, and theoretical grounding (Collins & Lanza, 2009).

The five resulting classes were 1) Polyvictimised racialised women (13.3%), 2) Emotional and observational adversities in racialised groups (10.7%), 3) Non-racialised polyvictimisation (6.0%), 4) Racialised low-adversity (34.1%), and 5) Non-racialised low adversity (35.9%). Defining characteristics of each are summarised in Figure 9.1 below.

Figure 9.1

LCA Five Class Model of ACEs, Gender, and Ethnicity



9.8.4 Ethnicity, Collectivism, Individualism, and Treatment Preferences

The individualist-collectivist scales were scored out of 36, with higher scores indicating stronger agreement. Helpfulness scores were coded from 1 (Unhelpful/Unsupportive) to 3 (Very helpful/Supportive). Categorisation of each activity was also coded numerically, with 0 representing 'neither,' 1 representing behavioural or diversion, and 2 representing cognitive or engagement.

A one-way ANOVA was conducted to examine the relationship between ethnicity and the sum scores for each of the individualist and collectivist scales. Table 9.6 below displays mean scores across all scales and ethnic groups. Results indicated significant between-group differences across all four individualism and collectivism subscales. A post-hoc Scheffé revealed that Black participants rated their agreement significantly higher on average across all four scales. No other significant ethnicity-based associations emerged.

Table 9.6

Individualist-Collectivist Scores by Ethnicity

Scale[13]	**Ethnicity**						
	Asian M(sd)	Black M(sd)	FNIMI[a] M(sd)	IDAW[b] M(sd)	White M(sd)	F	Sig.
Horizontal Individualism	28.57 (3.42)	30.72 (4.18)	28.52 (3.98)	28.41 (4.18)	28.29 (4.22)	5.17	<.001
Horizontal Collectivism	23.41 (3.85)	26.04 (3.83)	22.64 (4.40)	23.33 (5.14)	22.97 (4.13)	8.11	<.001
Vertical Individualism	23.58 (4.90)	28.10 (5.33)	21.96 (5.33)	22.36 (5.23)	22.28 (3.82)	21.25	<.001
Vertical Collectivism	25.07 (4.67)	29.16 (3.92)	25.63 (4.76)	26.66 (4.33)	25.17 (3.65)	12.32	<.001

[a]First Nations, Inuit, Métis, or Indigenous
[b]Selected option *I describe my ethnicity another way*

An exploratory Pearson's *r* correlation was conducted to test the potential relationship between ACEs and IND-COL scores. A cumulative ACE score was calculated for each participant and compared to their scores across each of the individualist and collectivist scales. A significant (but weak) negative correlation between an increased

[13] Horizontal and vertical in the context of collectivism or individualism refers to the shared belief that people ought to be treated as fundamentally equal (horizonal) or as falling within a hierarchy (vertical).

accumulation of ACEs and vertical individualist scores was observed (r (403) = -.23, *p* <.001). However, scores across all individualist and collectivist scales correlated positively and moderately (i.e., ranging between r=.27, <.001 (HC and HI) and r=.60, <.001 (VI and VC)) amongst themselves, suggesting that participants who scored higher on any scale tended to score themselves more highly on the others.

Helpfulness ratings were compared across all activity types and ordinal logistical regression was the primary approach used to examine how helpfulness ratings may have been influenced by several other variables. Potential relationships between individualist and collectivist beliefs as well as the categorisation of activities were evaluated in reference to how helpful participants rated each activity type to be from 1 (Unhelpful/Not supportive) to 3 (Very helpful/supportive). Results of a Friedman Test indicated significant differences in helpfulness scores for each activity type, $\chi 2(5)=167.08$, p = <.001. Post-hoc analyses using the Wilcoxon Signed Ranks test revealed that "Talk therapy or counselling" was consistently rated as significantly more effective than other activities (p = <.001). Mean rank and descriptive statistics for helpfulness scores overall are presented in Table 9.7. A summary of the ordinal logistical regression outcomes is displayed in Table 9.8.

Table 9.7

Descriptive and Friedman Test Results for Helpfulness Ratings by Activity

Activity	Mean	SD	Mean Rank
Participating in community events, cultural activities, or religious ceremonies	2.18	0.64	2.86
Spending time in nature	2.39	0.57	3.39
Physical activity	2.46	0.58	3.60
Skills training	2.41	0.59	3.44
Talk therapy or counselling	2.67	0.55	4.19
Mindfulness, relaxation, or meditation	2.43	0.64	3.53

Table 9.8

Relationship between Individualism, Collectivism, and Categorisation and Helpfulness Ratings by Activity

Factor	OR	95% CI	Sig.
Participating in community events, cultural activities, or religious ceremonies			
Horizontal Collectivism Score	1.08	1.02-1.15	.006
Vertical Collectivism Score	1.13	1.07-1.20	<.001
Horizontal Individualism Score	1.01	0.96-1.06	.743
Vertical Individualism Score	0.97	0.92-1.02	.220
Categorisation (Diversion, Engagement, Neither)	1.16	0.86-1.57	.337
Categorisation (Behavioural, Cognitive, Neither)	1.16	0.85-1.58	.346
Spending time in nature			
Horizontal Collectivism Score	1.08	1.03-1.15	.005
Vertical Collectivism Score	1.10	1.03-1.16	.002
Horizontal Individualism Score	1.08	1.02-1.14	.007
Vertical Individualism Score	0.93	0.88-0.98	.009
Categorisation (Diversion, Engagement, Neither)	1.24	0.80-1.91	.346
Categorisation (Behavioural, Cognitive, Neither)	0.83	0.52-1.32	.431
Physical activity			
Horizontal Collectivism Score	0.99	0.93-1.04	.615
Vertical Collectivism Score	1.07	1.01-1.13	.016
Horizontal Individualism Score	1.05	1.00-1.11	.053
Vertical Individualism Score	1.04	0.99-1.10	.136
Categorisation (Diversion, Engagement, Neither)	1.19	0.74-1.91	.468
Categorisation (Behavioural, Cognitive, Neither)	0.53	0.22-1.29	.163
Skills training			
Horizontal Collectivism Score	1.04	0.98-1.10	.170
Vertical Collectivism Score	1.05	0.99-1.11	.092
Horizontal Individualism Score	0.97	0.92-1.02	.208
Vertical Individualism Score	1.03	0.97-1.08	.325
Categorisation (Diversion, Engagement, Neither)	2.37	1.71-3.27	<.001
Categorisation (Behavioural, Cognitive, Neither)	0.92	0.63-1.34	.660
Talk therapy or counselling			
Horizontal Collectivism Score	0.99	0.93-1.05	.643
Vertical Collectivism Score	0.98	0.93-1.04	.590
Horizontal Individualism Score	0.99	0.94-1.05	.802
Vertical Individualism Score	1.01	0.96-1.07	.668
Categorisation (Diversion, Engagement, Neither)	3.90	1.80-8.47	<.001
Categorisation (Behavioural, Cognitive, Neither)	0.50	0.19-1.33	.163

Mindfulness, relaxation, or meditation			
Horizontal Collectivism Score	1.06	1.00-1.11	.050
Vertical Collectivism Score	1.10	1.04-1.16	<.001
Horizontal Individualism Score	0.99	0.94-1.04	.626
Vertical Individualism Score	0.98	0.93-1.03	.455
Categorisation (Diversion, Engagement, Neither)	3.90	1.80-8.47	<.001
Categorisation (Behavioural, Cognitive, Neither)	1.08	0.76-1.53	.670

Higher scores on vertical and horizontal collectivism were found to predict higher ratings for the helpfulness of participating in community events, cultural activities, or religious ceremonies (e.g., beading, praying, reading sacred scripts) by a factor of 1.08 and 1.13, respectively. Spending time in nature was rated as more supportive by those who scored higher on horizontal individualism (HI), horizontal collectivism (HC), and vertical collectivism (VC). Those agreeing more strongly with vertical individualism statements, however, were 0.93 times less likely to view this as a helpful treatment approach. Physical activity was rated as more effective by participants who endorsed horizonal individualist and vertical collectivist statements.

Next, activity categorisation and its relationship to effectiveness was analysed. The only significant relationship between effectiveness ratings and categorisation was that therapy was evaluated as much less effective, by a factor of 0.04, by participants who categorised it as neither a diversion or engagement activity and mindfulness being rated as much less effective, by a factor of 0.38, by those who viewed it as behavioural. Thus, the prediction that more collectivist participants would be more inclined to categorise their preferred activities as cognitive and engagement focused, was not supported.

9.8.5 Group versus Individual Treatment

When evaluating the helpfulness of treatments, those who rated it as a 3 (i.e., very helpful/supportive) were asked whether the treatment would be best administered in a group or individually. A summary of these ratings can be found in Table 9.8 below.

Table 9.8

Group Versus Individual Treatment Delivery

Activity	Very helpful N (%)	Individual N (%)	Group N (%)
Time Spent in Nature	176 (44.5)	133 (32.8)	43 (10.6)
Therapy	285 (70.4)	243 (60.0)	42 (10.4)
Physical Activity	201 (50.4)	98 (24.2)	106 (26.2)
Skills Training	190 (46.9)	28 (6.9)	162 (40.0)
Mindfulness	208 (48.6)	187 (46.2)	21 (5.2)
Community, Cultural, or Religious Activities	126 (31.1)	6 (1.5)	120 (29.6)

Participants indicated a preference for an individual format when spending time in nature, participating in therapy, or engaging in mindfulness, while skills training and community, cultural, or religious activities were thought to be more effective in a group setting. These findings were compared with the outcomes of the prior ordinal logistic regression, as there was a demonstrated relationship between collectivism and a preference for treatments involving participating in community events, cultural activities, or religious ceremonies.

9.8.6 Ethnicity and Treatment Preferences

Six one-way ANOVAs were conducted to explore the possibility of ethnic differences in preference for different treatment types. Table 9.9 below summarises the findings.

Table 9.9

Treatment Helpfulness Ratings by Ethnicity

Activity	Ethnicity					F	Sig.
	Asian M(sd)	Black M(sd)	FNIMI[a] M(sd)	IDAW[b] M(sd)	White M(sd)		
Time spent in nature	2.27 (0.61)	2.41 (0.57)	2.43 (0.54)	2.47 (0.53)	2.37 (0.59)	1.41	.231
Therapy	2.63 (0.58)	2.63 (0.62)	2.61 (0.55)	2.71 (0.49)	2.77 (0.45)	1.30	.270
Physical activity	2.41 (0.61)	2.49 (0.60)	2.45 (0.54)	2.50 (0.56)	2.44 (0.62)	.373	.828
Skill development	2.40 (0.57)	2.51 (0.62)	2.33 (0.59)	2.35 (0.61)	2.46 (0.58)	1.22	.300
Mindfulness	2.37 (0.66)	2.58 (0.63)	2.37 (0.65)	2.59 (0.55)	2.27 (0.64)	3.96	.004
Ceremony, community, religious practices	1.97 (0.61)	2.39 (0.61)	2.16 (0.64)	2.26 (0.58)	2.13 (0.68)	4.85	<.001

[a]First Nations, Inuit, Métis, or Indigenous
[b]Selected option *I describe my ethnicity another way*

Significant differences in helpfulness ratings were noted for both mindfulness and ceremonial, community, or religious practices. A post-hoc Scheffé revealed that this difference was specific to certain groups. Black participants rated mindfulness as significantly more helpful than White participants did ($p = .05$). Asian participants rated ceremonial, community, and religious practices as significantly less helpful than Black participants ($p = .002$).

To further assess Indigenous-specific differences in perspectives on treatment, Indigenous helpfulness scores across all activity types were compared to all other

ethnicities' scores as a single one-way, between-groups ANOVA. No significant differences emerged (i.e., all Fs <2, all *p*s > .2).

9.8.7 ACEs, Intergenerational Trauma, and Treatment Preferences

Exploratory ANOVAs were also conducted to test for relationships between past ACE exposure or self-reported intergenerational trauma and activity preference. Participants were compared in various groupings based on whether they indicated any ACEs, polytraumatisation, and finally intergenerational trauma. No significant patterns emerged (i.e., all Fs < 3.6, *p*s > .07).

9.8.8 Summary of Results

Several key findings emerged from the analyses. Women, FNIMI, and IDAW participants were more likely to report ACEs, with Indigenous and IDAW women indicating ACEs and polyvictimisation significantly more often. Certain ACEs were more common among FNIMI and female participants as well. An LCA suggested that those sampled could be grouped into five classes based on ACEs, ethnicity, and gender: 1) Polyvictimised racialised women, 2) Emotional and observational adversities in racialised groups, 3) Non-racialised polyvictimisation, 4) Racialised low-adversity, and 5) Non-racialised low-adversity. Regarding IND-COL scores, Black participants agreed more strongly with statements across IND-COL scales and a weak negative correlation between ACEs and vertical individualism was observed. Notably, scores across each of the four scales (VI, HI, VC, and HC) were found to correlate significantly with one another. Activity preferences were found to relate to several factors, with scores on VC and HC predicting higher helpfulness ratings for participation in community events, cultural activities, and religious ceremonies and time in nature being endorsed more by those scoring higher on HI, HC, and VC. In terms of treatment preferences, Black participants

rated mindfulness as more helpful than White participants and ceremonial, community, and religious practices as more helpful than Asian participants. Categorisation was found to have little impact on helpfulness scores, positively correlating only in the case of therapy and mindfulness. Outcomes are next discussed in the context of current clinical and traditional practices as well as existing theory.

9.9 Discussion

A core objective was to address the limited sampling of Indigenous people in the ACE and youth behavioural treatment literature, a theme noted in the systematic reviews summarised in Chapter Five and Six. Overall, Indigenous people reported significantly more ACEs on average, which supports an abundance of data on the subject, but relatively few contributions to the literature (Gone, 2023; Richards et al., 2021).

Female-identifying participants were more likely to report ACEs generally and sexual abuse specifically. The higher rate of women reporting an ACE of sexual abuse coincides with the findings from a large quantity of prior studies (e.g., Asscher et al., 2015; Armour et al., 2012; de Luca, 1995). Indigenous women were generally at particularly high risk of ACEs, experiencing six of the eleven measured at a rate significantly higher than participants of other ethnicities. This finding resonates with oft-reported statistics related to the victimisation of Indigenous women and girls in North America (i.e., Missing and Murdered Indigenous Women (MMIW), TRC, 2015).

The LCA revealed five probable classes within the participants sampled: 1) Polyvictimised racialised women, 2) Emotional and observational adversities in racialised groups, 3) Non-racialised polyvictimisation, 4) Racialised low-adversity, and 5) Non-racialised low adversity. Notably, two of the three high-adversity classes had significant numbers of Indigenous participants. While high adversity classes have been found to

emerge across ethnic groups in prior LCAs (e.g., Friedman et al., 2022), this was the first known ACE-focused LCA study to include a disctinct category for those of Indigenous ethnicity, and thus this finding is important to highlight. The first class, representing just over a tenth of participants, had raised numbers of Indigenous and female members with moderate levels of sexual abuse and frequent experiences of discrimination, parent mental health and addictions issues, witnessing violence, emotional or physical neglect, and physical and emotional abuse. Another tenth of participants fell into class two, which had higher rates of what have been referred to as 'environmental' ACEs (e.g., discrimination, emotional abuse, emotional neglect, cargiver mental health or addictions, or witnessing violence) (e.g., Berzenski & Yates, 2011; Parnes & Schwartz, 2022). Participants in this group, too, were more likely to be Indigenous. Class three, making up just over five percent of the sample, had the next highest rates of ACEs and participants had a near-equal likelihood of being from each of the included ethnic backgrounds. Adversity rates in this group appeared reduced overall, with most falling at moderate levels (i.e., parental imprisonment, parent mental health or addictions, caregiver divorce or separation, and physical or emotional abuse). The two low-adversity classes collectively represented just under three quarters of the sample and included a racialised group, wherein Black ethnicity and male gender were moderately common along with experiences of discrimination, and a non-racialised group, who were more likely to be White and report instances of emotional abuse or neglect. Remarkably, even the lowest adversity groups reported relatively high occurrences of some ACEs. Further, discrimination was a consistently reported experience among ethnic minority participants. Across all analyses, the prediction that Indigenous and female-identifying participants would have a substantially increased likelihood of ACEs as compared to other groups was supported.

These findings suggest that despite certain similarities in experiences among ethnic minority groups, Indigenous people are more frequently exposed to ACEs. Researchers have suggested that there is value in identifying latent classes pertaining to adversity, as it can help to identify targets for intervention or prevention efforts (Lanza & Rhoades, 2011). That is, if certain constellations of maltreatment and demographic variables can be determined, services that are better adapted to the needs of specific subgroups can be developed. For instance, Indigenous girls who are contending with physical or sexual abuse (i.e., Class One) are likely to benefit from different types of supports than non-Indigenous boys living in high-conflict environments (i.e., Class Three).

A secondary objective of the current study was to examine collectivist and individualist beliefs and their association with ethnicity and treatment preferences when addressing trauma and antisocial behaviour. The only significant relationship was between Black ethnicity and strength of agreement across scales. This was an unusual observation and may simply reflect a tendency to select more extreme scores among this sample.

It was also noted that stronger ratings on any given scale positively correlated with scores across other scales, perhaps suggestive of a tendency to respond uniformly within this group and potentially calling response validity into question. However, Vargas and Kemmelmeier (2013), noting a similar correlation, postulated the *Cultural Convergence Hypothesis*. This refers to cross-cultural transmission in countries with diverse populations resulting in shared values that reflect a heterogeneous mix of individualistic and collectivistic beliefs. Further, the statements included in the IND-COL measure are not inherently contradictory (Triandis & Gelfand, 1998). For instance, it seems entirely possible to value both competition (individualist) and taking care of one's family (collectivist), or both being direct and forthright (individualist) as well as cooperating

(collectivist), resulting in the endorsement of two statements that Triandis and Gelfand categorise as ideologically disparate. Factor analyses conducted previously have revealed similar correlations, concluding that there is a dimensional aspect to individualism and collectivism (Fatehi et al., 2020). That is, rather than being viewed as a continuum, most people will align with aspects of each "quadrant" of the belief types.

Nonetheless, given that collectivistic sentiments were expressed by First Nations participants in Study Two (Chapter Eight), it was surprising to see little evidence of this trend among Indigenous respondents in the present study. However, as has been seen with other types of assessment, it could be that this measure was not culturally appropriate to capture collectivism within Indigenous groups (Flanagan et al., 2007). While the IND-COL scale was validated with diverse populations, it remains a Western-derived measure with no prior documented use in Indigenous groups. Previous authors have adapted the wording of certain questions to be better understood by people of certain cultures or language groups (e.g., Fatehi et al., 2020). Perhaps the beliefs captured do not apply to the form of collectivism embodied in Indigenous cultures. For instance, the questions mainly focus on sociocentric forms of collectivism (e.g., 'It is my duty to take care of my family even when I have to sacrifice what I want'; 'To me, pleasure is spending time with others'), neglecting ecocentric and cosmocentric factors, which may be more common in Indigenous cultures (Kirmayer, 2007; Burrage et al., 2022). Sociocentric collectivist traits have been found to be especially prevalent among some Asian and Latin American cultures (Yeh et al., 2006). Alternatively, the sampling weaknesses of *Prolific*, which self-reports a WEIRD (Western, Educated, Industrialised, Rich, and Democratic; Henrich et al., 2010) bias, increased the likelihood of participants being more assimilated to mainstream Canadian or American culture. It would, for instance, be unlikely that on-reserve populations, such as those

sampled and interviewed in Study Two, would be represented within the participant pool. Further, the IND-COL demonstrated lower than expected internal consistency with this sample, and particularly high levels of inconsistency were observed in responses acquired near the end of the IND-COL questionnaire. This was suggestive of testing fatigue, which may have impacted overall findings. Nonetheless, the second hypothesis, that Indigenous participants would score higher on collectivist scales, was not supported.

Activity preferences were demonstrated to have a relationship with collectivism scores and ethnicity to some extent. While no differences were found between Indigenous and non-Indigenous groups, Black participants as compared to White indicated a preference for mindfulness while Asian participants rated ceremony, religious, and community activities as less helpful than Black participants. Time spent in nature was seen as more helpful by all except those rating themselves higher on VI while rating physical activity as more supportive was associated with higher HI and VC. Notably, all activity types were rated as somewhat or moderately helpful, on average, in treating trauma and externalising behaviour in youth. This aligns with feedback from the Delphi study (Chapter Seven), wherein practitioners and researchers described varied strategies for engaging clients and underscored the value of adapting to individual preferences and needs.

Those who scored higher on either collectivist scale tended to rate participation in community events, cultural activities, or religious ceremonies as more helpful. While not completely adhering to the predicted divide between collectivist and individualist preferences, the strong representation of collectivist beliefs among those who rated cultural or community-based activities as more helpful supports previous findings related to collectivist coping (e.g., Bookman-Zandler & Smith, 2023; Kuo, 2013; Yeh et al., 2006). Additionally, among those who rated these activities as very helpful, there was a near-

consensus that a group format was preferable. This further contributes to growing evidence for the value of offering such treatment options to enhance inclusivity for those who endorse collectivism (e.g., Burrage et al., 2022; Gone, 2023; Kuo, 2013).

Another component of this study involved having participants categorise activities as behavioural or cognitive and diversion or engagement based. No observed patterns corresponded with predictions. Mindfulness being rated as less effective by those who saw it as purely behavioural may speak to diffuseness in colloquial understandings of what it entails (Van Dam et al., 2018). As mindfulness is a central feature of mainstream wellness discourse, there is a strong likelihood of disparate definitions and experiences associated with it. Regarding responses to therapy as a treatment, it is difficult to say what may have prompted participants to categorise it as neither diversion nor engagement. It is perhaps a fundamental lack of confidence in therapy generally, however, that would prompt them to rate it as significantly less helpful. Nonetheless, the prediction that more collectivist participants would be inclined to rate their preferred activities as cognitive and engagement focused was not supported.

9.9.1 Limitations

The present study had several weaknesses. First, as equivalency between ethnicity and culture cannot be assumed, it would have been beneficial to include a measure of cultural connectedness. For instance, Snowshoe and colleagues (2015) present one such measure for Canadian First Nations youth samples which surveys connectedness across participants' identity (e.g., I feel a strong attachment towards my [Aboriginal/FNMI] community or Nation), traditions (e.g., I can understand some of my [Aboriginal/FNMI] language) and spirituality (e.g., I know my cultural/spirit name). However, there is precedent for stratifying participants based on ethnicity, particularly when sampling from a

culturally and ethnically heterogeneous population, such as Canada or the United States (see Oyserman et al., 2002 for a review). Further, it was anticipated that differences in cultural alignment could be accounted for through use of the IND-COL measure.

There were also some limitations to the listed options for intervention or healing strategies. Given that the activity choices were quite general, it is possible that people simply had very disparate activities in mind when categorising and rating helpfulness. For instance, it could have been informative to ask about participating in community events, cultural activities, or religious ceremonies as separate activities. In hindsight, participants may have had preferences for one out of the three or have categorised each differently, and detail was lost by amalgamating them. However, there were also concerns about respondent fatigue that informed decisions about limiting content.

The online recruitment process may have created several confounding factors. First, participants who had experiences of trauma may have been more drawn to the topic of the study. Second, participants may have not given their full effort and attention to the testing, as there were limited ways to monitor engagement. This hypothesis is somewhat bolstered by the finding of internal consistency scores for the IND-COL scales diminishing as participants progressed toward the end of the measure. Further, as with all online surveys, it was not possible to verify the identity of the person completing the questionnaire. Despite *Prolific's* screening efforts, it is ultimately possible that the participant was not actually from the background disclosed on their profile or that account owners might allow others to complete surveys on their behalf. Finally, participation was limited to the involvement of those who were registered on the platform and had internet access. This would have significantly impacted the ability to acquire perspectives from people living in lower income circumstances, as access to internet and technology is reduced in these communities

(i.e., the WEIRD bias and implications for those contending with digital poverty). This was a significant limitation to the generalisability of the present findings to broader, and particularly Canadian on-reserve, populations. However, sampling of all kinds is needed given the overall limited representation of Indigenous people in psychology literature.

9.10 Conclusions

This study contributed to a fledgling body of research regarding prevalence of ACEs, IND-COL beliefs, and trauma treatment preferences across North American ethnic groups inclusive of Indigenous people. Significantly higher rates of ACEs were reported by the Indigenous participants, particularly among women. While collectivism did not emerge as strongly associated with Indigeneity among this sample, it was associated with higher helpfulness ratings for more traditional healing approaches (e.g., ceremonial, community, or religious practices). It is also notable that all treatment types were rated as somewhat or moderately helpful on average across ethnic groups, speaking to the appreciation for diverse approaches when addressing trauma and externalising behaviour. In the final chapter findings across all three studies and both systematic reviews are synthesised and discussed.

CHAPTER 10: GENERAL DISCUSSION

10.1 Adverse Childhood Experiences in Indigenous Populations

The overarching aim of this research was to develop a conceptual framework that could inform assessment and intervention practices when working with culturally diverse youth to address externalising behaviour. Indigenous representation within the academic literature on these topics has been minimal (Richards et al., 2021; Gone, 2023). Thus, the studies provided needed insight into the perspectives and lived experiences of these populations across ACE prevalence and impact as well as assessment, research, and intervention practices.

The disproportionate occurrence of ACEs and impact of historical trauma among Indigenous people was identified as a core theme in the development this programme of research (e.g., Burrage et al., 2022; Gone, 2023). However, while a connection between ACEs and behaviour was generally well-supported (e.g., Basto-Pereira et al., 2016; Fox et al., 2015; Gray et al., 2021; Meddeb et al., 2023; Stinson et al., 2023), the first systematic review evidenced a dearth of information about the connection between these experiences and externalising in Indigenous youth. Only two of the reviewed studies (Cain, 2020; Watts & Iratzoqui, 2019) included a subsample explicitly identified as such. Further, neither accounted for ethnic differences in their analysis nor provided information about the comparative prevalence of such experiences across ethnic groups. One reviewed study which *did* examine differential impacts based on ethnicity, but did not include an Indigenous sample (Bonner et al., 2020), indeed recorded a significant variation insofar as behavioural outcomes. This and other research demonstrating ethnic differences in the impacts of ACEs on behavioural outcomes (e.g., Fix et al., 2021) contributes support for culturally integrative models of trauma (e.g., the C-ACE; Bernard et al., 2020). Such

models recognise the unique systemic, historical, and biopsychological factors that may enhance or alter the impact of adversity on people from certain cultural and ethnic backgrounds. It also has implications for common models of antisocial behaviour, such as Strain (e.g., Agnew, 2001), Control (e.g., Gottfredson & Hirschi, 1990), and Cognitive Behavioural theories (e.g., Bandura, 1986) which tend to centre risk factors as an individualised phenomenon. These theories shy away from clarifying a role for the higher-level, systemic and historical issues that appear relevant for many ethnic minority groups, but especially Indigenous people. As highlighted by Gone (2023), the collective and persistent aspects of historical trauma differentiate its impacts from those of more acute forms and has implications for psychological and behavioural treatment.

Two additional studies were conducted with the goal of increasing understanding of the ACE-behaviour relationship as it pertains to Indigenous youth. An online survey looking at the prevalence of ACEs among North Americans from a variety of ethnic backgrounds revealed significantly higher rates of adversities experienced by Indigenous-identifying participants. They were also much more likely to self-report exposure to intergenerational trauma. This reinforced the findings of several previous researchers (e.g., Burrage et al., 2021; Linklater, 2017; Richards et al., 2021; Weatherburn & Holmes, 2016) and, practically, underscores the need to anticipate and inquire about these experiences when providing mental health and assessment services to First Nations youth. ACEs were particularly prevalent among female respondents, who reported significantly higher rates of polyvictimisation. Tragically, this finding coincides with an abundance of crime-related data (StatsCan, 2023), as victimisation of Indigenous women is a well-known issue (TRC, 2015). In accordance with a biosocial perspective (Linehan, 1993), women who bear the brunt of ACEs and are at increased risk of trauma-related symptomology could be

physiologically transmitting the impacts of intergenerational trauma, as foetal development can be affected by stress responses prenatally (Alhusen et al., 2016; Holmes et al., 2024).

Interviews with First Nations educators highlighted community-wide challenges including addictions, gang recruitment, and parenting difficulties. Reserve living in Canada and the US generally coincides with poorer access to resources, overcrowded and aging housing, and limited infrastructure (Gone, 2023). These are environmental risk factors rooted in inequity (Bonner et al., 2020; Powell & Davis, 2019). This collective impact needs to be better reflected in both assessment and treatment processes when addressing antisocial and externalising behaviour. For instance, reflecting on the relevance of Anderson's 'Code of the Street' (1999), the socio-political disconnect of some reserve communities from the cultural majority in the context of socioeconomic inequity may facilitate normalisation of delinquency. Given the history of Indigenous oppression in Canada and the way communities may feel disregarded economically and politically, it logically follows that alternative pathways to financial and social success and stability will emerge (e.g., Brockie et al., 2015; Brownridge et al., 2017; Gone, 2023). While initiation of grassroots cultural and social programming may be the ideal result, the many barriers to their development mean that gang and criminal activity are also feasible outcomes. Increased prevalence of ACEs within these communities arguably increases the risk of antisocial norms emerging and taking root. In light of these factors, interview participants also shared their perspectives on the need for psychologists and other mental health practitioners to develop trusting relationships with youth and families. Without such relationships, acquiring a holistic understanding of the role community strengths and challenges play in a child's socioemotional and behavioural development is not possible.

10.1.1 Decentring Western Epistemology in Indigenous Research

Another area of insight from this research process occurred through an attempt to address the challenge that Indigenous epistemology poses to Western methodology. Across both systematic reviews there was notable variation in assessment and analysis strategies: interview data, official records, standardised measures, questionnaires – numerous sources of information considered valid, empirical representations of behaviour and experience. There are many ways to conceptualise, operationalise, define, and record our observations, all of which come with both psychometric and human limitations. It is easy to see ways in which these methodological decisions can influence findings. By selectively attending to only certain types of information, we necessarily ignore other, perhaps 'noisier' and more subjective varieties which could enrich our understanding. The aspirational goal of objectivity is a guiding principle of most Western approaches to research. However, both the literature (see Chapter Three) and present findings made it clear that these restrictions severely limit our ability to engage meaningfully with Indigenous people.

From the outset, two-eyed seeing was a guidepost of this research programme (Bartlett et al., 2012). Recognition of the value of multiple sources of knowledge is crucial for conducting ethical and culturally valid research with Indigenous populations (Gone et al., 2020; Kovach, 2020). Within the social and health sciences, the conflict between Western, extractive research approaches and Indigenous reciprocity has a long and painful history (Gone, 2009). As Kovach states, "A self-reflective narrative research process that honours multiple truths is congruent with an ethos of *nisitohtamowin* (a Cree word for understanding)" (p. 26). The impact of this self-reflective and multi-faceted element, while a background presence throughout the research process, was most evident in Study Two,

wherein aspects of both Western and Indigenous methodologies were applied with very disparate outcomes.

The goals of Study Two evolved, reflecting growth in understanding of the limitations of Western approaches when working with First Nations community. While the initial aim was to quantitatively analyse data from psychoeducational assessments with First Nations youth, barriers were evident almost immediately. Even after years of providing itinerant services in these communities, I had little grasp of the realities insofar as community transience and norms of communication among locals. This was vital information for both research and effective intervention practices. Timelines had to be continually extended as recruitment lagged. The information outlined in the psychoeducational reports was relatively sparse, with clear gaps, likely reflecting the lack of tending to relationships within the assessment process itself. Kovach describes a common Western pitfall of an "abuse of trust, with relational ethics cast aside in the name of research expediency and a 'get the job done' mentality" (p. 56). This was apparent both in the assessments I reviewed as well as elements of my own research. Though I had consulted with community members and made some appropriate adjustments to a typical Western approach, (e.g., encouraging face-to-face recruitment and informed consent meetings that emphasised the importance of oracy in First Nations communities; provision of translation services), I had not attended sufficiently to the relational work. I had failed to learn the norms of the community and connections both within and outside of the school environment. In time, I realised that I needed to approach things differently and as outlined in Chapter Eight, was much more successful when adhering more closely to principles of Indigenous methodology.

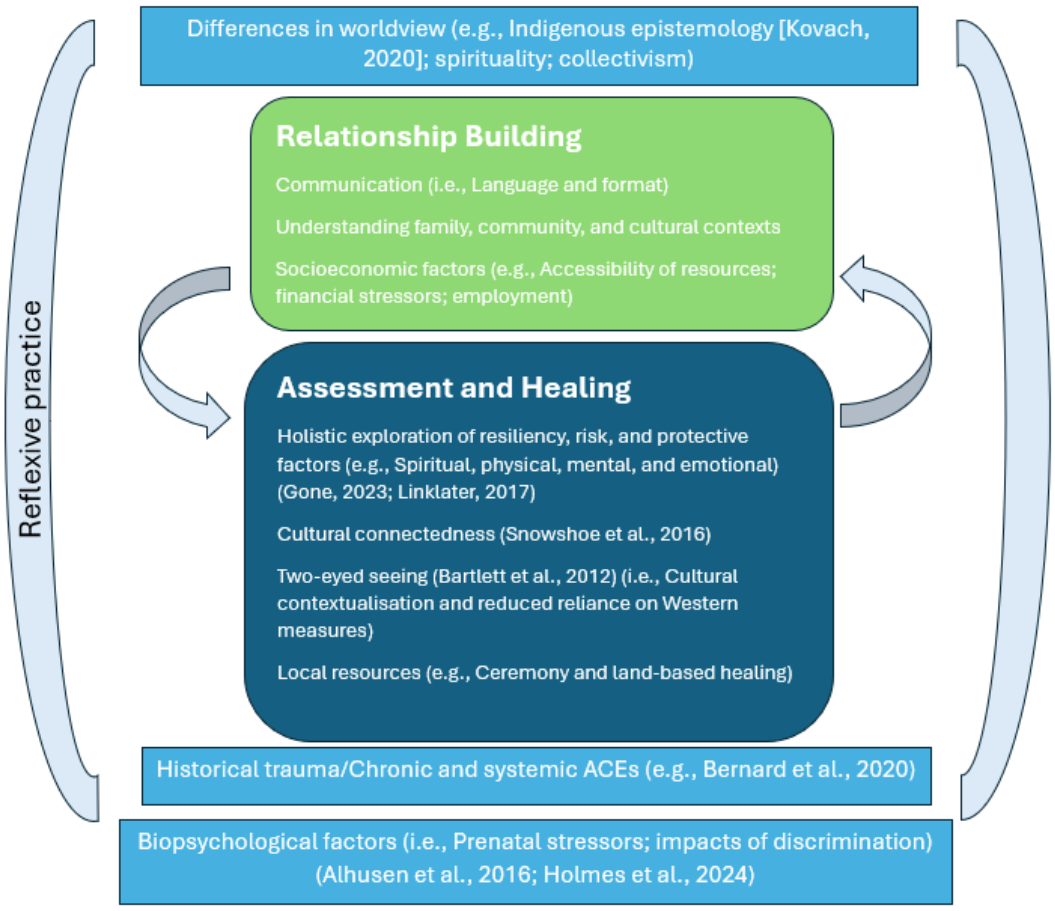
More broadly, if it stands to reason that even our best efforts within a Western research paradigm are never completely empirical or objective, and that decades of research in the same area can come to conflicting conclusions, it is perhaps surprising that there such mainstream resistance to Indigenous epistemologies (Hansen, 2010; Kovach, 2020; Burrage et al., 2021). How much does a Reflexive Thematic Analysis, wherein we might compile anecdotal evidence and simply examine our own biases and influences (Braun & Clarke, 2021), deviate from considering spiritual, ceremonial, or dream-based information as reliable? We must strive to understand, and searching for common ground across research, assessment, and intervention is a necessary step on that path.

10.2 Collaborative Behavioural Assessment and Intervention with Indigenous Youth

This research followed a Grounded Theory methodology, wherein the codes derived from each study were compared and synthesised into higher level concepts and categories (Birks & Mills, 2023). These findings then influenced the design of the subsequent study as well as contributing to development of a conceptual framework outlining a proposed approach for assessment, research, and intervention when working with Indigenous youth. The data gathered through the reviews and studies was ultimately organised into five overarching categories: 1) Reflexive practice, 2) Differences in worldview, 3) Relationship building, 4) Expanding concepts of assessment and healing, and 5) Becoming historical trauma-informed. These are captured in the Framework for Relational and Reflexive Assessment and Intervention for Trauma (FRRAIT) depicted in Figure 10.1 below.

Figure 10.1

Framework for Relational and Reflexive Assessment and Intervention for Trauma (FRRAIT)



10.2.1 Reflexive Practice

A unifying concept in the FRRAIT is the importance of reflexivity in research and practice with Indigenous people (Kovach, 2020; Sasakamoose et al., 2017). While psychologists and other mental health providers are used to reflecting on the way that their own biases and lived experiences may impact their perspectives and service provision, reflexivity in this context extends beyond these domains. When working inter-culturally with Indigenous people, settler practitioners and researchers need to recognise the limits of their ability to fully understand the client's worldview on a perhaps spiritual and

existential level (Kovach, 2020; Sasakamoose et al., 2017). The arrows within the framework symbolise the reciprocal interaction between relationship, assessment, and healing when working with Indigenous youth. More so than in a Western-centric treatment model, the client and the practitioner or researcher must meet as equals with differing expertise, establishing the epistemological *middle ground* (Ermine, 2007). However, given the current magnitude of need for support, attempts must be made to reconcile these differences, and reflexivity should precede and occur alongside any psychological services provided. This will require the settler psychologist to think about their personal and professional goals as well as their positioning within the community

10.2.2 Differences in Worldview

As a core difference between Indigenous and Western cultures, a comparison of worldviews should be the first stop on the assessment or treatment pathway. Findings from the second systematic review suggested that this is a frequent oversight, with three youth intervention protocols outlining an in-depth consultation around cultural relevance (i.e., O'Callaghan et al., 2013; Tol et al., 2008; 2012), but none specifically mentioning worldview. The Delphi responses indicated a broad understanding of culture, encompassing worldview, traditions, language, morals, and behavioural norms among other factors. Practitioners and researchers agreed that the best strategies for informing themselves about the cultural norms of their youth clients generally involve asking them, their families, or someone from the same cultural background for insight. However, findings also indicated that most continued to primarily consult Western models of wellness even when working with culturally diverse clients. This is a clear area of deficit, as it cannot be solely the job of the client to educate the practitioner on these topics. Further, if we bring only a Western

lens to the therapeutic or assessment relationship, those cultural blind spots are likely to reduce the scope of our awareness and compromise validity of our services.

As has been reiterated throughout this thesis, Indigenous people are more likely to endorse collectivism, holistic wellness, and connectedness to nature (Choate et al., 2020; Kovach, 2020; Linklater, 2017; Sasakamoose et al., 2017). In Study Two, First Nations participants spoke to both the value of more Western, therapy-based approaches as well as the healing aspects of spending time on the land, participating in ceremony, or spending time with elders. Non-Indigenous respondents were more likely to highlight the role of organised sports or counselling. While on the surface some activities may appear to fulfil similar needs, there can be profound differences in the meaning behind the activity. Taking organised sports and time spent outdoors as an example, non-Indigenous respondents focused on the social relationships and sense of belonging a child can feel when participating in sports. First Nations participants spoke to the healing aspects of time spent on the land and working with your hands. Indigenous connection to the land has been framed as a source of identity (Kovach, 2020) and perhaps even as a form of caregiver attachment (Lindstrom & Choate, 2016). Clearly, there are major differences in how each group is experiencing and perceiving these types of activities. Thus, it is important not to assume shared understandings and to be curious about these differences.

However, it is of course important to check in with the client about their level of cultural connectedness (e.g., Snowshoe et al., 2015). In a colonial context, it is not the case that every Indigenous person is equally invested in a non-Western worldview. The results of Study Three evidenced cross-ethnicity differences in collectivist and individualist beliefs, thought to be key areas of Indigenous and Western ideological differences. For instance, in Study Three (Chapter Nine), Indigenous-identifying participants were found to

be more likely to endorse collectivist beliefs. This aspect of worldview could have implications for everything from who the person might want in the room during assessment or treatment (e.g., an Elder, grandparent, medicine person) to how they engage in a working relationship. For instance, those who identify with collectivism may be less likely to express discomfort or opposition, prioritising social harmony over their own preferences (Kirmayer, 2007; Yeh et al., 2006). Overall, an early step should be to query worldview.

10.2.3 Relationship Building

The importance of relationships in working with Indigenous youth cannot be overstated. Across the reviewed literature and findings, the message was clear: relationships are everything (Acoose, 2012; Burrage et al., 2022; Kovach, 2020; Linklater, 2017; Gone et al., 2020). This is not an alien concept in psychology - an oft cited statistic is that the strongest predictor of therapeutic change is a good working alliance, or the relationship between the counsellor and their client (Horvath & Symonds, 1991). However, in some Indigenous contexts, this may extend beyond individual rapport building and can involve family members or the larger community. First Nations interviewees suggested options for engaging caregivers and families, such as offering meet-and-greet events, attending community nights, and hosting information-sharing opportunities to become a 'familiar face.' This could help to build trust and approachability and assuage fear and misconceptions about the intentions of school-based assessment and support services informed by historical trauma, particularly related to residential schools and social services (e.g., Gone, 2009; Helgason, 2009). Given the significant differences between Indigenous and Western perspectives and experiences, relationship serves to inform and bolster services, but nurturing connection must also be a stand-alone goal of any assessment, research project, programme, or intervention implemented

Building social relationships with clients may run contrary to the rigid principles of psychological practice more broadly (e.g., 'multiple relationships', Canadian Psychological Association, 2017), but Western approaches are not effectively healing these communities. The importance of relationship building was also evident in my own experiences recruiting participants for Study Two (Chapter Eight) and Three (Chapter Nine), wherein ignorance of norms around local communication, community transience, and possible implications of digital poverty (i.e., the restricted number of Indigenous participants available through *Prolific*) compromised recruitment efforts. Further, when providing standard educational psychology services in Northern Saskatchewan, it is common for caregivers to be disengaged. They may be slow to respond to assessment requests and often decline to attend meetings. Obviously, this results in little follow-through on recommendations, but more importantly reflects a severe disconnect between needs and supports. Cultural adaptation demands that we strive to meet the needs of people whose customs are distinct and possibly contrary to our own.

Assessment and diagnosis, while providing context, are in no way a solution to the trauma-related behaviour challenges that generate requests for assessment and intervention. Developing a more robust relationship with people in the community beforehand can provide a crucial window into the needs and priorities of caregivers and families. It can increase comfort for caregivers and communities not only in providing more comprehensive background information to inform the assessments, but also for discussing what aspects of the process are not working. Shifting from a clinical to a relational approach can deepen the understanding of a youth's history and context and increase the likelihood of follow-through across assessment and behavioural intervention. Allotting more time to establishing these relationships is respectful of cultural norms, increases the

reliability of the data collected, and is likely to enhance the relevance and effectiveness of treatment (Kovach, 2020).

Service providers must also spend more time getting to know the children themselves. First Nations participants shared their concerns in the interviews about the lack of student voice within the psychoeducational assessment process. Some formalised self-report measures do exist but are not always appropriate depending on a child's reading level. This can be especially problematic in on-reserve schools, where language and reading development are often delayed for a variety of reasons (Gone, 2023). Thus, it is important to spend the time getting to know the student qualitatively. While rapport is important to increase the veracity of all assessments, it is particularly important when working in a context of historical and intergenerational trauma. Many of these children will already have strong ideas about what health professionals do and may have had negative past experiences within the medical or social services system. It is important to take the time, push aside the Western drive towards speed and efficiency (Kovach, 2020), and establish a trusting relationship with youth, caregivers, and communities.

10.2.4 Expanding Concepts of Assessment and Healing

Also echoing previous literature (e.g., Wendt et al., 2022), strong support was garnered for incorporating a holistic approach to wellness and ensuring culturally appropriate treatment options are available. The second systematic review, in which 25 different Western-style interventions were reviewed, demonstrated that a variety of intervention approaches can be effective. For instance, treatments involving psychoeducational (e.g., Beltran et al., 2016); cognitive behavioural (Misurell et al., 2011), mindfulness (e.g., Beltran et al., 2016), social skill training (e.g., Grijalva & Vasquez, 2021), art (e.g., Johnston, 2003), and play (Tol et al., 2012) components were all found to

significantly improve behavioural outcomes in adversity-exposed children and youth. Delphi respondents (Chapter Eight) also endorsed the value of a multifaceted, adaptive approach to treatment, highlighting the value of mindfulness and relaxation, trauma-centred psychoeducation, and the development of social problem-solving skills. The findings from Study Three (Chapter Nine), wherein all the presented healing or treatment methods were perceived as somewhat helpful, on average, further supports this. Given the breadth of effective ways to address trauma and externalising behaviour in youth, it should not be difficult to extend this openness to non-Western approaches to assessment and healing.

For example, when assessing the behaviour of First Nations youth and considering the potential impacts of trauma, we must be aware of possible cultural differences in attachment and behavioural norms (e.g., Choate et al., 2020). For instance, while caregiver divorce or separation or living apart from a parent is generally considered an ACE (Felitti et al., 1998), families in First Nations communities are known to include more extended relational networks (Lindstrom & Choate, 2016). In this context, a child moving between living with a parent and a grandparent for a prolonged period may not be experienced as an adversity and might be quite normalised. They may have in fact lived in an extended family household with a grandparent or aunt as the primary caregiver for most of their lives. Most psychoeducational assessments reviewed in Study Two indicated that the child was separated from either one or both biological parents. Whether this is a negative experience for that child or not should not be assumed based on Western models of adversity.

Importantly, not every child with a traumatic history or behavioural issues needs or will benefit from a Western intervention. Western education and healthcare systems have long privileged and even mandated use of evidence-based practices, largely to the exclusion of Indigenous healing methods (Gone et al., 2020; Linklater, 2017; Wendt et al., 2022).

Findings from the Delphi aligned with this, demonstrating a disconnect between the awareness among trauma and behaviour experts of a need to adapt for cultural differences in research and practice, and reliance on Western-based models of wellness. As pointed out by Gone (2009), this is not just an issue of discomfort with the unfamiliar:

> The substance of the multicultural critique within the profession is not that the culturally different are simply "uncomfortable" with mainstream [evidence-based therapies], such that merely adorning these approaches in cultural garb (a few beads here, some feathers there) might remedy the problem. Instead, the real danger is that these approaches partake of European American cultural norms, presume specific forms of personhood… (p. 760)

Findings from Study Two reinforced this view, with Indigenous participants vocalising their support for cultural and community-based supports that deviate from the therapeutic norm. This corroborates what has been found previously related to the differences among non-egocentric or psychocentric cultures insofar as their view of mental health and wellbeing (Kirmayer, 2007). The results of the second systematic review (Chapter Six) and Delphi (Chapter Seven) evidence a lack of follow-through on the part of mental health practitioners and institutions to embrace a model of cultural inclusivity. In keeping with Gone's (2009) criticisms, systematic review two revealed minimal adjustment of interventions to accommodate for multicultural participants. Those that did make significant adaptations fell precisely into the category of 'dressing up' a regular Western model in local vocabulary and content (e.g., O'Callaghan et al., 2013). Of those surveyed in the Delphi, only one practitioner referred to a non-Western theory for supporting a minority of a culture different from their own (i.e., the Social and Emotional Wellbeing model, Gee et al., 2014). Familiarising oneself with foundational models of holistic health relevant to

First Nations people (e.g., the Medicine Wheel), spiritual or ceremonial wellness practices (e.g., sweat lodges; Talking Circles; Acoose, 2012; Gone et al., 2020), or local events that promote community or individual wellbeing are important steps in providing responsive, effective care to First Nations youth.

Relatedly, we must be prepared to accept and encourage our clients seeking traditional treatment outside of our offices or integrating aspects of these practices into our own settings. Cultural humility, the recognition that one's own cultural norms come along with limitations, is a key component of embracing these differences. For instance, Indigenous youth may wish to bring family members into a therapeutic setting or have a caregiver present during an assessment (Lindstrom & Choate, 2016). Healing may involve community-wide grieving or remembrance practices (Brave Heart & DeBruyn, 1998).

Further, we must consider a variety of options for meeting the needs of youth and step out of our comfort zone when it comes to providing recommendations. Delphi participants and interviewees expressed an understanding that challenging behaviours of young people are likely to be communicating unmet needs or the lack of skills to manage difficult emotions (Greene & Winkler, 2019). Practitioners can extrapolate from this awareness in a culturally informed way and consider how local resources or connections can meet such needs. We can consider the way culturally rooted activities can address the challenges a child is dealing with. First Nations interviewees consistently described, for example, the importance of land-based, hands-on, and traditional activities for mental health. Thus, rather than recommending only counselling or the creation of a formalised behaviour plan, we might suggest local supports, such as a community-based Elder or traditional activities (e.g., checking traplines or ice fishing) that can provide social support and mentorship opportunities. Development of robust community relationships can

facilitate educating oneself what is available and relevant nearby. It is similarly important to ensure that we integrate practitioners from other backgrounds who may facilitate healing in ways Western practitioners or strategies are not equipped for (Linklater, 2017).

10.2.5 Being Historical Trauma Informed

The concept of being historical trauma informed entails a broad view, encompassing individual ACEs, biosocial factors (Linehan, 1993; Alhusen et al., 2016), family and relational impacts (Hamby et al., 2020), community discord (Gone, 2023), and the possibility of spiritual disconnect (DeBruyn & Brave Heart, 1998). A significant number of Indigenous survey respondents in Study Three (Chapter Nine) indicated that they were affected by intergenerational trauma and First Nations interview participants (Chapter Eight) shared the community-wide challenges they see and the influence those factors have on the youth they work with. This finding has been reflected in Western-centric theorising as well, which has begun to emphasise the role of broader environmental and social conditions, such as community traumas or civil unrest, in adverse behavioural and health outcomes (Bonner et al., 2020; Centers for Disease Control and Prevention, 2021).

When conducting assessments, awareness of historical trauma should inform both the sources of information (e.g., observation and awareness of community wellness status; conversations with caregivers, families, and school teams) and the valuing of the data collected. The content of formal, Western assessments of cognition and behaviour were noted by interviewees as both intimidating and irrelevant at times to First Nations students and families. They have also been pointed to as falling short when assessing culturally diverse populations in previous literature (Flanagan et al., 2007; Styck & Watkins, 2013). While use of some of these measures may be required to meet current federal assessment standards (Indigenous Services Canada, 2023), the relative weighting of this data is largely

at the discretion of the assessor. Thus, a historically informed approach would likely entail deemphasising formal measures in favour of the qualitative and conversational aspects of assessment that are more likely to accurately reflect the experiences and needs of First Nations youth (Burrage et al., 2021; 2022; Linklater, 2017).

Regarding intervention development, historical trauma's collective reach necessitates a macroscopic view of behavioural challenges in First Nations youth. Interviewees demonstrated their awareness of these factors, speaking to the home lives of students and community discord that contributed to behavioural challenges. Relatedly, findings from Study Three evidenced the wide variety of ACEs that may differentially impact children from Indigenous and non-Indigenous backgrounds. The diversity and pervasiveness of the impact is likely to reflect the impacts of historical trauma. Gone (2009) encourages the "contextualization of personal pain and dysfunction within the shared Aboriginal history of European Canadian colonization" (p. 758). Thus, while recommendations and intervention should be customised to meet the needs of the child, an individual-centric approach to the intervention itself is perhaps less advisable. Even within a Western context, conclusions from the second systematic review emphasised the value of involving caregivers in intervention, with one intervention demonstrating significant increase in efficacy when caregivers were involved versus when they were not (Runyon et al., 2009; 2010). As always, collaboration and consultation with the client, family, and any community stakeholders should guide the decision-making process.

10.3 Limitations

Though many valuable insights were gained throughout the reviews and studies that comprised this research, overall limitations were also noted. Two key categories were identified: sampling and recruitment challenges and cultural relevance of methodology.

10.3.1 Sampling and Recruitment Challenges

Sampling was a challenge across all three studies for several reasons. In the case of the Delphi, several explanations for low recruitment were suspected. First, it is possible that there are relatively few practitioners who considered themselves to have expertise across all of the three areas of focus: ACEs, externalising behaviour, and culturally diverse youth. This may indicate a common skill or confidence deficit within the mental health profession that could be addressed through training and mentorship. Of those who responded to decline to participate, many indicated that they were too busy to contribute, which may also suggest a shortage of professionals in a high-needs area. Another consideration may be the approach to recruitment, which was mostly done through either direct emailing or newsletters and website advertisements on regulatory or fraternal professional associations. It may be that practitioners are 'tuned out' because of receiving many such requests in their inboxes. This hypothesis was supported by the response of several associations who declined to post research requests from external sources, as the demand is too high.

The shortcomings of digital recruitment likely also affected the Indigenous participant numbers for Study Two and Three. In these studies, prospective interviewees and questionnaire respondents were recruited via email and digital advertising. This meant participation was restricted to those who had access to the internet and/or who checked their email regularly. Particularly in on-reserve populations, internet access may be limited (Gone, 2023). Further, linguistic and educational differences between cultural groups have been known to impact English literacy levels (Gone, 2023; Sasakamoose et al., 2017), further diminishing the pool of participants accessible by these means. In both studies, this restriction could have meant that participants who did respond to the questionnaires

represented a unique and potentially unrepresentative subsample of the Indigenous population in their area.

Recruitment difficulties for the Study Two file reviews (see Chapter Eight) were primarily related to community transience and inconsistent access to technology. This challenge was exacerbated by a lack of insight into local norms of communication, as people for whom phones and internet were less available may rely on a family member or in-person contact to convey messages. Again, this meant that those who were recruited to participate through established means (i.e., phone) may not have been representative of the broader population. More thorough application of an Indigenous methodology (Kovach, 2020), wherein community familiarity and relationships would have been at the forefront, would have helped in anticipating and resolving this issue. This aspect of the limitation is described in further detail in the next section.

10.3.2 Cultural Relevance of Methodology

A lack of consideration for the cultural relevance of the measures and methodology being used became more evident as the research progressed. At the earliest stages, when conducting the systematic reviews, a focus on quantitative measures and published articles increased the likelihood of missing Indigenous contributions to the area. With my prior training and knowledge base rooted in Western, empirical methods, I felt most competent in comparing and evaluating literature that had a quantitative element and had been through the peer-review process. As my understanding of Indigenous epistemology grew, I realised that qualitative measures and community-level evaluations or publications are more common among these populations (e.g., Gone, 2009; Kovach, 2020; Linklater, 2017). Similarly, when recruiting participants for my Delphi, I sought the expertise of qualified, credentialed professionals with academic or clinical backgrounds in psychology and social

work. This excluded the involvement of Knowledge Keepers, Medicine People, or Elders of both Indigenous and other diverse cultural backgrounds who could have offered valuable insight. However, this was a limitation partially borne out of my awareness of the ceremonial customs and processes that would need to be followed when approaching these groups. Recognising the limits to time, resources, and my own spiritual preparedness (Kovach, 2020), a less comprehensive and more conventional Western approach was taken. As a settler researcher there are also limits to the extent to which I could become a 'cultural insider' in this regard. Thus, there are important gaps that future researchers should seek to fill in wholistically evaluating the current state of Indigenous-inclusive treatment and intervention related to ACEs and externalising behaviour.

From the point of my second study, the importance of ensuring the cultural relevance of the methodology became clear, but some limitations remained. For instance, in Study Two (Chapter Eight), the First Nations communities were not consulted in the development of the research methodology or interview protocol, which is a crucial step in ensuring the value of the research for the community (i.e., impacting reciprocity) (Kovach, 2020). While the topic of the research had important implications for these communities based on my own lived experience, best practice would have been to involve them in all stages of the research development. In Study Three (Chapter Nine), the inclusion of an ethnically diverse sample complicated the possibility of ensuring cultural relevance further. One key limitation was apparent reliability issues with the IND-COL measure (Triandis & Gelfand, 1998), which suggested it may be more effective at picking up on individualist and collectivist beliefs in a limited set of cultural groups. Further, as mentioned previously, the use of an online questionnaire limited participation to select subpopulations among each ethnic group. Namely, those who were digitally literate and had access to the internet. Next

steps could involve utilising more applicable measures and means for determining potential cultural differences when assessing ACEs, treatment preferences, and beliefs regarding individualism and collectivism among Indigenous populations.

10.4 Dissemination Plans and Implications for Policy

The value of the proposed framework is in what can be shared and implemented by settler psychologists going forward. Indigenous educators and healers from various disciplines have led the way in offering recommendations as to how we can integrate Indigenous worldviews, relationship building, and reflexive practice into our work (e.g., Kovach, 2020; Linklater, 2017). The FRRAIT is primarily an integration and extension of this important work informed by the data collected throughout the course of this PhD.

10.4.1 Next Steps in Practice and Education

The FRRAIT summarises key considerations for settler psychologists when implementing assessment and intervention. They can be viewed as interrelated steps that can be directly applied to every phase from the point of referral onward. If we take psychoeducational assessment as an example, a practitioner who receives a referral for an Indigenous student living either on or off-reserve might begin by learning the extent to which the child is engaged with their community and culture. On-reserve, this could be as simple as inquiring with teachers or other school team members as to what common cultural activities or events go on in the community and then directly asking the student or their family if they participate. In Urban settings, your organisation may have connections with Elders, Knowledge Keepers, or another designated contact who can help support you in learning more about events or services local Indigenous groups are engaged with. In seeking to strengthen relationships, the settler psychologist may also start prioritising attending community events themselves and becoming better acquainted with the teachers,

parents, and students they work with. As these bonds are strengthened, the practitioner can learn more about potentially relevant historical trauma factors, such as the ways local families may have been affected by the 60s scoop or residential school recruitment and whether there are concerns about gang violence or substance misuse. Further, insights can be gained about how these issues are being addressed at the community level.

When interviewing the child themselves, it could be valuable to ask them who they feel close to in their family or community and who they talk to about things that are important to them. These can be conceptualised as worldview-focused conversations which, undoubtedly, will also contribute to relationship building. This integration will also help facilitate awareness of local beliefs around healing and wellness, as well as likely increasing awareness of who provides that kind of care in the community already. This will serve to inform the best approach to assessment and intervention.

Further supporting this, when establishing an assessment or intervention goal, previous researchers have suggested shifting focus from diagnosis and presence of traumatisation to the state of a child's self-efficacy, cultural identity, and connectedness to their family and traditions (Burrage et al., 2021). Treatments plans that involve family members or community engagement may be more appropriate for meeting these outcomes than more 'standard' Westernised recommendations. In terms of classroom-based recommendations, focusing on an ethos of connectedness and belonging is both culturally and socially adaptive (e.g., Yeh et al., 2006; Pesta, 2022). Avoiding the use of exclusion-based behavioural strategies and focusing on the way in which a child can be integrated and develop needed skills in a social context also reduces known risk-factors for externalising (e.g., Farrington, 2015).

Dissemination of the findings summarised in the FRRAIT has already begun and will continue. Initial steps involved sharing the findings with the interview participants, who generously reviewed and approved the entirety of the thematic discussion from Chapter Eight. This information will also be shared with the assessment teams at both schools that were involved in the study as well as informing my own personal and supervisory practices going forward. A draft version of the model was also presented at the 2024 Canadian Psychological Association Convention in Ottawa, Canada. The steps outlined in the FRRAIT, which align with the TRC calls to action (2015; Saskatchewan College of Psychologists, 2016), should be integrated in some form across applied psychology programmes in Canada.

Practitioners may feel uncomfortable at first in adjusting their approach and actively identifying the ways that differences in worldview might reduce the effectiveness of our current practices. Rather than shying away from these conversations, however, it may be helpful to begin querying worldview with all clients to normalise that initial step. Indigenous youth are not the only population that is not necessarily best served by standardised, Western psychological supports (e.g., Kirmayer, 2007).

10.4.2 The Ethical Imperative for Advocacy and Activism

In reviewing Strain and Control theories presented in Chapter Two, the idea of addressing disengagement from social norms and values by changing the societal structure itself was introduced. The Canadian Psychological Association's code of ethics, discussing psychologists' responsibility to society, compels us to "act to change those aspects of the discipline of psychology that detract from just and beneficial societal changes, where appropriate and possible" (2017, p. 34). Given what has been reviewed about the policies pertaining to the provision of behavioural and academic supports to First Nations students

(Indigenous Services Canada, 2023), there are systemic factors that impede the application of culturally appropriate models of assessment and wellness. If we are to meaningfully engage with Indigenous populations, settler psychologists are compelled take on advocacy and activism in some form. It is naïve and perhaps harmful to treat individuals in a context of historical trauma without taking a stand against the perpetuation of the conditions that maintain it. As has been outlined by Friere (1970), one does not have to be an agent of oppression to contribute to its continuation, simply failing to act in opposition is sufficient.

10.5 Conclusion

Overall, this research underscores the importance of culturally informed practices when assessing and intervening with Indigenous youth who are exhibiting antisocial or externalising behaviours. The findings highlight the disproportionate rates of ACE exposure and impact of historical trauma on Indigenous people generally, reinforcing the need for psychological theories and models that are informed by these realities alongside frameworks for Indigenous wellness. Effective practice requires acknowledgement of the unique systemic and biopsychological factors at play.

The studies conducted confirmed the high prevalence of ACEs among Indigenous youth and adults and reinforced the importance of a holistic view of wellness when working with these populations. Further research should be done to explore potential cultural differences in interpretation of adverse experiences and definitions of trauma (Choate et al., 2020; Karstoft & Armour, 2022). It is also important to recognise the broad scope of historical trauma, which can take the form of community-wide challenges, such as addictions, gang recruitment, and parenting struggles. Rooted in inequity, these environmental factors need to be considered and accounted for in research, assessment, and treatment with Indigenous youth. The findings reinforce the value of embracing non-

Western ideologies and methodologies and applying approaches that integrate Indigenous and Western ways of knowing.

Based on these outcomes, a collaborative framework for assessment and intervention was developed. In striving to best meet the needs of Indigenous youth, practitioners and researchers should enhance their awareness of the various impacts of differences in worldview, prioritise relationship building, question the applicability of Western assessment and healing methods, and expand their understanding of trauma-informed practice to include historical trauma. Above all else, reflexivity and communication with communities, families, and the young people they serve must be prioritised in pursuit of these goals. Recognising how the effects of socio-political context and the collective impact of colonisation may interact with the relationship between ACEs and behaviour in Indigenous youth is vital to providing appropriate support.

10.5 Closing Thoughts: Repositioning

> Place and the everydayness of our lives shape how we think and write […] Returning to a physical home territory might not be the case for everyone. However, if we are following the path of Indigenous methodologies, we each find home wherever that may be. (Kovach, 2020; p. 55)

The concept of home has been something that I have struggled with. As I grew older and began to understand Canada's history and the reality of its colonial roots, the idea troubled me. How could I be at home in a place my ancestors stole? When I could travel abroad, I was amazed to meet people across Europe who could trace their family histories back – so many generations all born into the same geographic area. Gaining self-awareness as a settler can (and perhaps should) create an existential homelessness.

Canada is sometimes referred to as a ‘cultural mosaic,’ and, true to form, I think I needed some distance to see the picture more clearly. From here, in Liverpool, it’s easier to see the points of conflicts and the progress. It also gave me the space to reflect on a different framework of oppression. Resentful of its English dominion, Irish and working-class roots vibrating with pride and frustration borne of classism and colonialism, it was a good place to feed both rage and curiosity. It helped that I could join in the indignance here without the quiet awareness that I was a part of the problem. However, Liverpool is not ‘home,’ and masking oneself in the struggles of others is not a viable way forward.

All Canadians have a role in reconciliation, but those of us working in youth mental health and education have greater responsibilities - professionally, ethically, and personally. I hope the outcomes of the research outlined here can help other settlers to work alongside Indigenous people in finding a shared path forward.

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[14] *Indicates inclusion in systematic review one; **indicates inclusion in systematic review two

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APPENDIX A: TRUTH AND RECONCILIATION INFORMATION

Completed TRC Calls to Action

1. Call 41: Missing and Murdered Indigenous Women's and Girls Inquiry
2. Call 48: Adoption of United Nations Declaration on the Rights of Indigenous Peoples by Churches and faith groups
3. Call 49: Rejection of the Doctrine of Discovery by churches and faith groups
4. Call 83: Reconciliation agenda for the Canada Council for the Arts
5. Call 85: econciliation agenda for the Aboriginal Peoples' Television Network
6. Call 88: Long-term support from all levels of government for North American Indigenous Games **(**Yellowhead Institute, 2019)

7. Call 13: To acknowledge that Aboriginal rights include Aboriginal language rights.
8. Call 15: To appoint, in consultation with Aboriginal groups, an Aboriginal Languages Commissioner. The commissioner should help promote Aboriginal languages and report on the adequacy of federal funding of Aboriginal-languages initiatives
9. Call 67: To provide funding to the Canadian Museums Association to undertake, in collaboration with Aboriginal peoples, a national review of museum policies and best practices to determine the level of compliance with the United Nations Declaration on the Rights of Indigenous Peoples and to make recommendations.
10. Call 70: To provide funding to the Canadian Association of Archivists to undertake, in collaboration with Aboriginal peoples, a national review of archival policies and best practices to:

a. Determine the level of compliance with the United Nations Declaration on the Rights of Indigenous Peoples and the United Nations Joinet-Orentlicher Principles, as related to Aboriginal peoples' inalienable right to know the truth about what happened and why, with regard to human rights violations committed against them in the residential schools.
b. Produce a report with recommendations for full implementation of these international mechanisms as a reconciliation framework for Canadian archives.

11. Call 72: Allocate sufficient resources to the National Centre for Truth and Reconciliation to allow it to develop and maintain the National Residential School Student Death Register established by the Truth and Reconciliation Commission of Canada.
12. Call 80: In collaboration with Aboriginal peoples, to establish, as a statutory holiday, a National Day for Truth and Reconciliation to honour Survivors, their families, and communities, and ensure that public commemoration of the history and legacy of residential schools remains a vital component of the reconciliation process
13. Call 94: To replace the Oath of Citizenship with the following: I swear (or affirm) that I will be faithful and bear true allegiance to Her Majesty Queen Elizabeth II, Queen of Canada, Her Heirs and Successors, and that I will faithfully observe the laws of Canada including Treaties with Indigenous Peoples, and fulfill my duties as a Canadian citizen. (Yellowhead Institute, 2023; p. 10)

APPENDIX B: SYSTEMATIC REVIEW ONE SUPPLEMENTARY INFORMATION

Details of Exclusion Rationales

A total of 26954 studies were excluded based on the following criteria:

1. Irrelevant subject matter (n = 22697),
2. Incorrect study focus (e.g., no behavioural component, focused only on prevalence of ACEs) (n = 2015),
3. Inappropriate format (e.g., book review, literature review) (n = 855),
4. Sample demographics (i.e., adverse experience or documented externalising behaviour occurred after the age of 18) (n = 722),
5. Methodology (e.g., qualitative only, temporal order of ACEs and behaviour not established, only included one behaviour) (n = 334),
6. Information excluded from analysis (I.e., did not distinguish among ACEs or behaviours) (n =333),
7. Or no access either via the university or direct from author (n = 1)

Summary of Measures Used Across Reviewed Studies

Professionally Administered Measures of ACEs

Trauma History Profile (THP; Pynoos & Steinberg, 2004). The THP is a 20-item trauma screener that is a part of the University of California Los Angeles-Posttraumatic Stress Disorder Reaction Index (UCLA-PTSD Reaction Index; Steinberg et al., 2004). It is a clinician-administered semi-structured interview that gathers information across 18 categories: 1) caregiver sexual abuse, 2) non-caregiver sexual assault or rape, 3) caregiver physical abuse, 4) assault, 5) emotional or psychological abuse, 6) neglect, 7) domestic violence, 8) traumatic illness or medical experience, 9) serious injuries or accidents, 10) traumatic loss or separation, 11) impairment of a caregiver (e.g., addiction, mental health,

illness), 12) extreme interpersonal violence, 13) community violence, 14) school-based violence, 15) exposure to war, 16) natural disasters, 17) kidnapping, and 18) forced displacement. Responses were dichotomised as a yes/no as to whether or not a traumatic incident was thought to have occurred. Of the two studies that used this measure, one excluded responses to items 15-18 in their analyses (Adams et al., 2016), as they were very infrequently reported, and the second focused solely on the emotional, physical, and sexual abuse items (Spinazzola et al., 2014).

Washington State Juvenile Court Assessment (WSJCA; Washington State Institute for Public Policy, 2004). The WSJCA is a comprehensive measure of risk and protective factors intended to predict recidivism in youth who are already involved with the justice system. It is comprised of a pre-screen and a full assessment, both of which take the form of a structured, motivational interview completed with both the youth and their caregiver or family. Responses are meant to be validated by triangulation with information provided by relevant records or agencies as required (e.g., Social Services, schools, pediatricians). There are 12 domains: criminal history, demographics, school, use of free time, employment, relationships, family, alcohol and drugs, mental health, attitudes/behaviours, aggression, and skills. The WSJCA was used in one study based on analysing data gathered during the validation of the measure (Asscher et al., 2015). Physical abuse, sexual abuse, and neglect were the only trauma-related domains included in the analysis and were dichotomised as either present or not.

Positive Achievement for Change Tool (PACT; Winokur-Early, et al., 2012). The PACT is a comprehensive assessment package designed for use with high-risk, delinquent youth involved with the justice system to help inform treatment and reduce recidivism. It is completed using a combination of semi-structured interviews, case file review, and official

records (e.g., law enforcement or social services). Information gathered spans 12 domains: record of referrals, gender, school history and current school status, historic and current use of free time, history of and present employment, past and current relationships, family history and current living arrangements, past and present drug and alcohol use, mental health status, attitudes/behaviours, aggression, and skills. Though the sample was administered the full PACT, the one study that incorporated this measure focused on references to physical abuse, sexual abuse, and household substance abuse as independent variables, dichotomising them as present or absent (Miley et al., 2020). However, emotional abuse, neglect, witnessing household violence, and incarceration or mental illness of a member of the household were included as control variables.

Maltreatment Classification System (MCS; Barnett et al., 1993). The MCS is a structured process for assessing maltreatment that aspires to be comprehensive in accounting for not only occurrence of maltreatment, but also severity, frequency, developmental stage of the child at the time, family context, and perpetrator relationship. It was developed to be used in reviewing and collecting data from child protection records and provides clear inclusion criteria for labelling incidents of physical, emotional, and sexual abuse, physical neglect (i.e., encompassing two subcategories: failure to provide and lack of supervision), and moral/legal/educational maltreatment. The two studies that used the MCS both omitted data collection regarding the moral/legal/educational maltreatment category (Vachon et al., 2015; Villodas et al., 2015)

Self-report and Parent-rated Measures of ACEs

Brief version of the Childhood Trauma Questionnaire (CTQ; Bernstein et al., 2003)**.** The brief CTQ is a 28- item retrospective, self-report questionnaire which assesses five types of experiences from childhood and adolescence: emotional abuse, physical abuse,

sexual abuse, emotional neglect, and physical neglect. Each has five allotted items rated on a five-point Likert scale ranging from “never true” to “very often true.” The three additional items are designed to assess validity and address minimisation or denial. This measure was used in two studies. One used a German translation of the CTQ and focused on only three types of experiences: emotional, physical, and sexual abuse (Aebi et al., 2015). Responses to each item were dichotomised as “yes” (i.e., score of 2<) or “no” (i.e., score of 2>). The second study used a Chinese translation and included all categories of questions. Responses were scored according to the manual and total mean index scores were calculated for the experimental and control groups (Zou et al., 2019).

The Comprehensive Child Maltreatment Scale (CCMS for Parents; Higgins & McCabe, 2001). The CCMS for Parents is a 22-item measure of caregivers’ perception of children’s experience of potential abuse and neglect. Ratings are provided regarding the frequency with which a child is believed to have experienced specific types of behaviour directed at them from their mother, father, or another adult or older child. Behaviours fall into five categories: physical, sexual, or psychological abuse; neglect; and witnessing family violence. Physical abuse, psychological abuse, and neglect are measured using three items rated on a five-point scale (i.e., 0 – never or almost never to 4 – very frequently). Witnessing family violence has two items rated on the same five-point scale. There are 11 sexual abuse items rated on a six-point scale (i.e., 0 – never, 1 – once, 2 – twice, 3 – three to six times, 4 – seven to twenty times, or 5 – more than twenty times). One study used this measure (Higgins & McCabe, 2003) and all five maltreatment indices were utilised.

Inventario de Evaluación del Maltrato a la Infancia (ICMI; researcher-developed). The ICMI is a 60-item assessment that evaluates a mother’s perception of her child’s exposure to physical (17 items), sexual (2 items), and emotional (31 items) maltreatment as

well as neglect (10 items). Each item has four response options: 0 – never, 1 – once every two to three months, 2 – several times a month, and 4 – several times a week. A higher score indicates more severe maltreatment. This tool was used in one study and findings regarding physical abuse, emotional abuse, and neglect were documented in the analysis (Lopez et al., 2017).

Inventario de Evaluación del Maltrato a la Mujer por su Pareja (Matud et al., 2003). This measure contains of 56 items to assess psychological (37 items) and physical (19 items) maltreatment of a woman by her partner. The response to each item ranges from 0 (never) to 3 (almost always). In the one study that used this measure, the items relevant to the ACE framework were related to whether a child had witnessed domestic violence against their caregiver (Lopez et al., 2017). suffered by a woman.

Clinically Administered Measures of Externalising Behaviour

Washington State Juvenile Court Assessment (WSJCA; Washington State Institute for Public Policy, 2004). Described more comprehensively in the ACE measures section above, the WSJCA also covered domains related to antisocial behaviour. It was used in one study for this purpose (Asscher et al., 2015). Interview information about specific transgressions was aggregated into two categories for analysis: sexual aggressive behaviour (i.e., including sexual misconduct and felony sexual offenses) and violent behaviour (i.e., including incidents of violence, uncontrolled anger, intentional inflicting of pain, fire starting, use of or threat with a weapon, destruction of property, and animal cruelty).

The NIMH Computerized Diagnostic Interview Schedule for Children – Fourth Edition (NIMH-DISC-IV; Shaffer, et al. 2004). The NIMH-DISC-IV is a structured, diagnostic interview that can be administered by a clinician, computer program, or completed as a self-report measure. The instrument includes questions pertaining to 34

common psychiatric diagnoses for children and adolescents. The one study that included this measure used a computerised version (Villodas et al., 2015). Externalising behaviours were included in the Conduct Disorder and Oppositional Defiant Disorder sections of the measure (e.g., disobedience, threatening others, cruelty or bullying).

Self-report and Parent-rated Measures of Externalising Behaviour

Child Behaviour Checklist (CBCL; Achenbach, 1991; Spanish version, Achenbach & Rescorla, 2001). The CBCL is a part of the Achenbach System of Empirically Based Assessment (ASEBA; Achenbach & Rescorla, 2004) that focuses on parent ratings of their child's behaviour in the past six months. It contains 113 questions answered using a three-point scale (i.e., 0-2, with 0 being not true and 2 being very or often true). Responses contribute to scores on eight symptom subscales: anxious/depressed, withdrawn/depressed, somatic complaints, social problems, thought problems, attention problems, rule-breaking, and aggressive behaviour. These subscales feed into two overarching groupings of internalising and externalising behaviours. Of the studies (k = 6) that used the CBCL or a translated version (Lopez-Soler et al., 2017), four (Adams et al., 2016; Higgins & McCabe, 2003; Spinazzola et al., 2014; Villodas et al., 2015) only reported the total antisocial behaviour scores while two (Lopez-Soler et al., 2017; Zou et al., 2019) included antisocial subscale scores (i.e., social problems, attention problems, rule-breaking, and aggressive behaviour) in their analyses.

Youth Self Report (YSR; Achenbach, 1991). The YSR is another questionnaire from the ASEBA, but homes in on youth's self-reported behavioural challenges in the last six months. It has 118 items and, like the CBCL, is answered on a three-point scale ranging from *not true* to *very or often true*. Scores across the same eight CBCL domains outlined above are generated. The one study that involved this measure (Aebi et al, 2015) included

all externalising subscale scores in their analysis (i.e., social problems, attention problems, delinquency, and aggressive behaviour).

Teacher's Report Form of the Child Behavior Profile (TRF, Achenbach, 1991; Achenbach & Edelbrock, 1986). As a third component of the ASEBA, the TRF follows a very similar structure as the two aforementioned measures and is designed to pull in the perspective of teachers on a child's behaviour. It too is 118-item measure with a three-point response option and generating the same eight-subscale output as the CBCL. The two studies that included the TRF as a measure (Depaul & Arruabarrena, 1995; Vachon et al., 2015) both included externalising subscale scores (i.e., social problems, attention problems, rule-breaking, and aggressive behaviour) in their analyses.

Child Sexual Behaviour Inventory (CSBI) (Friedrich et al., 1991). The CSBI is a 35-item, parent-rated measure aimed at assessing the frequency of sexual behaviour problems in children. Response options range from 0, *never*, to 3, *at least once per week*. Scores generated include a total sexual behaviour score and two subscale scores: developmentally related sexual behaviour and sexual abuse specific items. The study that used this inventory (Higgins & McCabe, 2003) included only the total sexual behaviour score in their analysis.

Alcohol and Drug Problem Index (Van-Houton & Golembiewski, 1978). Detailed information about this measure was not available to access through the UCLan library and was not provided by the authors of the reviewed study that used it. This questionnaire was used in one study (Cavaiola & Schiff, 1988) to establish whether chemical dependency was present for the purposes of determining the sample and control groups.

APPENDIX C: SYSTEMATIC REVIEW TWO SUPPLEMENTARY INFORMATION

Details of Exclusion Rationales

A total of 15,749 studies were excluded based on the following criteria:

8. Irrelevant (*k* = 14,698),
9. Intervention protocol only or no evaluation conducted (*k* = 323)
10. Incorrect focus (e.g., non-behavioural outcomes; no consideration for trauma) (*k* = 365),
11. Methodology (e.g., qualitative; review) (*k* = 159)
12. Wrong age group or population (e.g., adults; parent-focused; mandated treatment group) (*k* = 156),
13. No clear group component (*k* = 35)
14. Insufficient intervention detail or referred to an individualised intervention style without specifying a framework (*k* = 8)
15. No access to full-text via university and unable to obtain (*k* = 5)

Table C.1

Summary of Intervention Information from Systematic Review Two Studies

Study	Inclusion and Exclusion Criteria	Interventionist Training/ Qualifications	Intervention Summary	Treatment engagement/ Fidelity
Beltran et al., 2016.	**Inclusion criteria** Youth who had been provided community-based mental health service for three months prior to being offered participation in the group **Exclusion criteria:** Risk of aggression toward others or if unable to remain in the treatment room safely	No information provided.	*Name:* Yoga-based Psychotherapy Group (YBPG) *Type:* Psychoeducation; mindfulness; somatic *Delivery:* Community (urban mental health centre); no facilitator information provided *Structure:* Manualised; 10 children per group *Length:* 14 sessions (weekly; 90 mins); parents invited to first and last session to complete measures and be briefed Sessions *Targets:* Safety/Boundaries, self-awareness, self-soothing, self-regulation, competency, and self-esteem • S1: parents and children attended; introductory psychoeducation, goal setting, shared meal, completion of measures, relaxation exercise. • S2: participant orientation, use of visual schedule, creation of group norms to be reviewed at each session. • S3-4: body awareness, yoga, breathing • S5: relaxation practice and psychoeducation • S6: awareness of embodied emotions; psychoeducation re: fight, flight, freeze • S7: body boundaries practice/education • S8: awareness of effect of behaviour and communication on others • S9-10: identification and practice of teamwork and leadership skills	Measured by attendance. Number of sessions attended on average was 9.4 (SD=3.2, range 1-14).

Study	Inclusion and Exclusion Criteria	Interventionist Training/ Qualifications	Intervention Summary	Treatment engagement/ Fidelity
			• S11: consolidation of relaxation, self-regulation, and social skills • S12: reflection, farewells, planning for final session • S13: celebration and closure • S14: parents and children attended; completion of post-measures and group feedback; shared meal	
Brown et al., 2006.	*Inclusion criteria:* Children attending a specific school in a low-income area of New York City *Exclusion criteria:* Severe development-tal delays, psychotic disorders, or if dangerous to themselves or others. Children whose caregivers did not speak English - consent concerns.	Licensed clinical social worker supervised and trained by child clinical psychologist who specialised in treatment of trauma survivors	*Name:* School-based trauma intervention *Type:* Cognitive behavioural *Delivery:* School group and community individual; mental health clinician led *Structure:* Manualised; 10 to 24 children per group *Length:* 10-week group, 6-week individual (45 mins) Sessions *Group* • S1: intro and rules • S2: affect regulation and tripartite model • S3-8: strategies for relaxation, cognitive restructuring, anger management, problem solving • S9-10: safety plan, skill review, creation of a "toolbox" *Individual* • S1: review of skills taught in group • S2-5: gradual, imaginal exposure • S6: individualised safety plan and "toolbox" creation	Sessions were audio recorded and reviewed weekly and supervision was provided by a clinical psychologist.

Study	Inclusion and Exclusion Criteria	Interventionist Training/ Qualifications	Intervention Summary	Treatment engagement/ Fidelity
Carbonell & Parteleno-Barehmi, 1999.	**Inclusion criteria:** Experienced seven or more of 10 traumatic events: sexual abuse, murder of family member, violence/ abuse, caregiver drug or alcohol abuse, suicide of a family member, witnessing violence, an accident, a fire, eviction or homelessness, immigration under hardship **Exclusion criteria:** None identified	Clinical social worker trained in psychodrama, group work, and school-based services	*Name:* Psychodrama groups *Type:* Psychodrama *Delivery:* School; mental health clinician led *Structure:* Flexible; six children per group *Length:* 20 weeks (session length not provided) Sessions • *Warm-up:* build group cohesion and develop rules/norms. Introduce key ideas and techniques related to psychodrama. Emphasis on fun and creating a safe sharing environment. • *Action:* Re-enactment of the traumatising event using a variety of approaches (e.g., role reversal, scene setting, "empty chair," personification, chorus). Very flexible – child may want to act out all, part, or none of their traumatic event. Substitutions as needed. • *Sharing:* Discussing emotional responses to the *Action* phase as a group. Goal is to contain the activity.	Evaluation was qualitative, including notes kept by the facilitators and an exit interview conducted with each participant. Participants described building trust with other group members and a reduced sense of isolation.
De-luca et al. 1995.	**Inclusion criteria:** Females with one or more incident	Female graduate students from a clinical	*Name:* Group intervention (no name given) *Type:* Psychoeducation; social skills *Delivery:* Community (university health centre); mental health clinician led; cofacilitation	No information provided.

Study	Inclusion and Exclusion Criteria	Interventionist Training/ Qualifications	Intervention Summary	Treatment engagement/ Fidelity
	of intrafamilial sexual abuse, living in family settings that did not include the offenders, caregiver had consented to treatment **Exclusion criteria:** None identified	psychology programme	*Structure:* Flexible; six to eight children per group *Length:* Nine to 12 weeks (90 mins) Sessions *Targets:* Develop sense of safety and trust; improve identification of feelings; discuss family relationships, changes, and offender-related issues; legal concerns; improvement of self-esteem and body image; development of social skills; delivery of sex education and prevention strategies; and to manage issues around termination • *Open:* 15 minutes of *circle time* to share daily events; creation of nametags • *Core content:* 45 minutes of activities to address issues and themes related to sexual abuse (e.g., games about feelings, viewing psychoeducational movies, puppet-based roleplay of social skills, roleplaying aspects of court, sex education, writing a letter to the perpetrator, drawing life-sized self-portraits) • *End:* 30-minute wind-down involving diary, snack time, and opportunity to speak to therapist one-on-one	
Ehntholt et al., 2005.	**Inclusion criteria** Refugees or asylum-seekers from war-affected countries who experienced	Clinical psychology trainee supervised throughout by two clinical	*Name:* CBT group intervention (no name given) *Type:* Cognitive behavioural *Delivery:* School; mental health clinician led *Structure:* Manualised; maximum of eight children per group *Length:* 6-week group (60 mins)	No information provided.

Study	Inclusion and Exclusion Criteria	Interventionist Training/ Qualifications	Intervention Summary	Treatment engagement/ Fidelity
	traumatic events; specific teachers chose participants based informal assessment of exposure and resulting behaviour/ psychological issues **Exclusion criteria:** Less than conversational reading or speaking abilities in English; learning difficulties	psychologists who had developed the treatment manual	Sessions • S1: intro, rules, psychoeducation - stress reactions, safe place coping technique; homework - visualising safe space • S2: psychoeducation - intrusive images, dual-attention tasks (EMDR technique); homework - practicing safe space when visualising stressors • S3: bad dreams and restructuring, make dreamcatchers, sleep hygiene; homework - rehearse positive endings to bad dreams • S4: psychoeducation - arousal, relaxation techniques (e.g., progressive muscle relaxation), homework - relaxation and coping statements • S5: psychoeducation - avoidance, graded exposure and fear hierarchies; homework - imaginal exposure, drawing, writing about traumatic events • S6: future planning; homework - do enjoyable activities	
1. Exner-Cortens et al., 2020.	**Inclusion criteria:** Students available for the entire duration of the programme **Exclusion criteria:**	Teachers who had previously facilitated the programme and received a three-hour review training.	*Name:* Healthy Relationships Plus (HRP) *Type:* Psychoeducation; social skills *Delivery:* School or community; teacher led *Structure:* Manualised; maximum of 15 children per group *Length:* 15 sessions (two sessions per day, 60 mins each) Sessions	A significant majority of the youth involved attended most or all of the sessions (i.e., 94.3% attended seven or

Study	Inclusion and Exclusion Criteria	Interventionist Training/ Qualifications	Intervention Summary	Treatment engagement/ Fidelity
	Evaluated by school counsellor to be a risk to self or others		*Targets:* Focus on increasing social competency, developing mental health awareness, improving relationships, resisting peer pressure, and building self-efficacy in social problem solving. Session themes included positive mental health (e.g., stressors, symptoms, emotional regulation), substance misuse, and healthy relationships (e.g., boundaries, assertiveness, power dynamics)	eight treatment days). Engagement and activity checklists indicated high fidelity (i.e., 90%< implementation of activities)
Grijalva & Vasquez, 2021.	**Inclusion criteria:** In a residential programme for severe mental or behavioural issues during the three-month observation period **Exclusion criteria:** None identified.	A master's level social worker or equivalent with support from frontline residential staff. Staff had bachelor's degrees and were trained over three days (i.e., participation in the intervention themselves and personal reflection).	*Name:* KINNECT *Type:* Social skills; mindfulness; attachment; somatic *Delivery:* Residential; mental health clinician led *Structure:* Manualised; group size not stated *Length:* 20 sessions (90 mins) Sessions *Targets:* Framework based on safety, emotion, loss, and future (SELF) model (Bloom, 2003) and Classroom/ Community/Camp Based Intervention (CBI) model (Macy et al., 2003; Tol et al., 2008) • *Open:* Focus on building group cohesion (e.g., icebreaker) • *Core content:* Team building activities involving physical movement and social connection and are rooted in the theme of the day/week (e.g., social safety) • *End:* Calming activity (e.g., mindfulness; Tai Chi)	Voluntarily remaining in the treatment room was the standard for attendance monitoring. Data only analysed from those who attended all 20 intervention sessions. Fidelity was said to be monitored by the intervention development team

Study	Inclusion and Exclusion Criteria	Interventionist Training/ Qualifications	Intervention Summary	Treatment engagement/ Fidelity
				– method not specified.
Habib et al., 2013.	**Inclusion criteria:** Enrolled in a residential programme. **Exclusion criteria:** None identified	Psychologists or social workers who received four days of training by treatment developers.	*Name:* Structured Psychotherapy for Adolescents Responding to Chronic Stress (SPARCS) *Type:* Psychoeducation; mindfulness; social skills *Delivery:* Residential; mental health clinician led *Structure:* Manualised; group size not stated *Length:* 16 sessions (60 mins – one group met for 90 mins over 10 weeks) Sessions *Targets:* Emotional, social, and behavioral difficulties following violence exposure. The Four C's – Cultivating awareness (i.e., applying the Slow down, Orient, Self-check (SOS) approach; Russo, 2006), Coping effectively (e.g., identifying maladaptive strategies), Connecting with others, Creating meaning.	Treatment is manualised, but it is expected that clinicians will adapt based on the group. Bi-monthly facilitator consultation calls to support recruitment, assessment, engagement, retention, and implementation.
Hebert et al., 2010.	**Inclusion criteria:** Formally documented history of sexual abuse; guardian able to express themselves in French	Facilitators had been trained in the intervention through the CIASF and had a background in social science (e.g., sexology,	*Name:* Group intervention (no name provided) *Type:* Psychoeducation; psychodrama; art *Delivery:* Community; non-specialist professional led; cofacilitation *Structure:* Manualised; five to eight children per group *Length:* 14 sessions (120 mins); parents invited for first four sessions Sessions	Participants attended 93% of the sessions on average. Facilitators had weekly supervision meetings

Study	Inclusion and Exclusion Criteria	Interventionist Training/ Qualifications	Intervention Summary	Treatment engagement/ Fidelity
	Exclusion criteria: Severe developmental or conduct disorders contraindicating group work	social work, psychology)	*Targets:* Reduction of post-traumatic stress symptoms, fostering self-esteem, awareness and expression of emotions, identifying coping strategies, decrease social isolation, facilitating relationships with parents and peers, decreasing rates of revictimization. Can be delivered in Spanish and manual indicates that it can be adapted based on the population, though no specific guidance. *Activities:* Group discussions, storytelling, role-playing, skits, drawing, collage work, and watching videos. Teaching of emotional regulation and cognitive coping skills; sex education, abuse information, and prevention techniques.	with clinical supervisor or the director of the community sexual abuse organisation that offered the intervention.
Jaycox et al., 2009.	**Inclusion criteria:** Assessed on the Life Experiences Survey as having an experience of severe violence in the prior year and moderate or higher levels of PTSD symptoms endorsed on the Child PTSD Symptom Scale	Adapted the CBITS curriculum (Stein et al., 2003 below) to be used by those without specialised mental health training. Teachers with a variety of training and subject specialisation trained over two	*Name:* Support for Students Exposed to Trauma (SSET) *Type:* Cognitive behavioural *Delivery:* School; non-specialist professional led; cofacilitation *Structure:* Manualised; group size not stated *Length:* 10 sessions (length not stated) Sessions *Targets:* Adaptation of the CBITS curriculum (Stein et al., 2003 below). Teaching common reactions to stress or trauma, relaxation, cognitive coping strategies, tolerance for trauma reminders and anxiety, processing traumatic memories, social problem-solving.	Attendance monitored (M = 8, range 0-10). Three audio recorded sessions reviewed by three raters for cover-age of key elements out of three (M = 2.39). Quality assessed using seven items rated zero to three (M = 2.37). Weekly

Study	Inclusion and Exclusion Criteria	Interventionist Training/ Qualifications	Intervention Summary	Treatment engagement/ Fidelity
	Exclusion criteria: None identified.	days by the second author		supervision first year and biweekly during second.
Johnston, 2003.	**Inclusion criteria:** Children involved with family service agencies who witnessed or experienced violence or marital problems, lost a primary caregiver, had been exposed to abuse or neglect because of caregiver or household substance use issues **Exclusion criteria:** Direct sexual abuse, severe emotional disturbance, serious	A trained counselor and a student counselor usually cofacilitated. When short-staffed, only an experienced counsellor led at some sites.	*Name:* Children's Well-being Groups *Type:* Psychodrama; social skills; attachment *Delivery:* School and community; mental health clinician led; usually cofacilitated (one bilingual English/Spanish counsellor participated at each school site and groups may be delivered in either or both languages) *Structure:* Flexible; seven children per group *Length:* 10 sessions (90 mins) Sessions *Targets:* Awareness and revision of internal scripts. Development of interpersonal trust and reduction in hypervigilance. Increased ability to articulate feelings. *Activities:* Games, drawing, and charades to develop relationships. Recorded psychodrama roleplays enacted by the children are the core activity used to revise internalised scripts. Parents were invited to attend monthly or weekly psychoeducational groups (content not described)	Attendance averaged 85% (school site attendance was better (89%) than agency (80%)). Parent involvement was less than anticipated - about half of parents participated at least once.

Study	Inclusion and Exclusion Criteria	Interventionist Training/ Qualifications	Intervention Summary	Treatment engagement/ Fidelity
	behavioural issues, psychotic symptoms, or learning disability.			
Mendelson et al., 2015.	**Inclusion criteria:** Middle school students attending two Baltimore City Public Schools in disadvantaged neighborhoods. **Exclusion criteria:** None identified	A mental health clinician and young adult community member from a local employment training program. Facilitators received one day of programme training.	*Name:* Relax, be Aware, do a Personal rating (RAP) Club *Type:* Cognitive behavioural; mindfulness; social skills *Delivery:* School; mental health clinician led and community member cofacilitation *Structure:* Manualised; group size not stated *Length:* 12 sessions (45 mins biweekly over six weeks) Sessions *Targets:* Psychoeducation regarding stress, mindfulness to address emotion regulation (e.g., breathwork), CBT-based problem solving and communication skills • S1: intro • S2: psychoeducation - stress and the body • S3: mindfulness - emotional states • S4-5: mindfulness - approaches • S6-7: CBT - communication skills • S8-9: CBT - problem solving skills • S10: mindfulness/CBT - distress tolerance: distraction • S11: mindfulness - distress tolerance: self-soothing • S12: review/graduation	Weekly supervision by the first or second author.

Study	Inclusion and Exclusion Criteria	Interventionist Training/ Qualifications	Intervention Summary	Treatment engagement/ Fidelity
Misurell et al., 2011.	**Inclusion criteria:** Sexual abuse and/or sexually inappropriate behavior either disclosed or confirmed, child and caretaker completed pre- and posttreatment assessment batteries **Exclusion criteria:** Significant cognitive impairment, active psychotic symptoms, or severe behavioral problems that would interfere with ability to participate in treatment;	One clinical psychologist (the program director), one master's level clinician, and doctoral-level graduate students Each received two comprehensive training seminars covering research and clinical aspects of the program.	*Name:* Game-based Cognitive Behavioral Therapy (GB-CBT) *Type:* Cognitive behavioural; social skills; play *Delivery:* Community; mental health clinician led; facilitation involving three leaders *Structure:* Manualised; group size not stated *Length:* 12 sessions (90 mins) Sessions *Targets:* Games enhance group cohesion and provide opportunities to practice skills in a safe environment. *Open:* Introduction and development of rapport, emotional awareness and processing skills, self-regulation. *Core content:* Rule-governed, team-based games involving competition and incentivised participation. Roleplaying to teach and model skills. Psychoeducation and disclosure regarding sexual abuse. Trauma processing and learning coping and self-protection skills. Games are used to help support disclosure (e.g., nonverbal acknowledgement of experiences)	Data was only reported for children who attended a min of eight sessions. Program director was present during all sessions to ensure consistent implementation Facilitators received pre- and post-group supervision - specific cases were discussed and direct feedback provided.

Study	Inclusion and Exclusion Criteria	Interventionist Training/ Qualifications	Intervention Summary	Treatment engagement/ Fidelity
	revictimization during treatment			
O'Callaghan et al., 2013.	**Inclusion criteria:** Witnessing or experiencing rape or inappropriate sexual touch. **Exclusion criteria:** Intellectual disability, psychosis, or severe emotional and behavioral problems that prevented group participation	Local social workers who received the manualised intervention to study before each session	*Name:* Culturally-modified, trauma-focused CBT (no name given) *Type:* Cognitive behavioural *Delivery:* School or community; mental health clinician led (facilitators had the opportunity to recommend cultural adaptations to material before each session) *Structure:* Manualised; group size not stated *Length:* 15 sessions (120 mins) Sessions *Group* *Intro:* Rules, psychoeducation re: rape and trauma, safe space exercise *Core content:* Stress management (e.g., relaxation strategies, thought stopping), emotional recognition and regulation; cognitive coping and restructuring. *End:* Graduation ceremony involving family and select community members *Individual* Trauma narrative development over three sessions *Cultural adaptations* Local advice about reducing the risk of sexual violence (e.g., fetching firewood in pairs), use of familiar games and songs, social workers connecting with families to try to reduce	Caregiver attendance over the three sessions ranged from 82%to 100%. Lead researcher monitored each session to ensure fidelity Daily pre- and post-intervention meetings took place with the facilitators and lead authors to ensure content was understood, discuss cultural adaptations, and address concerns

Study	Inclusion and Exclusion Criteria	Interventionist Training/ Qualifications	Intervention Summary	Treatment engagement/ Fidelity
			stigma and rebuild relationships between participants and their communities *Caregiver sessions* For guardians, three sessions to discuss the intervention, provide psychoeducation about trauma, and supportive parenting practices	
Overbeek et al., 2014 (Intervention details pulled from Overbeek et al., 2012)	**Inclusion criteria:** Experienced intimate partner violence that stopped before the intervention **Exclusion:** Child or parent had cognitive impairment. Child psychiatric issues, or behavioural problems that impede functioning or endanger themselves or others	Mental health therapist and social worker who received one day of training by one of the intervention developers and followed a manual for every session.	*Name:* "It's My Turn Now!" (Translated from Dutch) *Type:* Psychoeducation; social skills *Delivery:* Community; mental health clinician led; cofacilitation; parallel sessions for parents *Structure:* Manualised; group size not stated *Length:* 9 sessions (90 mins) Sessions *Children* • S1: introduction and recognising emotions • S2-4: emotions – sadness, happiness, safe place, anger • S5-S6: conflict and loyalty; violence, and contact with the other parent • S7: secrets and safety • S8: the future • S9: saying goodbye and evaluation	Attendance rates for the children averaged 6.41, (SD = 2.13, range 0-9). 85.1% of the children participated in at least five sessions. Therapists participated in at least three peer supervision meetings throughout the intervention

Study	Inclusion and Exclusion Criteria	Interventionist Training/ Qualifications	Intervention Summary	Treatment engagement/ Fidelity
			Open: Children in a circle holding hands; greeting and feelings check. Story about interparental violence. Break for food. *Core content:* Activity related to weekly topic. *End:* Gross motor game to relieve tension. Reunite with parents and optional sharing. *Parents* Psychoeducation about interparental violence and impact on parenting; provision of parenting and communication skills training – roleplay, discussion, homework.	
Powell & Davis, 2019.	**Inclusion criteria:** Children attending an afterschool programme in rural Tennessee **Exclusion criteria:** None identified	The three counselors and one teacher previously trained in and facilitated a similar intervention. All held master's degrees related fields, had a three-day training, and were provided with materials and manuals.	*Name:* Journey of Hope (JoH) *Type:* Psychoeducation; social skills; art; play *Delivery:* School; mental health clinician and non-specialist professional (i.e., teacher) led; group facilitated *Structure:* Manualised; six to 10 children per group *Length:* Eight sessions (60 mins) Sessions *Targets:* Social-emotional skill building based on *social cognitive theory*, strengthen protective factors, positive coping, development of positive relationships. *Open:* Intro, parachute game *Core content:* Activities – literacy and critical thinking, cooperative games, art, music, and movement *End:* Closing circle; cooperative play • S1-S5: Emotions - sadness, fear, worry, and anger	Facilitators collected attendance and completed fidelity checklists after each session. Guidance was provided from a staff support who conducted monthly fidelity checks. Data was not provided in the write-up.

Study	Inclusion and Exclusion Criteria	Interventionist Training/ Qualifications	Intervention Summary	Treatment engagement/ Fidelity
			• S6: Bullying - understanding and coping • S7: Self esteem and taking action • S8: Me, my emotions, and my community	
Rivard et al, 2005. (Intervention details pulled from Rivard et al., 2003)	**Inclusion criteria:** All youth in selected residential treatment settings, between Feb and Aug 2001, for whom written consent was obtained from the respective guardian or professional representative **Exclusion criteria:** None identified	Staff that worked in the programs and who consented to participate in surveys and focus groups	*Name:* The Sanctuary Model *Type:* Psychoeducation; social skills; attachment *Delivery:* Residential; non-specialist professional led *Structure:* Manualised; group size not stated *Length:* 12 sessions (length not stated) Sessions *Targets:* Four stages - safety (i.e., self and environment), affect modulation, grieving, and empowerment. Views community as the most influential treatment factor and emphasises that treatment should be democratic. • S1-2: trauma theory psychoeducation • S3: tools that help people build a better future – overview of a framework for recovery • S4-5: safety (i.e., physical, psychological, and moral safety) • S6: safety and boundaries - physical and emotional • S7-8: emotions (i.e., recognition, identification, and management) • S9-10: loss - grieving, healing • S11-12: future (i.e., decision-making, safety)	Progress documented through consultants' process notes and periodic reviews of the implementation checklist, which contained a list of observable criteria. Across the eight units, scores ranged from 66% to 92%, with a mean of 78%.

Study	Inclusion and Exclusion Criteria	Interventionist Training/ Qualifications	Intervention Summary	Treatment engagement/ Fidelity
Runyon et al, 2009.	**Inclusion** Referred from a university medical school-based service that focused on children who were at risk or had a history of physical abuse. **Exclusion** Parent or child suffering from cognitive disability, parent having been the perpetrator of sexual abuse, presence of psychotic symptoms, or severe psychological problems requiring inpatient intervention (e.g.,	Therapists who had two full days of training involving dyads, modeling of techniques, role-plays, and performance feedback.	*Name:* Combined Parent-Child CBT (CPC-CBT) *Type:* Cognitive behavioural *Delivery:* Community; mental health clinician led; cofacilitation Parent and child groups run concurrently for the first part of the session. Joint dyadic time with the child (for parent coaching purposes) occurs at the end of each session. *Structure:* Manualised; group size not stated *Length:* 16 sessions (120 mins) Sessions *Targets:* Reduce physically abusive episodes, address unrealistic expectations and misinterpretations of children's behaviors, increase parents' emotional regulation and nonviolent child management skills, increase positive interactions, and improve children's emotional adjustment *Child* S1-2: introductions, psychoeducation, affect regulation S3-4: cognitive coping and assertiveness S5-7: cognitive coping, anger-management, assertiveness, general safety S8-10: review and application of skills; personal safety plan; perspective-taking; problem-solving; letter of praise S11-14: develop trauma narrative S14-16: joint trauma narrative w parent *Parent*	Ongoing case consultation as facilitator leads a minimum of one full treatment program.

Study	Inclusion and Exclusion Criteria	Interventionist Training/ Qualifications	Intervention Summary	Treatment engagement/ Fidelity
	active suicide risk).		S1-2: intros; disclosure and antecedent/behavior/ consequence of incident; motivational interviewing; commitment to no violence S3-4: psychoeducation re: abuse, intergenerational violence. Intro coping skills and positive reinforcement. S5-7: coping continued; expectation setting; stress & anger management; personal safety plan; dyadic training w child S8-10: review and application of skills; dyadic training w child S11-14: review, clarification, dyadic training w child S14-16: see above	
Runyon et al., 2010.	**Inclusion:** Abuse reported within the last four months or indicated in questionnaire responses. Medications, if taken, stable for at least 1 month prior and not receiving therapy for abuse outside of the study.	Doctoral-level psychologists and master-level social workers received two days of didactic training. Conducted a pilot treatment group under supervision of the first two authors. Trainees served as co-facilitators.	*Name:* Combined Parent-Child CBT (CPC-CBT) *Type:* Cognitive behavioural *Delivery:* Community; mental health clinician led, cofacilitation *Structure:* Manualised; group size not stated *Length:* 16 sessions (120 mins) Sessions *SEE ABOVE FOR BREAKDOWN* *Children* Abuse education, identifying and expressing emotions, cognitive coping, anger management, social problem-solving. *Parents*	The investigators observed three randomly selected sessions over each 16-week group to monitor fidelity Analysis restricted to children and parents who completed three or more sessions

Study	Inclusion and Exclusion Criteria	Interventionist Training/ Qualifications	Intervention Summary	Treatment engagement/ Fidelity
	Exclusion criteria: Significant impairment from active psychotic or substance use disorder; offending parent and child unwilling; pervasive developmental disorder (e.g., autism); parent-perpetrated sexual abuse.		Psychoeducation (e.g., intergenerational transmission of violence, types of abuse, alternative discipline strategies). *Both* Modeling, problem-solving, emotional regulation, role-plays, behavioral rehearsal, praise, feedback, and homework. Integrated sessions to practice behaviour management strategies with coaching from facilitator More time allotted to parent-child section based on need (i.e., apx. 15 minutes in S1–6; 30–40 minutes in S7–11 and 60–75 minutes in S12–16).	
Salloum & Overstreet, 2012.	**Inclusion criteria:** Exposure to violence, hurricane-related stressors, or death; and a moderate level of PTSD symptoms indicated by score	Mental health clinicians who received a two-day, nine-hour training from the first author about study protocol procedures, theoretical rationale of	*Name:* Grief and Trauma Intervention with coping skills and trauma narrative (GTI-CN) or coping skills only (GTI-C) *Type:* Cognitive behavioural; art *Delivery:* School; mental health clinician led *Structure:* Manualised; group size not stated *Length:* 10 sessions (50-60 mins) Sessions One individual and one parent session (psychoeducation occurring at the child's home, school, or where convenient).	Mean number of sessions attended was 10.61 After each session, clinicians completed fidelity checklists for each child - 43 and 39 topics for the GTI-CN and

Study	Inclusion and Exclusion Criteria	Interventionist Training/ Qualifications	Intervention Summary	Treatment engagement/ Fidelity
	on the UCLA-PTSD index **Exclusion criteria**: Suicidal ideation, as indicated through screening questionnaire, or not clinically appropriate for group participation as determined by the evaluator.	treatments, group development theory, and self care. They also attended an additional three-hour training to review the treatment manuals used.	*Targets:* Resilience and safety, restorative retelling, and reconnecting *GCT-CN* S1-5: anger management, feelings, relaxation, identifying supportive adults, enjoyable activities, grief and trauma psychoeducation, coping with anniversaries and holidays, spirituality and beliefs, dreams, safety. Begin trauma narrative development. S6: restorative retelling of trauma narrative. S7-10: Review of positive aspects of life and progress; visions for the future; restorative retelling and reconnecting; supportive people; discuss memories; completion of own story book *GTI-C* - same skills and topics of resilience and safety and reconnection as described in GTI-CN, except for connection with the positive memories of the deceased and restorative retelling topics. Completed a coping book instead of a trauma narrative.	GTI-C groups, respectively, of which the GTI-CN group covered 95.69% and the GTI-C, 97.12%. The GTI-CN and GTI-C clinicians were supervised separately twice a week.
Sibinga et al., 2016.	**Inclusion criteria:** All students in either of two Baltimore schools selected during the 2012-	Two experienced, certified mindfulness-based stress reduction (MBSR)	*Name:* Mindfulness-Based Stress Reduction (MBSR) *Type:* Psychoeducation; mindfulness *Delivery:* School; mental health clinician and non-specialist professional led; cofacilitation *Structure:* Flexible; group size not stated *Length:* 12 sessions (length not stated)	Students attended an average of 80% (Range 74%–85%) of sessions Instructors met regularly to

Study	Inclusion and Exclusion Criteria	Interventionist Training/ Qualifications	Intervention Summary	Treatment engagement/ Fidelity
	2013 academic year. **Exclusion criteria:** None identified	instructors with more than 10 years' experience teaching mindfulness	Sessions *Targets:* Three components - material for dyads related to mindfulness meditation, yoga, and the mind-body connection; experiential practice of meditations and body awareness during meetings; group discussion of application of mindfulness to problem-solving in everyday life.	discuss and alter implementation.
Springer et al., 2012	**Inclusion criteria**: Sexual abuse and/or sexually inappropriate behavior disclosed or confirmed and completion of clinical measures at two timepoints **Exclusion criteria:** Developmental, cognitive, or behavioural limitations that would impede functioning among same-aged	One supervising psychologist, master's level clinicians, and doctoral-level graduate students. All received two comprehensive training seminars facilitated by the co-authors and covering research and clinical aspects of the program.	*Name:* Game-based Cognitive Behavioral Therapy (GB-CBT) *Type:* Cognitive behavioural; social skills; play *Delivery:* Community; mental health clinician led; facilitation involving three leaders *Structure:* Manualised; group size not stated *Length:* 12 sessions (90 mins) Sessions *Targets* and *structure* summarised above (Misurell et al., 2011). • S1: Conversation building • S2: Personal space and boundaries • S3: Emotional expression skills • S4: Linking feelings to experience • S5: Anger/Stress management • S6: Child abuse psychoeducation • S7-8: Passive disclosure I & II • S9: Active disclosure • S10: Personal safety skills	Data only analysed for those who attended eight out of 12 sessions. No fidelity evaluation information provided.

Study	Inclusion and Exclusion Criteria	Interventionist Training/ Qualifications	Intervention Summary	Treatment engagement/ Fidelity
	peers. Psychotic symptoms or unwillingness to participate in group activities. If presenting issues were determined unrelated to the abuse experience (e.g., ADHD, bereavement).		• S11: Asking for help • S12: Coping with abuse	
Stein et al., 2003.	**Inclusion criteria:** Substantial exposure to violence (i.e., victim or witness of knife or gun violence; exposure to three or more violent events) and symptoms of PTSD in the clinical range. Symptoms were related to violence	Psychiatric social workers.	*Name:* Cognitive-Behavioral Intervention for Trauma in Schools (CBITS) *Type:* Cognitive behavioural *Delivery:* School; mental health clinician led *Structure:* Manualised; five to eight children per group *Length:* 10 sessions (length not stated) Sessions *Targets:* Designed for use with inner-city, multi-cultural populations. Address PTSD, anxiety, and depression symptoms through games, worksheets, and psychoeducation. *Group* • S1: Intro, confidentiality, group procedure, explanation of treatment, discussion of reason for participating. • S2: Psychoeducation - common stress/trauma reactions; relaxation training	Randomly selected recordings of 10 sessions were reviewed and rated for completion and quality by a clinician not connected to the project. Completion of required components varied from 67-

Study	Inclusion and Exclusion Criteria	Interventionist Training/ Qualifications	Intervention Summary	Treatment engagement/ Fidelity
	exposure that they were willing to discuss in a group. **Exclusion criteria:** Too disruptive to participate in group therapy in the opinion of the school counsellor.		• S3-4: Link between thoughts and feelings, fear thermometer, combating negative thoughts • S5: Avoidance and coping - intro to real life exposures, construction of fear hierarchy, alternative coping strategies • S6 & 7: Exposure to stress or trauma memory through imagination, drawing, and/or writing • S8-9: Intro to and practice of social problem solving • S10: Relapse prevention/graduation *Individual* One session between S2 & 6 to do imaginal exposure with the traumatic event	100% across sessions with a mean completion rate of 96%. A seven-item quality measure indicated moderate-high performance across sessions.
Tol et al., 2008.	**Inclusion criteria:** Children from the Poso district of Central Sulawesi, Indonesia who were assessed as having witnessed a violent event and reaching a clinical cut-off for PTSD symptoms.	Community members who had at least a high school diploma and were 18 or older. Selected based on an assessment of their social skills using roleplays. Most had past experience as	*Name:* CBT group (no name provided) *Type:* Cognitive behavioural; psychodrama; art; play; *Delivery:* School; community member led *Structure:* Manualised; apx 15 children per group *Length:* 15 sessions (length not stated) Sessions • S1-3: psychoeducation - information, safety, and control • S4-6: stabilization, awareness, and self-esteem. • S7-12: trauma narrative - voluntary sharing of trauma stories through art and drama games • S13-15: reconnecting the child and group to social context using resiliency-focused activities	Research assessors judged fidelity by scoring 14, randomly selected, video-taped sessions and 25 in-person sessions, with a structured checklist re: the presence or absence of activities.

Study	Inclusion and Exclusion Criteria	Interventionist Training/ Qualifications	Intervention Summary	Treatment engagement/ Fidelity
	Exclusion criteria: Lack of suitability for group participation (e.g., violence, could not follow instructions) or psychiatric issues (e.g., mutism, cognitive disabilities, panic or phobic disorders, psychosis)	volunteers for human rights organisations. Received a two-week training program.		Average score was 89.76%
Tol et al., 2012.	**Inclusion criteria:** Children in randomly selected schools in northern Sri Lanka Sept 2007 - March 2008 were screened for risk factors (e.g., exposure to war, psychological symptoms) and an	Had at least a high school diploma and were chosen for their interest and ability in working with children, demonstrated in role-plays and interviews. Were trained	*Name:* Mental health intervention (no formal title) *Type:* Cognitive behavioural; psychodrama; art; play *Delivery:* School; community member led *Structure:* Manualised; apx 15 children per group *Length:* 15 sessions (length not stated) Sessions *Open:* Movement, song, dance – frequent use of a parachute during these activities. *Core Content:* Activity based on main theme. Cooperative game. *End:* Movement, song, dance.	No attendance or evaluation information of this kind provided.

Study	Inclusion and Exclusion Criteria	Interventionist Training/ Qualifications	Intervention Summary	Treatment engagement/ Fidelity
	absence of protective factors. Inclusion threshold unclear. **Exclusion criteria:** None identified	and supervised implementing the intervention for one year prior to the study	See above for session summaries	
Tourigny et al., 2005.	**Inclusion criteria:** Adolescent girls had experienced contact-based sexual abuse, ability to express feelings among peers, and voluntary participation. **Exclusion criteria:** Severe mental health impairment contraindicating group therapy or inability to	Minimum of an undergraduate in social work, psychology, or sexology. No information about training provided.	*Name:* Group therapy for sexually abused adolescent girls *Type:* Psychoeducational *Delivery:* Community; non-specialist professional led; cofacilitation (one male and one female) *Structure:* Manualised; six to eight children per group *Length:* 20 sessions (120 mins) Sessions *Targets:* Cycle of abuse, consequences, disclosure, relationship with perpetrator, sexuality, prevention of revictimization, healthy relationship building. Aim to reduce isolation and other consequences of abuse. *Activities:* Group discussions, personal stories, individual and group exercises.	Attendance varied from 65% to 100%. (M=17.3 or apx 90%; range 13-20) Only 10% of participants dropped out. Practitioners met weekly to prepare and received director supervision if problems arose.

Study	Inclusion and Exclusion Criteria	Interventionist Training/ Qualifications	Intervention Summary	Treatment engagement/ Fidelity
	communicate in French.			

APPENDIX D: STUDY ONE DELPHI INFORMATION AND MATERIALS

Table D.1

Organisations that Agreed to Advertise Delphi Info to Members

Organisation	Type	Advertising Medium
Alberta College of Social Workers	Regulatory	Email
American School Counsellor Association	Fraternal	Email/Website
Association of Psychologists of Newfoundland and Labrador	Fraternal	Email
Association of Psychologists of Nova Scotia	Fraternal	Website
Association of Psychologists of Quebec	Fraternal	Email
British Association for Counselling and Psychotherapy	Fraternal/ Regulatory	Website
British Association of Social Workers	Fraternal	WhatsApp group
British Columbia Association of Social Workers	Fraternal	Website
District of Columbia Psychological Association	Fraternal	Email
Iowa Psychological Association	Fraternal	Email
Maine Psychological Association	Fraternal	Email
New Brunswick Association of Social Workers	Fraternal/ Regulatory	Email
Oklahoma Psychological Association	Fraternal	Email
Ordre des Psychologues du Quebec	Regulatory	Emailed/Website
Psychology Association of Prince Edward Island	Fraternal	Email
Psychology Association of Saskatchewan	Fraternal	Emailed/Website
Saskatchewan Association of Social Workers	Fraternal/ Regulatory	Email
South Carolina Psychological Association	Fraternal	Email
Tennessee Psychology Association	Fraternal	Website

Email Invitation

Hello,

My name is Lisa Gaylor, and I am a PhD student with the University of Central Lancashire (UCLan).

I am currently looking to recruit mental health practitioners and researchers who have expertise in the treatment of externalising behaviour with cultural minority children and youth with a history of adverse childhood experiences (ACEs). *Externalising* in this study refers to observable behaviours such as aggression, rule-breaking, or violence. The purpose is to better understand the state of current theory and practice in mental health care for this unique population.

You are being contacted as a potential participant based on a review of your current research or potential areas of practice. Ideal participants are researchers who have published at least two papers related to and/or practitioners with competency and recent experience in treating behavioural concerns with ACE-affected, cultural minority youth. If you know of any colleagues who may also be qualified and interested in participating, please forward them this information.

This study involves a series of online questionnaires administered in three rounds over approximately 13 weeks. Each round is expected to take no more than 20 minutes to complete. The initial round will involve a series of open-ended questions about terminology, theories, assessment, treatment, and barriers to practice. For round two, feedback from round one will be synthesized and you will be asked to indicate the extent to which you agree with the conclusions. Finally, round three will provide the opportunity to review your own responses alongside those of your peers and indicate whether you wish to amend your answers.

There will be three weeks permitted to complete each round with a two-week break between them. We respectfully request that participants partake in all three rounds.

To facilitate contact and access to the questionnaires at each round, you will be asked to provide an email address. However, contact information will be stored separately from your survey responses to ensure anonymity.

Please see the attached information sheet for more details about this study. If you would like to participate, please follow the link below to provide an email address where you can be contacted:

[link here]

If you have any questions or would like more information, please contact the lead researcher at llegaylor@uclan.ac.uk. Alternatively, you may contact my supervisor, Professor Jane Ireland: JLIreland1@uclan.ac.uk.

Thank you

Online Advertisement

Ph.D. student currently recruiting mental health practitioners and researchers who have expertise in the treatment of externalising behaviour with cultural minority children and youth with a history of adverse childhood experiences (ACEs) to participate in a Delphi study. The purpose is to better understand the state of current theory and practice in mental health care for this unique population. For more information, please follow this link to view the full participant information sheet: (link)

Participant Information Sheet

Title: A Delphi survey of current practices in the treatment of externalising behaviour in ACE-affected, cultural minority children and youth

You have been invited to be a Delphi panel member in this study looking at the treatment of behavioural issues in ACE-affected, cultural minority young people. Participation is completely voluntary. To inform your decision, it is important that you understand what the study will involve and why it is being conducted. Please read this sheet carefully.

What is the purpose of the study?

The goal of this study is to survey current practices in treating externalising behaviour in ACE-affected young people from cultural minority groups.

What will my participation involve?

You will be asked to complete a three-round series of questionnaires over approximately 13 weeks. You will first be asked to consent to participate and to provide an email address where the survey link can be sent. Each survey is anticipated to take around 20 minutes to complete.

In the first round, the questions ask about the terminology, theories, and conceptual frameworks that inform your work; components of and barriers to effective assessments and interventions; and the impact of your own cultural background. Round two will consist of revisiting these topics and rating the extent to which you agree with the summarised

findings from round one. The final round will provide an opportunity to review your own responses from round two alongside those of the other participants, and to reconfirm your own opinion in light of the findings.

We respectfully request that participants complete all three rounds of the study. At the start of each, you will receive an email with a link to the online survey. The questionnaire will be open for responses for three weeks with a two-week break between rounds. During each round, after two weeks, you will be sent a reminder to complete the questionnaire.

Why have I been chosen?

Researchers and clinicians with expertise in the treatment of trauma and externalising behaviour in young people are being asked to participate. Potential participants may be psychologists, social workers, clinical counsellors, behaviour consultants, or academics.

Do I have to take part?

There is no obligation to participate. If you consent to take part, you can decide to withdraw from the study at any time. However, because the Delphi method requires anonymity, using only a participant number separate from identifying data, any previously collected responses will still be included in the analysis and any future dissemination of results.

What are the possible benefits of taking part?

Participation will help expand our understanding of current practice when working to address behavioural issues with young people from cultural minority backgrounds who may be affected by trauma. As participants are likely to come from a variety of backgrounds,

this study provides the opportunity for knowledge-sharing among disciplines. You may learn about theories and approaches that you had not previously heard of or considered in your own work. Further, the findings may inform future research and development of more effective interventions for an important, at-risk population.

What are the possible risks of taking part?

This study will ask you to reflect on topics related to trauma and cultural minority status, both of which can have distressing associations for some people. You are able to withdraw from the study at any time. If you feel the need for support following your participation in this study, consider connecting with the following organisations (organised by country):

Canadian resources

Wellness Together Canada

Free confidential mental health and substance use support available in English and French.

24-hr helpline: 1-866-585-0445

Website: https://www.wellnesstogether.ca/

Hope for Wellness

Emotional support and community referrals for Indigenous peoples across Canada available in English, French, Cree, Ojibway, and Inuktitut

24-hr helpline: 1-855-242-3310

Web chat available online: https://www.hopeforwellness.ca/

UK resources

Samaritans

Confidential mental health support

24-hr helpline: 116 123

Email: jo@samaritans.org

Website: https://www.samaritans.org/

Project5

Free wellbeing support for health/care workers

Email: support@project5.org

Website: https://www.project5.org/

American resources

The 988 Lifeline

A national network of crisis centres providing confidential mental health support in English and Spanish

24-hr helpline: 988 OR 1-800-273-TALK (8255)

Website: https://988lifeline.org/

Confidentiality

You will be assigned an ID number through the online survey platform to maintain anonymity, so that responses cannot be connected back to any one participant. Group responses will be summarised and presented to panel members but individual responses will not be shared. You are required to provide an email address so that survey links can be sent to you throughout the 13-week study period. If you are a clinician, you will be asked to confirm that you are or were previously registered with a regulatory body for the purposes of practicing as a mental health professional. This information will be kept in a secure, password protected computer database, accessible only to the lead researcher. Further information can be found by visiting https://www.uclan.ac.uk/data_protection/privacy-notice-research-participants.php.

How can I take part?

You will be asked to provide an email address and, if you are a clinician, whether you are registered with a regulatory body. To confirm your interest in participating, please follow this link: https://uclan.eu.qualtrics.com/jfe/form/SV_81EIbMcyZ4yWow6. After this information has been collected, you will receive an email from the lead researcher on **November 15, 2022** with a link to the first online questionnaire.

Contacts

To express any concerns about this study or to acquire further information, please contact the research team using the details below. If you would like more information about the ethical approval process, or to discuss concerns with the ethics board directly, their office can be reached at OfficerForEthics@uclan.ac.uk. Please include the title of the study and the names of the research team members in any correspondence of this kind.

Student Researcher

Lisa Gaylor (llegaylor@uclan.ac.uk)

PhD Student

University of Central Lancashire, Preston, UK

Research Supervisors

Professor Jane Ireland (JLIreland1@uclan.ac.uk)

School of Psychology and Computer Science, University of Central Lancashire, UK

Dr. Simon Chu (SChu@uclan.ac.uk)

School of Psychology and Computer Science, University of Central Lancashire, UK

Consent Form (Electronic)

Title: **A Delphi survey of current practices in the treatment of externalising behaviour in ACE-affected, cultural minority children and youth**

1. I have read the information sheet for the above study and understand the information provided. ☐
2. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily. ☐
3. I understand that my participation is voluntary and that I am free to withdraw at any point during the study, without giving any reason. ☐
4. I understand that if I chose to withdraw, it may not be possible for my data collected prior to this to be removed and excluded from the study. ☐
5. I understand that my data, including my email address, will be held electronically by the lead researcher in a secure password-protected environment. ☐
6. I understand that deidentified data collected throughout this study may be disseminated in a written form to research participants, in public or academic presentations, at conferences, or in peer-reviewed journals. ☐
7. I agree to all the above statements and consent to participating in the study ☐

Delphi Round One Questionnaire

The questions in this survey contain *key terms* that may be interpreted differently across jurisdictions and disciplines. The intended meanings are outlined here for your reference:

***Cultural*:** Pertaining to the unique worldview, traditions, customs, and behavioural norms of a given group of people.

***Externalizing behaviour*:** As defined by the American Psychological Association, behaviours "characterized primarily by actions in the external world, such as acting out, antisocial behavior, hostility, and aggression."

ACE-exposed: Referring to young people who are known to have had adverse childhood experiences (ACEs) including forms of neglect, abuse, and/or household dysfunction.

Young people: Primary and secondary school-aged children between four and 21 years of age

What is your profession?	i.	Researcher/Academic
	ii.	Social worker
	iii.	Psychologist
	iv.	Psychiatrist
	v.	Counsellor/Psychotherapist
	vi.	Other (**required** to comment)
Q1a.	Is there anything you would change in the provided definition of *externalizing behaviour*? (Yes/No) (If yes, optional comment)	
Q1b.	Is there anything you would change in the provided definition of *cultural*? (Yes/No) (If yes, optional comment)	

Q2a.	There are numerous theories and conceptual frameworks that may inform the assessment and treatment of ACEs and externalizing behaviours in young people. Some of these are listed below: i. Theory of Planned Behavior (Ajzen) ii. Social Information Processing Theory (Dodge & Crick) iii. Cognitive Behavioural Theory (Beck) iv. Developmental Trauma (van der Kolk) v. Attachment Theory (Bowlby, Ainsworth) vi. Social Cognitive/Learning Theory (Bandura) vii. Emotional Processing Theory (Foa) viii. Adaptive Information Processing Theory (Shapiro) ix. Biosocial Model (Linehan) Which do you find to be the *most* relevant to your own work? (choose a maximum of three)
Q2b.	Which do you find to be the *least* relevant to your own work? (choose a maximum of three)
Q2c.	If not included above, which theories or conceptual frameworks *most* inform your approach to assessing or treating externalizing behaviours in ACE-exposed young people?
Q2d.	Does the cultural background of your client affect which conceptual frameworks or theories you refer to? (Yes/No) (IF yes) Which theories or frameworks do you most often refer to in these cases?
Q3a.	The following are potential ways that cultural differences can be considered for when assessing externalizing behaviours among ACE-exposed young people: i. Open discussion with the young person and/or their caregiver about their cultural background ii. Researching relevant cultural norms prior to the assessment iii. Referring the young person to a practitioner of the same cultural background iv. Access to language supports when needed (e.g., an

	interpreter; translated questionnaires) v. Use of behavioural measures that have been normed with people from similar backgrounds vi. Consultation with someone who has expertise or experience with the young person's cultural background (e.g., asking about behavioural expectations) What are the *most* effective? (choose a maximum of three)
Q3b.	What are the *least* effective? (choose a maximum of three
Q3c.	What, if anything, would you add, remove, or change from this list?
Q4a.	The following are possible components of interventions for reducing externalising behaviour in ACE-exposed young people: i. Dyadic sessions involving caregiver and young person ii. Mindfulness and relaxation training (e.g., meditation, grounding, breathwork) iii. Psychoeducation focused on biopsychosocial responses to trauma iv. Development of a trauma narrative v. Imaginal exposure vi. Social problem-solving skill development and practice vii. Concurrent parenting/caregiver groups viii. Peer mentoring What, if anything, would you add, remove, or change from this list?
Q4b.	What do you consider to be essential components of these interventions? (choose a maximum of three with option to include their own responses from question (a))
Q4c.	Would your list of essential components change when working with young people of cultural backgrounds different from your own? (Yes/No) (IF yes) what would be added, removed, or changed?

Q5. The following are potential barriers to delivering effective treatment when working with ACE-exposed young people from minority cultural groups who are demonstrating externalizing behaviours:

i. Historical trauma related to mental health and medical services
ii. Lack of accessible transportation
iii. Inadequate access to complementary services (e.g., poor availability of paediatricians, child psychiatrists, etc.)
iv. Lack of culturally appropriate supports offered locally (e.g., traditional medicines or healing practices)
v. Expressive and receptive language differences
vi. Poor literacy in the dominant language
vii. Transience/No fixed address
viii. Finances/Poverty

What, if anything, would you add, remove, or change from this list?

Q6. How does the practitioner's own cultural identity impact the effectiveness of a behavioural intervention for ACE-exposed children and youth of other cultural backgrounds, if at all?

Q7. Are there any important factors or considerations when assessing or treating ACE-exposed young people from culturally diverse backgrounds that were not covered by the questions above?

Round 2 Sample

Q1. The following is a revised definition of *externalising behaviour* based on Round 1 responses:

Definition

How much do you agree with this definition?

1	2	3	4	5	6	7	8	9
Disagree		Somewhat		Neither agree Nor disagree		Mostly agree		Completely agree

Q2. The following theories were identified in Round 1 as being *most* relevant to the work of clinicians and practitioners working with trauma-impacted young people demonstrating externalising behaviour. How much do you agree?

x. Theory of Planned Behavior (Ajzen)
xi. Social Information Processing Theory (Dodge & Crick)
xii. Cognitive Behavioural Theory (Beck)
xiii. Developmental Trauma (van der Kolk)
xiv. Attachment Theory (Bowlby, Ainsworth)
xv. Social Cognitive/Learning Theory (Bandura)
xvi. Emotional Processing Theory (Foa)
xvii. Adaptive Information Processing Theory (Shapiro)
xviii. Biosocial Model (Linehan)

1	2	3	4	5	6	7	8	9
Disagree Completely		Somewhat		Neither agree Nor disagree		Mostly agree		agree

Round 3 Sample

Q1. In Round 2, you responded to the following definition of *externalising behaviour*:

Definition

Other (clinicians/researchers) responded (#)
You responded (#)

Would you like to change your response? **(Y/N)**
IF YES scale appears again.

1	2	3	4	5	6	7	8	9
Disagree Completely		Somewhat		Neither agree Nor disagree		Mostly agree		agree

Q2. In Round 2, you indicated your level of agreement that the following list of theories were *most* relevant to the work of clinicians and practitioners working with trauma-impacted young people demonstrating externalising behaviour:

i. Theory of Planned Behavior (Ajzen)
ii. Social Information Processing Theory (Dodge & Crick)
iii. Cognitive Behavioural Theory (Beck)

iv. Developmental Trauma (van der Kolk)
v. Attachment Theory (Bowlby, Ainsworth)
vi. Social Cognitive/Learning Theory (Bandura)
vii. Emotional Processing Theory (Foa)
viii. Adaptive Information Processing Theory (Shapiro)
ix. Biosocial Model (Linehan)

Other (clinicians/researchers) responded (#)
You responded (#)

Would you like to change your response? **(Y/N)**
IF YES scale appears again.

1	2	3	4	5	6	7	8	9
Disagree Completely		Somewhat		Neither agree Nor disagree		Mostly agree		agree

Debrief Sheet (Electronic)

Title: A Delphi survey of current practices in the treatment of externalising behaviour in ACE-affected, cultural minority children and youth

Thank you for your participation in this study.

The goal of this study is to survey current practices in treating externalising behaviour in ACE-affected young people from cultural minority groups. The present emphasis on trauma-informed, culturally-sensitive approaches to mental health and behavioural treatment is a fairly recent phenomenon. Responses provided will contribute to a better understanding of the application of these concepts in practice. This is important for identifying key factors that may guide the development of future research and interventions.

The data collected throughout this study will be kept confidential and you will not be identifiable based on your responses. Given the anonymity of each participant's responses to the Delphi, it is not possible to remove your individual data following study completion.

It is possible that participation in this study may have brought up difficult emotions related to personal experiences working with vulnerable populations. Please consider utilising the following resources (organised by country) should you feel the need for support at this time:

Canadian resources

Wellness Together Canada

Free confidential mental health and substance use support available in English and French.

24-hr helpline: 1-866-585-0445

Website: https://www.wellnesstogether.ca/

Hope for Wellness

Emotional support and community referrals for Indigenous peoples across Canada available in English, French, Cree, Ojibway, and Inuktitut

24-hr helpline: 1-855-242-3310

Web chat available online: https://www.hopeforwellness.ca/

UK resources

Samaritans

Confidential mental health support

24-hr helpline: 116 123

Email: jo@samaritans.org

Website: https://www.samaritans.org/

Project5

Free wellbeing support for health/care workers

Email: support@project5.org

Website: https://www.project5.org/

American resources

The 988 Lifeline

A national network of crisis centres providing confidential mental health support in English and Spanish

24-hr helpline: 988 OR 1-800-273-TALK (8255)

Website: https://988lifeline.org/

A summary of the results of this study will be available, upon request, following completion. If you have any further questions or concerns please feel free to contact a member of the research team using the details below.

This study was reviewed and approved by the University of Central Lancashire (UCLan) Science Ethics Committee. For details on the ethical approval process, or to discuss concerns with the ethics board directly, their office can be reached at OfficerForEthics@uclan.ac.uk. Please include the title of the study and the names of the research team members in any correspondence of this kind.

Student Researcher
Lisa Gaylor (llegaylor@uclan.ac.uk)
PhD Student
University of Central Lancashire, Preston, UK

Research Supervisors
Professor Jane Ireland (JLIreland1@uclan.ac.uk)
School of Psychology and Computer Science, University of Central Lancashire, UK

Dr. Simon Chu (SChu@uclan.ac.uk)
School of Psychology and Computer Science, University of Central Lancashire, UK

APPENDIX E: STUDY TWO INTERVIEW MATERIALS AND TRANSCRIPTS

Interview Protocol

1. Psychologists usually assess the behaviour of young people using interviews with parents and teachers, questionnaires, and classroom observations. Is there anything you would change about how behaviour is assessed?
    a. (Optional probe) What do you think might be missed by the assessments?
2. Is there anything you can think of that keeps families and young people in [community] from working with psychologists or other mental health professionals?
3. Potentially traumatic experiences have been shown to increase the chances of disruptive behaviour in young people. Examples might be divorce or separation from parents, having a family member with an addiction or mental health issue, neglect, abuse, or seeing violence. Are these things that you think of as traumatic?
4. Are there any possible sources of trauma that you think are important for psychologists to know about when working with young people in [community]?
    a. If yes, can you please share general examples (no specific details)?
5. What kinds of local activities, traditional practices, or resources might be helpful for young people in [community] who are affected by something traumatic?
6. Are there any trauma supports that you think are important but are not available locally?
7. What kinds of local activities, traditional practices, or resources might be helpful for young people in [community] who are having behavioural difficulties?
8. Are there any behaviour supports that you think are important but are not available locally?

Table E.1

Transcription Conventions Applied

Symbol	Meaning
(.), (..), (…), etc.	Pauses in speech with each /. / representing an additional 2 seconds (apx.)
(words)	Used to designate words or phrases that are overlapping or interjected
[words]	Clarification of meaning or removal of identifying information
[…]	Removal of a section of speech to enhance clarity
(Unintelligible)	Speech that could not be reliably transcribed
?	Questioning intonation

Note. Adapted from Jefferson (2004)

Interview Transcripts

Interview 1

Interviewer: So first question is, um, psychologists usually assess the behavior of young people using interviews, questionnaires, and classroom observations. Is there anything you would change about how behavior is assessed right now? (…....) Take your time.

P1: Uhm

Interviewer: No, take your time.

P1: I think um (…...).

Interviewer: Is there anything - like - you feel like isn't working or - like - a different way that you think would do better for just like the way that the families and the students are in the schools right now? [laughter]

P1: [laughter] (unintelligible)

Interviewer: Aww

P1: When? Same question?

Interviewer: Yeah

P1: (unintelligible) Yeah, I'm thinking maybe the questionnaires aren't culturally relevant and that different - having a different qu-questionnaire? And maybe helping the parents? Sometimes they don't understand the questionnaire themselves and they get overwhelmed - um. (…) And also like maybe more... Observation in the classroom?

Interviewer: OK.

P1: Yeah.

Interviewer: Yeah. Um - and what kinds of things do you think, um, would be culturally relevant?

P1: Well, that's what you're saying, because like you're saying that the questionnaire wasn't - the wording and stuff wasn't. (Interviewer: Mhm) But you're saying that was the only test available, right?

Interviewer: Well, it's what we. Yeah, like.

P1: You use, yeah. So I don't know like(….) um (….) Sometimes, maybe reading too the questions is the harder part? And there's so much questions that almost are the same, I think, too that throws them off, I think. I think like they just read the same question already and now they're answering it again 5 questions down?

Interviewer: Right.

P1: But they're looking - but that's for a purpose, right? To see if they're (Interviewer: Consistent) consistent in what they're saying about the child. I get that part. I hope I'm helping you. (Interviewer: You are, yeah. Definitely.) Um (….) I don't know. Maybe, like, if we're saying our students or... Are - are they the ones taking the questionnaire too?

Interviewer: Not always. Usually [SST] will take it. It but yeah.

P1: For the student? OK.

Interviewer: Yeah, yeah. Like she'll - yeah. So. OK. Um, and what do you think we might be missing with the way that we're doing assessment right now? Like for behavior?

P1: Are we missing their point of view, or is that something?

Interviewer: Possibly, yeah.

P1: Like - like I just asked. Like they don't get assessed (Interviewer: I see what you're saying. Yeah, no). They don't assess themselves.

Interviewer: No, usually not. Yeah. Yeah, usually not. Because it there is, like, there are assessments that they could do, but then the reading level would be too high (P1: Too hard?) like I guess I could do it.

Interviewer: Yeah, like as an interview.

P1: An interview.

Interviewer: But I haven't, yeah.

P1: Yeah, I don't know – and to change, I guess like even for the parents too, like giving them maybe (.) I think if they're going to lose the assessments and stuff, (Interviewer: Yeah) yeah, that's the hard part too, I think.

Interviewer: Yeah

P1: So they'll need some way to maybe complete it somehow better.

Interviewer: In a different way?

P1: Yeah, a different way. I know some of them aren't coming too or... (Interviewer: Right) - so there are a lot of barriers, I think, hey? (Interviewer: There are!) Yeah

Interviewer: And that's my next question. [Both laughing] So is there anything that you can think of that keeps families and young people, um, here from working with psychologists or mental health professionals?

P1: I think the - they need to have a good working relationship with the whole school, not just with one teacher that the child is in (.) and not afraid to come to the school, I guess, too right? That'll be a thing. Um - barriers like. I guess that form is pretty daunting and.

Interviewer: It is. [Laughing]

P1: Like even for myself, it took me a while to answer that one form (..) But - it's- I think it was just this one time because I had so many students as well (Interviewer: Absolutely) that had forms at one time it was - pretty much - a lot - but I'm not trying to make excuses.

Interviewer: I don't think that - [P1 Laughing] I think it was a lot. I think you're completely right.

P1: (Interviewer: cross-talking) I'm starting to drink water - that means I'm trying to think of what to say.

Interviewer: Oh. [Laughing] I can ask you the next question and then see...

P1: OK.

Interviewer: Um, so - traumatic experiences have been shown to increase the chances of disruptive behavior with young people, (P1 Yeah) so an example might be like divorce or separation (P1 Oh yeah) from their parents, like family members that have addictions issues, stuff like that. Um, are these kinds of things, things that you would think of as traumatic as well? Like..

P1: Yeah.

Interviewer: OK. And then are there any sources of trauma that you think are important for people like me to know about when working with people in this community?

P1: Yeah, for sure. To be aware, culturally aware of things that are happening and - even if you don't - I might not know myself, that's what's happening, still know that (Interviewer: Yeah) possibility that (..) um (.) they need support.

Interviewer: Yeah

P1: Um (..) I don't really know what's going on around town with my students' families, but I still empathize with them, and I know that they're feeling, sad sometimes. Sad? yeah.

Interviewer: Yeah. And like.. are there like – and no - no I don't. Don't give me, like, specific examples, (P1 Yeah) I guess, but like are what kinds of issues are common, would you say, like, from what you know?

P1: Family? I think alcohol, drugs. Uh, relationships, I think.

Interviewer: Yeah, I guess we're just, yeah, talking with some of that today, hey?

P1: Yeah. Think those are key things here.

Interviewer: OK.

P1: And just like doing things as a family, I think is lacking even in the community, I think too. So (..) like building relationships with the - within the families in the community, like, positively would be a good way like not using alcohol, I guess, right?

Interviewer: Right. Are there like community events and stuff that happen (crosstalk) like this?

P1: Like the school does put up events and stuff. Um... but I don't think there's like - like every day like an event.

Interviewer: OK.

P1: Every day it's up to the parent.

Interviewer: Because I'm here, obviously like such a limited amount of time, I never really know like (P1) what's going on, but. OK, So what kinds of local activities, traditional practices or resources might be helpful for young people in terms - or like who are affected by something traumatic. in your opinion?

P1: Well, I think hunting – doing hunting trips, going to the cabin, being on the land – I think those are great ways to - for healing. And I think that would be good for the kids as well if they go like on a cultural camp. Learning from the land and elders and stuff and yeah.

Interviewer: Like, how often does stuff like that happen, right now that..?

P1: Like it's happening in the summer that they do go (Interviewer: OK) to Zander and to the beach, but.. we do have cul - cabin once in a while but. Like maybe like a group of kids that are having trouble maybe they can take them once in a while out. (Interviewer: Mhm) Yeah.

Interviewer: Yeah. What is it about those kinds of things that you feel is so good for, um, I guess healing and for helping with trauma?

P1: I think it's mostly being hands on working with your hands. Because you heal - with your hands, you. You're healing your mind through keeping your hands busy and doing all the - all the activities out there. Yeah.

Interviewer: (unintelligible) [Both laughing] Are there any trauma supports that you think are important but are not available right now locally?

P1: Give me an example?

Interviewer: I - I guess I'm thinking of whatever you - you would think of as a good trauma support that, like, you think, “Oh, it would be good if we did more of that.” I-I suppose even like the-the land-based (P1 Yeah) stuff that you're talking about or yeah anything that you think would be helpful that you feel like, “I wish there was more of this available?”

P1: Probably counsellors, I guess? Maybe more school counsellors. We have a lot of students that need support. Um, telling like - even like lots of families… they need - like they go through a lot of things with their family as well. So they - a lot of them need a counselor like we were saying, which is, um, hard to get by right now.

Interviewer: Right.

P1: Like a cultural area too, that they can, um, utilize I guess (.) on a daily basis? Um

Interviewer: Would that be like in the school or?

P1: It would be good like even smudging in the school (Interviewer: Yeah) would be good. Um I don't know if I'm on the right side.

Interviewer: I'm trying - I'm learning from you, so you are completely on the right side [laughing]

P1: [Laughing] Um. Yeah, right now that's where I'm at.

Interviewer: OK. Um. What kinds of – same-same kind of question, but like what kinds of activities, traditional practices or resources might be helpful for kids who are having behavioral difficulties? Whether it's to do with trauma or not, just like kids who are acting out. What do you think would be helpful? Yeah, activities or like practi - like anything, anything that you think would be.

P1: I think they like hands on being active, going out. Um - we have no gym. Um - not gym - we have no recess, I think, and (Interviewer: Ah yeah) they need more body breaks and they don't have that interaction with peer-to-peer from other classes. Um (..) It'd be good if they had elder support or elder room as well.

Interviewer: OK, what does that look like?

P1: It looks like elders there, they - kids coming in, just visiting, knowing that there's someone there that's available to help talk to them.

Interviewer: OK.

P1: Um.. Just a place to go and calm down like a sensory room, but like in another room like that. (Interviewer: Like social, kind of, yeah.) Yeah, that they know that.. for me I - or even like a co - I don't know. Like. I don't know, what's the question again? Say the question again.

Interviewer: Yeah, um, any kinds of local activities, traditional practices or resources that would be helpful for young people who are having behavior difficulties.

P1: And I notice that they do like all these cultural things, like we're going out now. They do like that and and - and it is kind of hard. I think we do need resources - money and whatever - to do-implement more of these things, but it would be good to have that, like, not just. Like it would be good to have it steady, not just once a month. Yeah. If this - if this kept going till the end of the year, you know what I mean?

Interviewer: Like, have it really fully integrated instead of -

P1: Yeah, fully, yeah. But just culture week and then that's it for the, uh - for 30 weeks, we're in school, but only one week is culture week, you know what I mean? So kind of integrated throughout the whole system, yeah. (Interviewer: That makes sense, yeah) Yeah. But it is, um, manpower. And money too, I guess, yeah. (Interviewer: Yeah) But, and local, I guess like we have - we do have a lot of local people, too. Volunteers would be good too.

Interviewer: Right. (P1 Mhm) OK. And then are there any of these supports that you think are important but are not available locally, like anything that would need to come from outside the community to make something like this happen?

P1: Yeah, for sure. [Laughing] I don’t know.

Interviewer: Tell me more. [Both laughing]

P1: No, there's not much resources in town (Interviewer: Yeah) we live in a small area and everything does need to be shipped here. Same with anybody that - resources too, I guess, right? Um, like even doctors, I guess, right? Like that. I don't know how much I (Interviewer: Yeah), um, everything I guess they would be great if we were equipped like the schools in the city. (Interviewer: Right) Yeah.

Interviewer: Yeah, because I guess like we've been talking about today like some of the difficulties that kids are having are related to health needs, that they have that aren't getting met.

P1: Yeah, the health needs. Yeah the mental health needs. And then having more space too in the school, I think it's (Interviewer: OK) getting um, cramping? Not enough other space available to make (Interviewer: Yeah) Um. Like, where is this stuff gonna go like that, right? Hey, like. And then we want to make another area, like, I think it's just space-wise too.

Interviewer: Yeah, that makes sense. I think is there anything else that you feel like you'd want to share about the way that behaviors and mental health needs for students could be better, um, met, I guess.

P1: I don’t think so

Interviewer: That's fine if you think of anything and you wanna send me a follow up e-mail or whatever, but like that was that was really helpful. Thank you.

P1: I tried my best so.

Interviewer: No, I think.

P1: That's the part like a follow up with you after the recommendations are given and then to see if the teacher is following through or update if the students (Interviewer: If they change) if those recommendations are working or not or what other recommendations do you recommend on top of those recommendations that aren't (Interviewer: Yeah) working?

Interviewer: Yeah. So follow up meetings and stuff to like, yeah.

P1: Because it's a whole year later, you said, right?

Interviewer: Well, and that would be only to reassess like see that I-I agree. I think there could be.

P1: A follow up.

Interviewer: Yeah, like not an assessment, just a talk. Like just yes.

P1: How's it going? Yeah, what do you need from me? Do you know where to get this resource?

Interviewer: Yes.

P1: Yeah

Interviewer: Ok.

P1: Sounds good. [Laughing]

Interviewer: OK. So yeah, if at any point you feel like you want to withdraw or anything like that, just please get in contact with me. But um the first question is um psychologists usually assess the behavior of young people using interviews with parents, teachers – uh - with parents and teachers, questionnaires, and classroom observations. Is there anything you would change about how behavior is assessed right now?

P2: Um, no, cause I don't really think there's any other way (.) of doing it. I think that's the best for right now.

Interviewer: OK. Is there anything that you think might be missed in the way that we do assessments right now?

P2: Um (.) Kind of like there was a couple of students that I tried to get – uh – like in my class? They were having, like, behavioral issues, and I knew that seeing a counselor, just having somebody to talk to and some coping tools to have. I knew that it would help them (.) but when I contacted the parents they're like, “OK, yep,” you know, “I'm down for that.” And then I was like, “Okay, well, I'm going to send the paperwork over and they're going to come and talk to you.” And then by the time they got to them, they completely changed their mind and I don't even think they talked to the kids at all. It was just. I don't know - it stopped there and it didn't go any further. And I don't know why. [laughing] So that was kind of frustrating.

Interviewer: Right. So in that case, did you feel like it was the - the families not connecting with the-the school team, or?

P2: Yeah, I feel like maybe there's like a trust thing because it's such a small community. Everybody knows everybody, you know?

Interviewer: Right.

P2: And I feel like when it got to that because they had to go and ask like, I seen the questions on the questionnaire and it's like really like personal stuff that they're asking about the family. (Interviewer: Yeah) And they probably think, you know, they probably just don't trust, thinking (.) someone's gonna gossip or something.

Interviewer: Right. Um, so that actually leads really well into the next question, which is, is there something like, is there anything you can think of that keeps family and young people in [community] from working with psychologists or other mental health professionals?

P2: Yes, and that's exactly what it is. It's that everyone knows everyone, and you're scared that (.) everyone's gonna know your business, you know?

Interviewer: Right.

P2: And so like that - (crosstalk). Also too – sorry [laughing]

Interviewer: Sorry, go ahead. [laughing]

P2: Also, um, people don't really (.) think (.) it’s - what's the word here? There's like a stigma around getting help. They don't see it as an actual health problem - getting like help from counselors and therapy and stuff? (Interviewer: Right) Yeah, I've heard it several times. [laughing]

Interviewer: OK. And like what kind of things would people say about it?

P2: Like that. It's not, uh, “I don't need to talk to anybody. I'll be fine.” Like, “They're not - they can't help me. They're not really doing anything.” (.) Stuff like that.

Interviewer: Right. And anything - is there anything else that you feel like is a barrier?

P2: Um the availability I guess is not enough. (Interviewer: Yeah) Cause like say if a student wanted to go talk to the counsellor and they're like, “Oh, I don't - I don't get along with that person,” or “I don't like their family,” or something - they don't have any other options.

Interviewer: Right.

P2: It’s that one person. Otherwise, they’d have to travel to the city.

Interviewer: Right.

P2: I think, um, what is it? Uh - online counseling. I think that should be more available, maybe there should be people to come and just let the community know that there's online counseling available. And get them to know - or not know - just introduce it to them. Because a lot of people don't know that you could do it online too.

Interviewer: Right. And how do you think that would help?

P2: Um it would open up the - the one barrier, like how people don't wanna talk to anybody from here because they're scared just cause they know everyone? So if they had the option to do it online they wouldn't have to worry about that. It's someone that doesn't know them or anybody here. And my friend [laughter crosstalk]

Interviewer: Yeah, yeah, more private.

P2: Like I see counseling online, I've been doing it for about two years. (Interviewer: Okay) She's based out of PA, but she does her stuff online and one of my friends, too, who's also from here. She gets help online as well, like through zoom video conferencing. (Interviewer: Yeah) Yeah, and she was able to find Indigenous therapists, too.

Interviewer: Right. So you've got some a bit of like personal experience with - with those things.

P2: Yeah

Interviewer: OK, thank you. Um And so the next piece is a-a bit around trauma. So it's been shown that traumatic experiences can create – or - can increase the the amount of disruptive behavior young people show, so examples might be divorce or separation from their

parents. Having a family member with an addiction or mental health issue, any sort of neglect or abuse. Are those types of things things that you would see as traumatic as well?

P2: Yes

Interviewer: Are there any other sources of trauma that you think are important for mental health workers to know about when working with young people in your community?

P2: No, I think that's mostly it. (Interviewer: Okay) That's basically what we're surrounded by in communities, unfortunately. But that's just the truth.

Interviewer: Yeah – um. And are there - are there any issues that you feel like are more present there than maybe in other communities? Like just generally, not anything specific but...

P2: Uh, no, I think it's all the same. Like I'm - I'm originally from a different reserve.

Interviewer: OK.

P2: Yeah, but I've been here for about four years now.

Interviewer: OK.

P2: The only difference is. There's less drug problems here, but there's more alcohol problems than my community. (Interviewer: Ohh) That's the only difference, but, well, everything else is pretty much the same.

Interviewer: Kay. Are there - is there anything that you feel like are - I guess like it's-it's kind of a weird way to ask it, but like the *most* challenging things in the community? Like, are there things that stand out?

P2: Yeah, the alcoholism.

Interviewer: The alcohol, OK.

P2: Mhm. The students who come to school, not just in my class, but other classes like all over the school who've been up all night because their parents were drinking and it was loud and they couldn't go to bed.

Interviewer: Okay. It's like disrupting their whole, like being able to - just the basic needs, right? (P2: Yeah) Okay. Are there any local activities, traditional practices or resources that you think are helpful for young people in [community] who are affected by anything traumatic?

P2: Yeah, there's a lot of stuff going on here. Like I said, I'm from a different community. And that's the one thing I noticed about [community] is it's such a close-knit community and everyone's always doing stuff - that's cool. We have community night at the school. They have gym nights. They have, um, like just this week, we had culture week at school.

Interviewer: Right.

P2: And, it's just, I don't know, everybody's always doing stuff together and it's nice. And the clinic is always putting on stuff for the kids like they have toddler gym night (Interviewer: Aw) they have - they have kids, night for the kids, they do hangouts and stuff, and last night they had men's night. Like there's always something going on. (Interviewer: kay] So good.

Interviewer: And so like what - what are those programs like? What kinds of things? Or like is there a like... what kind of structure is there to-to those? Um, I suppose, like I've-I've been involved in some of the school ones. But like, if you could describe like what makes those *good* in your view?

P2: Uh, well, community night, for example, it's something that everyone looks forward to because it's at the end of every month - or the beginning? I don't know [laughing]. But -

everybody looks forward to it and everybody gets to get together and hang out and it's just... I don't know, I feel like it's doing something.

Interviewer: Um, are there any supports for trauma that you think are important but aren't available locally?

P2: Uh, yeah, but - I don't even know where they would begin to start working with that. I feel like it's a big problem (..) everywhere but we don't, really know where to start, it seems like.

Interviewer: Like if it was like in a perfect world, like, what kinds of things would you hope for? Um whether, yeah, whether in this community or, yeah - yeah, I suppose – yeah - we'll focus on in this community right now, but.

P2: Um. Have you ever heard of somatic - somatic work. (Interviewer: Yeah) Yeah that's the kind of therapy that I started doing about two years ago. And I feel like that's a really, really big thing that could help really lots of people, especially kids. (Interviewer: Yeah) Being able to connect with your body. And to feel - to feel like safe and OK in your body because when you go through so much trauma, you're nervous system just, like, collects all of that and it just stays with you. And then it comes out in triggers and stuff that like. (Interviewer: Yeah) [P2: laughing] Do you know what I mean?

Interviewer: Well, yeah. Well, and it's like I-I think it's-it's really helpful to have you describe because I think that um. I suppose like the - the value of this, right? Is like - it's one thing for people like me and other mental health people to come in and say, “O”h, let's do this, let's do this. But I think knowing what - so yeah, that's kind of the whole - so don't feel shy about it. [laughing] It's- It's really - it's really helpful to hear the parts that you think are-are working, you know.

P2: Yeah. Yeah, and I feel like, I-I started to learn that when I was like 23?

Interviewer: OK.

P2: And I-I started to really like enjoy my life. After that I used to be like *very* suicidal like I was-had suicidal thoughts when I was seven years old. I went through a lot of trauma and stuff and I did not really enjoy my childhood, I was a very nervous child. [Laughing] And after I learned all of that, I was like, "I wish somebody would have showed me this sooner," like I would have been able to start, like feeling comfortable and safe in my own body, you know?

Interviewer: Right.

P2: And I feel like if they started doing that with the kids, like, a lot of the little things like bullying and stuff like that, and because - I notice that a lot with kids here. They (Interviewer: Yeah) have - well, not *all* of the kids, but - it's one of the thing – things I noticed when I came to work here is the kids act out really lots and they're always like hitting each other. (Interviewer: Yeah) And then it just turns into a whole thing. And when I tried to help some of the students, like you go back to their family, one of them was just dealing with separation – (Interviewer: Okay) their parents separating, and the other one they have really lots of people in their house and it's like overcrowded, and they don't get enough attention. And I'm like, "If only they had somebody that could do the somatic work with them." You know? (Interviewer: Yeah, yeah, no) I don't know. And not a lot of people do that too - I asked about it. I asked my therapist and she said there's only like so many of them in Saskatchewan that are doing that.

Interviewer: Mhm.

P2: And they're hard to find.

Interviewer: Yeah, yeah. No, that is that is true. And like, do you - do you think that, um, there are any – um. Hmm, how would I phrase that, I guess? Like do you think there's

anything that is kind of like wh- related to the community nights and the things that are already going on that would bring in any of this, like, where you could integrate stuff like that? Like do you see a place for it?

P2: Um, I don't know. I don't know how they would do that. The clinic seems to be doing good stuff (Interviewer: Yeah) like they started doing Girl Power - this thing called Girl Power with the - I don't know what age group, but it's the younger girls of the community. (Interviewer: Mhm) And I was asking what kind of stuff they did. They're like, “Ohh, we did like a little show and tell, and then we did this and that, and we talked about our feelings.” I was like, that's so good. [laughing]

Interviewer: Aww you know cause I've heard an announcement actually while I was there that last - well this this past week a-about that and I was curious too what they were doing so, yeah.

P2: Yeah, it's just like a hangout for the girls, and they talk about their feelings and stuff. And I think that's really good. Um (..) Yeah, I don't know what they have going for the boys, though.

Interviewer: Yeah, (crosstalk) I've been thinking that.

P2: I'm not at the school whole lot, so I don't really hear what's going on. (Interviewer: Right) I'm not on Facebook so I don't see what kind of things are happening. (Interviewer: Yeah) And I know they post a lot of stuff on there, like the community stuff like they have (Interviewer: Yeah) the community kitchen here too, and they do, like, cooking they have like themes every week I think. Like - (Interviewer: OK) Like father- daughter cooking and, uh, kids cooking, teens cooking, stuff like that.

Interviewer: Wow. And where- where did you say that is?

P2: The community kitchen? (Interviewer: Okay) That's also, I believe that's also put on by the clinic. I just got to go (Interviewer: Ohh wow) check on my baby real quick.

Interviewer: Ohh. OK yeah no problem.

[Childcare break]

Interviewer: OK. So we were talking about community kitchen. So yeah, you said that the clinic that put that on?

P2: I'm pretty sure it's the clinic, yeah.

Interviewer: Yeah, I never - I haven't heard of that before. So, um, do you know how often those kinds of activities happen?

P2: Um, when I was looking on Facebook, it was like, it-it seemed like it was every night of the week it looked like.

Interviewer: Oh wow.

Ok. Yeah, I end up because I'm, you know, working at the school. I end up just only really knowing what's going on at the school. So that's-that's, I guess, part of why I've, yeah, wanted to do these interviews is to get a better sense of what's going on in the larger community. (P2: Mhm) Yeah.

Um, ok, um, so this question's kind of similar, but it's more focused on behavior. So what kind of local activities, traditional practices or resources might be helpful for young people in the community who are having behavioral difficulties? So like whether or not it's related to trauma, um, is there anything else that you think is helpful for them, that's already happening?

P2: When they go to the school cabin and stuff, they seem to really enjoy that and I feel like that's therapy without being therapy. [laughing] You know what I mean? Like doing stuff with your hands and, I guess, connecting with your body and with the land and stuff, it's kind of - it's healing in its own way. Without like – like the structure of *going* to therapy or counseling, and I feel like when they do that with the kids, it's helping them really lots. *But* it could be happening more. Like the community that I'm from, they have this group for the boys - I forget what they call it, and, um (…) For I don't know what age it is, like - maybe 12 to 17 year olds? Maybe younger, but, um, they take them just out into the community. They go hunting and when they catch something, they teach them how to like, fix it and get it all bagged up and stuff, and then they go give it to the elders in the community. And they clean up the community, like picking up garbage and stuff and they (Interviewer: Wow] like, cut wood and stuff for the elders and they just find stuff to do. They go and ask elders if they need anything done in their yard and they all just show up there and do work, and they do that throughout the summer. They go on like long hunting trips and stuff (Interviewer: Yeah]. Yeah, and I feel like that would be really, really beneficial for a lot of the kids here, especially for the boys.

Interviewer: Right, so who? (crosstalk)

P2: I feel like the boys get left out.

Interviewer: Yeah. Well, who-who initiates that in your community?

P2: In [community]? Uh it used to be [teacher name]. She's a teacher. She's a land-based teacher (Interviewer: Ohh) and student.

Interviewer: OK. And do you know if there's like much knowledge-sharing that goes on between the communities?

P2: Uh, I don't think so.

Interviewer: The feel, you know, I've worked at a few other [school division] schools too that had different programming going on and it does it's-it's I mean of course you want it to be unique to the community, but if somebody has a really good idea, it might be helpful I suppose if -

P2: I've [laughing] yeah, I've actually thought [Interviewer: laughing] about that. I've thought about that because one of the people here who's really helpful and it seems like she cares a lot about the younger generation and helping them is [community member].

Interviewer: OK.

P2: I feel like she sets up really lots of stuff and I thought of asking her before and asking [community member] for her, like, uh, what is it called? Like her plans and stuff, if she would be able to help us. [laughing] (Interviewer: Yeah). Mhm.

Interviewer: Yeah, I think that-that's definitely the kind of thing that I'm hoping will come out of having these conversations, I guess, and like starting conversations, you know? Cause it's yeah, like - there's a lot of good work happening in different - and I think that sometimes with the way that our assessments work, we focus on the negative too much, you know? So.

P2: Yeah, yeah.

Interviewer: OK. So the last question is, yeah, are there any support? I suppose we've already kind of talked about it, but any behavior supports that you think are important but aren't available locally right now?

P2: Um, just the stuff that I mentioned already (Interviewer: Yeah). I feel like just doing more programs like what I said about the whole land stuff, land-based stuff where you're connecting with your body and everything? I feel like if they had some kind of extra-curricular stuff for the kids (.) that would be good too. Like uh, they do stuff at the school,

but it doesn't last very long, and it's out when school's out. Like, what about summertime? You know, like. I feel like the boys could, like do like boxing or something? [Laughing] I don't know. (Interviewer: Yeah, yeah) Anything. Yeah. When I was at the school, I really wanted to do yoga with the kids, but I was like, very pregnant. [Both laughing]

Interviewer: Ohh gosh yeah.

P2: I just gotta go grab my baby. She's up now.

Interviewer: OK, sure.

P2: Sorry. (…...) OK, sorry about that.

Interviewer: No, no, it's OK. No problem. Yeah, basically. Is there anything that you feel like I haven't asked about yet that you'd like to share, um, that - yeah, that you think is important.

P2: No, I think that covered everything (.) that I was thinking about.

Interview 3

Interviewer: OK, so I'm just confirming that I have your permission to – uh - go ahead with the interview and that you've had a chance to ask questions.

P3: OK. Yeah. Interviewer: Yeah, OK. Um alright. So the first question is where? Do I have it? OK. Um so psychologists usually assess behavior of young people using interviews with parents and teachers. Questionnaires and classroom observations. Is there anything that you would change about how behavior is assessed?

P3: I think that's good. Nothing I would change.

Interviewer: No? Is there anything that you would add to it?

P3: Mm (..) Maybe, um, do they interview the child also?

Interviewer: I'd say usually not, yeah.

P3: I think maybe they should. Maybe they would – uh - be able to tell you why they're behaving the-the way that they are instead of parents have one-one side, the teacher has their side, and then what about the child?

Interviewer: Yeah. And what do you think that we might be missing by not interviewing the child?

P3: I think, um, the child has different views. They have their um - you have to be able to consider how they're feeling mentally, physically, you know? Emotionally with how, um, I think a lot of times like I'm talking about what I see. We don't know where the child is coming from. Like they could be ODD or something and they don't (.) take well to, um, say for instance rules, routines and stuff like that, because they're not used to it. Maybe they're not taught at home, or maybe the place that they feel safe is at school and maybe they follow it at school, but sometimes they fall and then they got incidents and stuff like that

because they don't know how to deal with incidents. Maybe, I don't know, (Interviewer: Yeah) something like that.

Interviewer: Yeah. Can you tell me more about that like about that? Like, the idea of their safe place being at school?

P3: Um, I think the reason is that, um, a lot of students go-go home after school and they have nothing to eat or they're not given routines, they're not expected to do chores or expected to, uh, you know? They're just - they just go back home and they're on their iPad or on their game and that's it for the rest of the - like, how it is nowadays? Like they're on there for the rest of the night, and nobody's really caring about it. And then they come back to school the next day and they're sleeping. And when they wake them up or when you ask them to do something, then they're fighting you. They're-They can become aggressive and they're not responding to you. So, they get into trouble and stuff like that. You know, sometimes it's more, um - um the home life has to do with it.

Interviewer: Right. Yeah, there's a lot more going on than what we-than what we know.

P3: You're not getting their meets - their needs met. Their meets - [both laughing] Their needs.

Interviewer: I gotcha.

P3: And they-they come eat here, they have a little rest here. When-whenever they can, if they can get away with having a little nap, you know? Like 5-10 minutes. But when you become a teenager and you're 13, 14 years old and you can't take a nap because your teacher expects you to, uh, to do - you know? Your work and whatever, and you don't want to do it because you're-you're tired and you fight, and sometimes we're not taking their - like we're not understanding where they're coming from.

Interviewer: Yeah, yeah.

P3: Yeah. And parents have - and they struggle at home because they want to play on their game. They're not turning the Wi-Fi off. And if they turn the Wi-Fi off and then the child gets upset and whatever and they fight and whatever and they turn it back on just to make things better and do the Band-Aid solution, you know? (Interviewer: Yeah) And I think - I think that's where you know, a lot of times when I'm asking teachers or going through the – the, um – the BASC with them, or some - or the other thing there? The-the rating scales? They kind of have to think, (Interviewer: Yeah) whereas, if you know your child, you shouldn't have to think for 5 minutes, right? (Interviewer: Yeah) But they don't. They don't really know their children anymore. And same with teachers. Teachers have 15, 16 more students to look after - you don't have time to be wondering or trying to figure out one student that's (Interviewer: Yeah) taking the whole class away from you. (Interviewer: Right.) Yeah. So of course we're gonna say, OK, this incident happened and write it up and pretty soon they - all these incidents start to add up. (Interviewer: Yeah, yeah.) So I would think.

Interviewer: Sorry, go ahead.

[Brief pause]

Interviewer: The no. I think that-that's really helpful. Just to get, you know, because I-I-I think I've experienced that too being in those spaces and try like to - I think that the-the questioner doesn't give us the whole picture. Right? Like that's the-the main thing. (P3: Yeah) So is there anything that you can think of, um, that keeps families and young people in [community] from? (unintelligible) Want to work with us?

P3: You kind of cut, cut off there for a little bit.

Interviewer: Ok, so anything that you can think of that would keep, like, families and kids from wanting to work with a mental health worker or a psychologist, like any barriers to connecting with us.

P3: The only barrier that I could find there is, um – uh, a lot of students they don't like talking to the community counselors. (Interviewer: Okay) And especially I find it here where like especially the teenagers and they-they'll say, “Ohh, I'm not gonna talk to the counselor here if she's from the reserve and whatever and I can't trust her or go to the - I'm not going to the clinic, I don't want to talk to anybody there, everybody'll (Interviewer: Okay) come back and tell you everything that I said,” and, you know? (Interviewer: Okay) So things like that. And then when you try to make an appointment with mental health or somebody in [City 1] or [City 2], it takes weeks. (Interviewer: Right) And like the other day, I called [City 1] mental health and they took they took the name, the birth date, and the phone number. That was last Tuesday and I haven't heard from them yet. You know? (Interviewer: Wow) Trying to make an appointment for-for somebody. So I'm still waiting.

Interviewer: Yeah. So it sounds like it's access and also like privacy? Like, would you say (P3: Right.)? Yeah. So anything else you can think of – sorry, go ahead.

P3: Um the other thing that, um, I think maaybe, and we're gonna try is maybe have them talk to elders about it. Uh, more like (..) a visit type of way instead of, “OK, I'm on the hot seat here. I'm with a mental health counselor and I'm not going to say whatever, I'm going to watch what I say or I'm going to just spill the beans or - and add a little bit more, you know? So. (Interviewer: Yeah) Yeah. It was.

Interviewer: Is that - sorry, go ahead.

P3: It's - it could be scary [laughing] for them.

Interviewer: Mmhm. I think - well and I think what you're saying really, um, connects with like one of my other questions, which is do you - what kind of local activities or traditional practice-practices are, like, would be good for kids in the community, do you think? That, like, they could be accessing as well?

P3: I think if they had, um, more land-based activities that would be good because it would keep them busy and stuff. But, yes, they try hard and I-I think it's a positive thing that they plan these activities, but they only go through these activities maybe once or twice and then they're done and the rest of the time - it's - I don't know, lost? And then they're - you're back to square one. Like it, it seems like it's not (crosstalk)

Interviewer: And so is what? What is it?

P3: Not an ongoing thing (Interviewer: Okay), an ongoing like therapy is. Or should be. And, um, I don't know. I think, uh, like the youth centre here is open for them (Interviewer: Okay), but there's not really any routine or anything for them to follow or rules, I don't think because they-they're free to go in and out and there's, uh, there might be activities planned, but nothing is structured. (Interviewer: Ohh) So a lot of the times when it comes to behavior, we all know that we need structure, right? (Interviewer: Right) If there's no structure, then we're not solving any behavioral issues, is what I find for myself, anyways.

Interviewer: Well, you mentioned these outdoor, like, land-based activities. So how-how often - like who runs those and how often do they happen? Is it a school thing?

P3: It-during school time. During the school year, they have those activities maybe once a month, but I, um, for myself, I would probably say, like, in another school that I worked in, they had activities every week, sometimes twice a week, and that's how they kind of worked on their behavior issues and stuff like that for the students. And it had something - something they could look forward to, and you had to be on your best behavior, or you

couldn't have more than two, three incidents or whatever. Otherwise you can't attend. So they kind of watch that, so I think that kind of helps, but here in our community, I don't see that anywhere where - you know - it's not followed through if there is and activities are not planned ahead of time.

Interviewer: I see. OK. And so there's some evidence that kids who have had a history of traumatic experiences will be more likely to show those disruptive behaviors. I think you've talked a little bit about this, so examples might be people who are from homes where there's been divorce or separation from their parents or, you know, things like that. Um - are there any things that *you* think of as traumatic that are that are common in the community?

P3: Traumatic. I think a lot of it has to do nowadays with young families or they're, um, I don't know if you can call it traumatic or whatever, but, uh young parents nowadays, they're too busy on their phones. And-and the student that, like the children, are not getting - like I said earlier - they're not getting their needs met. And they're not eating when they're supposed to be eating. They're eating, what? Three'o'clock in the morning, you know? Or there's- there's no bedtime? There's no, "OK, you need to get up. You need to go to school." Because you see a lot of students coming to school late, especially in the middle years, high school, and nobody's rea-like, I don't know. I think our parenting skills have gone down with-into technology and social media and stuff like that and, um, and there's a lot of drugs and alcohol and stuff, and most families, probably, I would say 75% of our families in our community are probably affected by drugs and alcohol, and gangs, so…

Interviewer: OK.

P3: Yeah our little g-little guys are joining freely so (.) It's-It's getting a little out of hand.

Interviewer: And would you say that's a change over like the - yeah (crosstalk)

P3: Change in the last maybe five years.

Interviewer: Wow. That's pretty serious. (crosstalk)

P3: Yeah.

Interviewer: So I suppose it's kind of the same question, but like are there-are there pieces of that-that's important for us to know about when we're working with the families in that community.

P3: I missed that [tech issue]

Interviewer: Like what we're thinking about? Sorry, I know it keeps breaking up on us. (crosstalk)

P3: I must have missed the question because the sound is not the greatest.

Interviewer: No, that's ok, um, I was just gonna ask, so do you, like, do you think that those factors might be important for us to-to get more information about when we're working on behavior with families?

P3: I-I think so. Because nowadays it's not like something that you throw under the carpet. It's a factor, it's realistic, and I think kids are not, um, they're not shy to tell you anything anymore. You know? It's like-it's like an everyday thing. “Oh, my parents are doing this. They're drinking all night last night,” and, you know? It doesn't seem like there's a problem. But I don't know when it comes to interviewing and stuff like that there's gotta, um, be guidelines that you have to follow (Interviewer: Yeah) so I don't know whether you have permission to do that and(.) But most – I – like - how many parents admit, you know? That (Interviewer: That's right.) they're the problem.

Interviewer: Yes, yes. And I mean, I guess there's also the question of what – um –(..) who has the role in in doing something about it right? Because it's when - I guess in the perfect world, the community can kind of help support that family, but (crosstalk) trying to figure out, yeah..

P3: It used to be like that. It used to be like that where it takes a community to raise the child used to be the motto, but now it seems like children are ruling the community and no one's doing anything about it because they're a lot of, like I said, a lot of young parents not, not only young parents, probably 40, 50, 60-year-olds are right into their addictions and stuff like that - that kids are basically (..) raising themselves and (.) they're doing the best that they can when they come to school. Siblings are raising their-their younger yeah. Yeah, and it's happening right now as we speak, you know? Where a 15 – 14-15 year old is at home raising 7 little kids. And you ought to give them credit because those kids come to school every day, and, like I say, this is their safe place. And they eat here and we change- like once in a while, give them something clean to wear and whatever and (Interviewer: Yeah) sometimes -

Interviewer: Yeah, go ahead.

P3: Yeah, what else did you what - what else were you saying, [name]? (Another speaker in the room says something not picked up by the recording) Ohh yeah - we give-they have breakfast here, they have lunch here and then they take home whatever's left for af- for supper and stuff. We had a few like in the past three years here that they have-they've had hot lunch? We've had a family that took all the lunches that were left, so sometimes they would go home with half a garbage bag full of lunches and - you know - that would be, that would be, um, the boy would think about, “OK, I need to feed my family at home tonight or (Interviewer: Yeah) yeah

Interviewer: Well, I think that's the thing is like the schools there is are so – they’re so much more than just a school, right?

P3: It's-It's more than a school. We're-we're all kinds of people here [laughing]. Like, nurses, psychologists, you name it.

Interviewer: Completely. (P3: Yeah) Completely. Um, so I guess (crosstalk)

P3: Half the time, without doing our jobs, you're busy being mothers. And, you know, (crosstalk)

Interviewer: A parenting guide, and like, it's everything, you know? and I think, yeah, we just need to get, um, well, us, as the people coming in need to really make sure we see the whole picture, you know? Um, cuz it is-it's so much more than that, so my last question is kind of a mix. It's like, are there any – uh, well actually no, that's - so I wanted to ask, yeah, something else first. Are there any, um, trauma or behavior supports that you think are really important but aren't available in the community right now?

P3: Uh they're trying, um, they have counselors and they have a - our guidance counselor. They have a counselor at the health clinic that comes here for doing child (.) psychology or whatever they call it and a psychologist and then they have MLTC, but, like I say, it's not follow through? Yes, you come see the child for one day or two days or talk to them once or twice, and then what happens? Nothing after that? You know, that's the only-only issue that I have here. And I think the community is is trying, but you can't really, I think - I don't know COVID took it with, you know?

Interviewer: So how? (crosstalk)

P3: It's gone with COVID, everything's gone on -

Interviewer: How do you think things were -

P3: the last two years that it's hard to come back up.

Interviewer: OK, OK. Yeah (P3: Yeah) So what was it like before COVID?

P3: Uh before COVID I thought-maybe-I think everything was starting to pick up and stuff and (.) um, I'm not (..) um. I think behavior and challenges and kids are more (..) they get away with stuff. They get away with a *lot* of stuff. They know, they watch everything

online, they learn everything, they're manipulative, they're really smart in that way and they're, um, it's hard to work with them. So you need people that are probably like, yeah, they don't wanna work with community members and stuff because of privacy and confidentiality and things like that. But they might be able to work outside with somebody from outside. I don't know. I don't know if I'm answering your questions.

Interviewer: Yeah, yeah, it cause it's like - it's about gaps, right? Like trying to figure out where the gaps and what maybe we should be focusing on to try to, like, help bridge those gaps. Like, what? What do communities need? Like, that's basically the question, right? (P3: Yeah) It sounds like you've got a picture of it.

P3: And like I said, like last week, there we had an incident here and, you know, you call mental health and you can't get anybody. Call the clinic and there's nobody. You go to RCMP? RCMP can't do anything unless the child is charged with something, you know? Where do you turn? (Interviewer: Yeah) You go-got guidance counselor and sometimes as a community guidance counselor, you're from the community, you're working with your people. You don't wanna - um- ruffle any feathers, maybe? (Interviewer: Yeah) Or open a can of worms [laughs] (Interviewer: Yeah), and it's kind of - it depends on-because you're related to everybody, right? So (Interviewer: Right) does the child really get the help that they need? No. That's my my point of view (Interviewer: Yeah). She has her side so.

Interviewer: OK, let me see if I -

P3: We have art therapy here - Max is still doing art therapy and he comes, like, s-students are open, more open to him.

Interviewer: OK.

P3: Than to the guidance or the behavior support and like we-we'll do incident reports and stuff like that, send them home and then – well (.) some, anyways. Not all. I think they

should *all* be sent home - all these incident reports so parents know where their child is at [Interviewer: Ooh] and what they're up to in school. And maybe they can deal with their child at home. But I noticed that a lot of incident reports are not being sent home from admin and stuff and… maybe that's another (.) reason why students behave the way they do, because their parents are not aware of it?

Interviewer: That communication, yeah.

P3: The communication, um, it used to be better, like when I-when I did behavior modification a long time ago, where we had success cards and they were sent home. I tried that here but they still don't go home (Interviewer: I see) and they don't come back like it's a communication tool where you drop down their behavior, give them some checklists and something, and tell the parent, "OK, your child did a really good job today," and whatever, and then they sign it and they come back? [P3: Mhm] It doesn't happen here. I tried it maybe - like every year try one or two students and they never come back.

Interviewer: OK.

P3: So that's, um - but art therapy is really good for them (Interviewer: Yeah). They're they're free and they just – um, [therapist] will pick up some stuff from their art therapy and talk to them and try to help them a little bit (Interviewer: Yeah) and they have drumming, so (Interviewer: Okay) that's another way of trying to control behavior is, "Okay the boys have to go drumming so they have to be, in there" you know? They can't be doing this or that or whatever, so.

Interviewer: And how often do those things happen? Like the art therapy and the drumming?

P3: Art therapy is daily.

Interviewer: OK. Yeah.

P3: So a lot of our students that are in their behavior-targeted behavior, they're in there (Interviewer: Yeah) and, like, um, our targeted behavior students are actually pretty good (Interviewer: Hm!). It's the other students that are not in our program [Interviewer: laughing] that are.

Interviewer: Well, that's interesting.

P3: It seems.

Interviewer: Maybe everybody. Yeah, needs to get in that targeted behaviour program [both laughing] (P3: Yeah.)

P3: They're actually the ones that are - they have no incidents. [Interviewer: Hm] But the ones that are-have incidents -a lot of incidents-are the parents that are defensive. (Interviewer: OK) Yeah, so (.) we're the problem. The school is always the problem. That's where. (Interviewer: Oh yeah)

Interviewer: OK. So is there, is there anything that you feel like I didn't ask about that would be helpful for myself or other professionals like me to know when it comes to dealing with behavior with kids who might have a history of difficulty at home or stuff like that?

P3: I think what would help is if you came down, “OK, you have a behavior child here, they're in targeted behavior, you've tried all of this, you've tried all of that. Now, here are some suggestions. Maybe, uh, you can talk or you can call this number. Or maybe you can try this.” Maybe a group home or list of numbers and stuff that we can reach out to?

Interviewer: Right. Like people that are actually available to you to be that kind of consultant (P3: Right) in the minute, yeah.

P3: Right. Yeah.

Interviewer: OK.

Interview 4

Interviewer: Um. So just to um confirm that you consent to participate in this study that's going to require you to answer some questions for me, please.

P4: Yes

Interviewer: Yes. OK. And if at any point you feel uncomfortable or don't want to answer something, you don't have to. And if you'd like to withdraw your information after I've already - after we - finished our interview or at any point in the future you can just let me know when you're allowed. To withdraw, there's no problem, OK.

P4: OK.

Interviewer: OK. So the first question is psychologists usually assess the behavior of young people using interviews with parents and teachers, questionnaires, and classroom observations. Is there anything that you would change about how that behavior is assessed?

P4: Mm, I'm gonna say no.

Interviewer: No? OK. Do you think there's any - (crosstalk) oh sorry, go ahead?

P4: No, sorry, I was talking to the dog so – (Interviewer: Aw ok) he's going.

Interviewer: Uh, do you think there's anything that might be missed by assessments the way that they're done right now?

P4: I guess, um, just keeping into consideration the vocabulary of our kids, I guess, for their ages is quite-quite low and limited. So a lot of the things I guess when you do assessments, um, don't really pertain to-to our-to where we live? I guess because I'm-I'm thinking in terms of, like, say farming and things like that? Like that would differ from region to region.

Interviewer: Yeah (P4: Yeah). Can you think of like some examples from, you know, your-just your experiences with the assessments?

P4: Well, I'm thinking like I'm not sure if it was Fontas and Pinnell [reading assessment] or I don't know if that's you guys. But I know with those assessments, uh, there was a book on farming and a lot of the kids couldn't, really (.) um (.) I guess, bring back any information on it because we didn't really - we didn't really know what it was or (.) how to visualize it or - actually see it, I guess. To be able to talk more about it, yeah.

Interviewer: OK. Cuz, yeah, I guess like our assessments are usually the – like - the ones that are focused more on like, um, classroom behaviour and so like they'd be like if I got you to go through a BASC or something with a family, you know?

P4: Oh, yeah, yeah. There too I would say probably vocabulary for, uh, parents because I know I've had some, um, (.) some run-in with it, cuz um, because particularly one student this year, actually, his parents didn't understand a lot of the information. So, I guess the vocabulary might have been a little too high for them (Interviewer: Ok). But I was able to – yeah - I was able to walk her through after.

Interviewer: So it sounds like when you (.) when like I would give you an assessment, for example, like to-to kind of pass on to the parent, you-you have to do some translation almost of it, hey?

P4: Yes, yes. [Dogs barking]

Interviewer: We have some dog issues. [laughing]

P4: They're walking by a fence. [laughing]

Speaker Ohh gosh. OK. [both laughing]

P4: Trying to get to the park.

Interviewer: Um so the next question is is there anything that you can think of that would keep families and young people in [community] from working with psychologists or other mental health professionals?

P4: Uum (.) that's a tough one too, because, uh, I can see it already with our job as teachers. Uh, reluctant, almost like a reluctancy to, um, engage with us. Like (.) yeah, that's a tough one. I always think about that one too. Um, I don't know, like, it's almost like you probably have to gain their trust (Interviewer: Mhm). To maybe see you a little more in the community so they know who you are and (.) maybe - I know you girls are busy for things like that… Um, engagement, I guess? More engagement, (Interviewer: Yeah) - because it takes a while for them to even like - warm up to you. Cause I know I've been there quite a few years and I still have a reluctancy for a lot of things and I – and it came down to young parents saying - because the demographic is quite low in [community]. Um… they almost say that a lot of the young parents don't really understand half of the stuff we give to them. (Interviewer: Okay) So I guess having more - having more of an informational (..) you know what I mean? (Interviewer: Yeah) Yeah that's just what I said - I gathered from this past year anyway.

Interviewer: And like, do you have a idea of-of what that would look like? Has there been-have there been things you've tried for your own work?

P4: Um, no, but I've actually, uh, been thinking about it because I have a - that was my first year as a spec ed, right? (Interviewer: Right) So I kind of gathered information as to how I could do things differently next year now. So one thing would be an informational session, like-Like say that, for instance, we're not going to give any names, but one parent we had was quite young. (Interviewer: Yeah) And she didn't really understand half of this stuff that we were gonna give her. So yeah, I don't know how it would look, but yeah, that's just one thing.

Interviewer: So it sounds like doing some bits of like education as well.

P4: Yep. Information sessions, I guess, right? (Interviewer: Yeah) Yeah. (..) But not as like individuals, as a whole. (Interviewer: Right) Maybe we could have like a-like a evening where you bring them in (unintelligible)…

Interviewer: Do you have any like? Yeah

P4: Bring dessert or supper or, you know? Someplace (Interviewer: Yeah) something to bring – bring them in - young people. Because I know, like I said, young parents - I was there once too. You don't really learn anything until somebody comes to you and – right? Teaches you things. (Interviewer: Right) Yeah. So yeah.

Interviewer: So are - are there any like areas of education that you can be most important for them.

P4: Um, I guess - I don't know - I'm thinking about those forms and stuff. Maybe we can - we can do something around those forms. Cuz, like, even the forms like, didn't you find that a lot of them, they were, uh - what's the word I'm looking for? Like a lot of them got offended by some of the questions on that questionnaire like they were trying to - like I said to them, "We're not trying to pinpoint anybody or anything [laughing]. We just wanna - need the information." And a lot of people were offended by certain things, right? (Interviewer: Ohh ka) like. Like that one lady said, "You're trying to take away my kid!" [laughing] I'm like, no. (Interviewer: Right) We're trying to help your kid, if anything. So yeah, so about the questions.

Interviewer: So do you think that that might be a barrier to then like some misunderstandings or fear around what-what we're doing?

P4: Yeah, yes, yes.

Interviewer: OK. Thank you. Uhm, so the next question is so traumatic experiences have been shown to increase the chances of young people having disruptive behaviors like in the

classroom and stuff, so examples of traumatic things might be divorce or separation of the parents or caregivers, having a family member with addiction or mental health issues, uh neglect or abuse - things like that. Are these things that you would think of as traumatic as well?

P4: Mhm. You're asking me what would be considered or not traumatic?

Interviewer: Well - yeah, like, would you consider the things that I just listed as traumatic? Or is that - it's like, yeah, basically it's just asking what people's viewpoints are on, like what-what is traumatic and what's not.

P4: Yeah, that would be. I would consider that. Did you mention suicide in there too?

Interviewer: I didn't. But uh - that's good to note, yeah.

P4: Yeah, like witnessing suicide, yeah…

Interviewer: Cuz that-that is actually the next question, so are there any possible sources of trauma that you think are important for us to know about when working with young people in [community]?

P4: Uum, could I say - Like say (.) would residential school trauma go under that?

Interviewer: Absolutely. Yeah, I'd say so.

P4: OK. Yeah. That's another one.

Interviewer: And like that suicidal that, like – would-would you say that that's another thing that's relevant to that community?

P4: Ohh yeah yeah, cause I've got - yeah, yeah. I've had one kid who (.) is in that realm.

Interviewer: OK. Um, so the next question is what kinds of local activities, traditional practices or resources might be helpful for young people in [community] who are affected by something traumatic?

P4: Hmm - this is a tough one. I think about it all the time myself. Um so that was one of the things I was revisiting this summer, I was doing a lot more – uh (..) um background information on (.) ceremony. Right? (Interviewer: OK. Yeah.) because we're dealing with our own children here, so I thought maybe ways of trying to heal them is my mandate too. And, uh, we bought - I've-I've been able to visit things like the swing therapy. That's like a First Nations, uh, I guess, um, way of (..) healing our children. Um (Interviewer: What did you say it's called? Sorry.) there's quite a few other ones - called the swing therapy. Susan Auger, I believe, maybe? Somebody Auger – A-U-G-E-R.

Interviewer: OK.

P4: So if you wanna look into that one. That was one thing we were - we were revisiting trying to, uh, see, because it's actually had a lot of success in a lot of, um, First Nations. (Interviewer: Ok) And uh, the swing is like a significant part of who we are as-as, um, in our-in our years as children, I guess, because the swing is used from-from quite a young age. Like I remember - I think I was in a swing till I was like 4 [laughs]. And uh anyways, they're saying that if you use this swing we could actually, um, bring ourselves back to our childhoods and begin to repair, um, basically I guess what we lost along the way, as children. (Interviewer: Yeah) And they say it-it even works on children – but if you want to do some reading into that, you'll see. Because I'm just at the, like I said, the stages of - of looking into it.

Interviewer: Yeah. Oh, it sounds really interesting.

P4: That would be one – one suggestion for me, I guess, if we're dealing with First Nations children, maybe we should try to, uh, bring back our own ways. That we (Interviewer: Yeah) you know? The way that we -yeah, what I'm trying to say - like if we work together

(…)

Interviewer: Yeah. Are there any other things that you think are like currently available in- in town that might be helpful that way?

P4: Well, that's wha - I'm going to say the sweat lodge. They have a sweat lodge there - they bring the kids in there too. So I guess we're turning back to ceremony and our traditional ways is one way. Another one would be taking them on - taking them on the land. And they also - they learn, I guess, the virtues of the land, or learn how to survive off the land - how to respect it. Right? Again, going back to ceremony again. That would be one way, yeah.

Interviewer: OK. And, um, so the same question basically but like what kind of activities, practices or resources might be helpful for young people who are having behavior difficulties? Like would you say it's the same kind of stuff or when we're thinking about behavior difficulties?

P4: (crosstalk) I'm. I'm gonna. I'm gonna say something else too on that one.

Interviewer: Sure. Yeah.

P4: I was speaking this one, and that maybe having a full-time grandma or grandpa in the building might be a-a good thing too for our kids. (Interviewer: Okay) Because a lot of them don't have it, for whatever reasons, going back to, uh, residential school again, right? (Interviewer: Right) Have a lot of loss of parenting. And, um, I think just having them around? And coming in and explaining to our kids about respect and how it works and maybe giving kids hugs and being around us all the time would be a beneficial thing because I was one thing that I actually rallied for for next year too. Having someone there.

Interviewer: Yeah. And like - within like a, I guess, like a traditional framework, like what, um.. what is that role exactly? Like what- what role does a grandparent normally play?

P4: So I guess it'd probably be one of the more important ones, because they're the ones that actually, uh, teach children - cause I was raised by my grandparents. They taught me my language, my culture, respect, respect the land. Yeah, so they did everything for me. They gave me a sense of security. (Interviewer: Yeah) Yeah. So that's what I'm saying - that maybe it would work in the school system also.

Interviewer: That makes total sense. (crosstalk)

P4: Because of the kids - because of, we lost a lot along the way, right? As Aboriginal people and [Community] too. So yeah. Yeah, I always think of ways to-to help the kids. In every aspect.

Interviewer: Right. Well, um, I guess on that note, are there any trauma or behavior supports that you think are important but aren't available locally right now in [community]?

P4: I'm going to say mental health. And having somebody who's actually there (..) there for the kids, like if they don't switch their jobs - there's too much of a turnover. And sometimes there's even like vacancy. So I don't understand like, mental health is important, but that's the one area where, you know, there Saskatchewan struggles, period.

Interviewer: Absolutely (...) So if it was like in your perfect world, what would-what would be a good option for mental health up there?

P4: Somebody who could see our kids on a (.) daily, or at least twice a week, three times a week?

Interviewer: OK. Yeah.

P4: Cuz I have a lot of kids that cry out for - to talk to people right? Sometimes I wish I could do it (Interviewer: Yeah), but I'm not trained like that. I'm not trained like that. And anyways, it's where, "OK, I need to talk to somebody, Miss Teacher." But there's nobody there, right?

Interviewer: Right, yeah.

P4: That job is vacant right now. You're like what? And that would be the most important part, I would say. (Interviewer: Yeah) Even like, because we we have such a high case of suicide, hey? In Northern [province], and in [community] too. That's why I'm saying I don't understand why that area is not seen as-as being important.

Interviewer: Hmm. OK. Is there anything that I haven't asked about yet that you think is important when it comes to assessing or treating behavior issues and-and trauma with-with the kids in [community]?

P4: No, not that I can think of right now.

Interview 5

Interviewer: So just to confirm that you are comfortable going ahead with the interview and that you've had a chance to ask questions?

P5: Yes, I am comfortable and I have had the opportunity to ask questions.

Interviewer: Fantastic. OK, um, and so at if-if at any point, yeah, you don't-don't want to answer something or um, you want to withdraw your consent, you can feel free to do that and any information I've gathered so far. I will get rid of, just so that you're aware, but we will start and see how things go. (P5: Perfect) OK, so the first question is psychologists usually assess the behavior of young people using interviews with parents and teachers. Questionnaires and classroom observations. Is there anything that you would change about how behavior is assessed?

P5: Uh (.) no, I like all of those things. I think (.) I think that the I think the classroom observation is vital because sometimes the behavior results as (.) an unfortunate mix of personalities between the student and the teacher. So I think it's really important to see that. Um, from a teacher standpoint, sometimes when I'm filling out the questionnaires they're really - difficult to fill out because the answers are yes or no. And I wanna - and sometimes as the teacher, I want to explain, so perhaps having a conversation with the classroom teachers would also be beneficial. Um (…) I - and I think maybe for older students (.) I don't - I'm not really sure though. I'm thinking like, some kids are are more self aware than others? So perhaps (.) having them answer - I don't know about a questionnaire. Um, I changed my mind on that - maybe just having a conversation with the kids is enough. Because the questionnaire might not get you the results you need.

Interviewer: OK and, um, I suppose you've spoken to this a little bit, but is there anything else you think might be missed by the way that assessments are done right now?

P5: Uhm (..) I think (…) Um boy(..). I think there might need to be - and I realized, you know, psychologists have time constraints and there's timelines that need to be followed - but perhaps more in class observation because I think sometimes the snippet is a very small window and for myself, being in different classrooms, I find the first time I'm in kids are on their best behavior. The second time I go in, they're still trying to do their best, but by the third time I go into a classroom, they don't even realize I'm there anymore - now they're used to me. So I think you get a much truer picture of what it's like for the child in the classroom and some of their typical behaviors. I-I also think (.) and I also think maybe that's where having a conversation with the teachers (.) to gather data would be good, like maybe in a similar way that you gather data from the parents.

Interviewer: Right. Kay

P5: But then I would also be cautious about talking to teachers because some of them run very negative about kids that are - with difficult behavior.

Interviewer: It's difficult to get the, um, yeah – in-in both ways it-it-it's kind of pulling together the-the (P5: Yeah) closest thing to the truth.

P5: That's right.

Interviewer: Kay. And there was a bit where your connection went, um, for just a second and I wanted to confirm that - was it that you were saying that it's a small window into their behavior? Was that - it's kind of a (P5: Yes) b - yeah. OK.

P5: I think - like classroom observations are great, but one observation is just a super small picture of-of maybe what happens on a daily basis. (Interviewer: Yeah) Cuz both teachers are - like as I had said, the students act different, but also the teachers do as well.

Interviewer: Right. That makes sense. The next question is, um, and this is kind of thinking about both behavior and I suppose other things that-that a psychologist or somebody else

might be consulted on, but is there anything that you can think of that keeps families and young people in the communities that you work with, um, from working with psychologists or mental health professionals? Like anything that holds them back?

P5: I would say the biggest barrier is the lack of manpower and the-the amount of wait time. So typically if I refer a student to see an educational psychologist it can take somewhere between (..) three months - if it's a student who's graduating, like a 12th grade student, sometimes they'll bump other people to get them in quickly - but typically (..) if I refer somebody at the beginning of the school year, it - we're lucky to get them in by the end of the school year and it's typically the following school year. So there's a lot of time between when we talk to the parents about a referral and the actual assessment date, and so I think that sometimes gives parents who are - who are worried or on the fence the opportunity to share (.) or quote unquote research, and find out all the negatives that could happen from it. [Interviewer: Ohh kay] and that could change their mind. Um, when consulting mental health professionals (.) um, so the students in schools typically have access to counselors, but I do not have a school that has a full-time counselor. Um the closest would be out of five days, like Monday to Friday, the-the most counseling I see in any of the schools, the nine schools I go to, would be four out of five days. (Interviewer: Ok) So kids do not have - and-and that's one counselor in the building for 300 kids? Or so? (Interviewer: Yeah) So yeah, it is difficult for them to get in to see the counselor and then in terms, in a broader term, in terms of our communities, there are no mental health professionals unless they're accessing somebody through the hospital. If their Community has a Hospital. Or if they're able to make a connection to someone online.

Interviewer: Right.

P5: So that would be the big barrier, just the (.) the lack of manpower, I guess, for a better term in-in rural locations.

Interviewer: And then when you mentioned that some parents are looking things up and finding reasons to not go ahead with it, what if - have they shared any of those reasons with you?

P5: Uhm, a few have and it ranges from (.) the stigma of their child getting a label (.) um, the fact that other members in the community will know that their kid saw the psychologist, and for some reason there are lots of people who see that as a really bad thing. Um, and I think the biggest one is when the ps - they find out the psychologist is going to talk to their student - or their child and gonna talk to them, and there are some people who are very - and I find this – I-I guess I shouldn't say more in a rural setting, because I don't have a lot of experience with an urban setting, but in rural settings, um people are really protective of their privacy in-in some ways. So - and in a small community, now everybody knows your kid's seeing the psychologist. And they feel that's a stigma - and they feel the parents themselves feel talking to the psychologists, they're nervous about what kind of questions are going to be asked and worried that the psychologist is then, I guess ultimately it's going to lead to a social services type of thing. [P5: Mmm] That we're gonna ask a question that they're accidentally gonna disclose something that's gonna make us raise the red flag and call social services.

Interviewer: OK, so a trust issue there maybe?

P5: I think so, yes. And because, um, a lot of people (.) so a lot of kids who come into our schools in rural Saskatchewan have been in multiple different schools. And I think part of it is economics and because it's the-the rent is much cheaper in a rural setting, (Interviewer: Mhm) we get-we get a lot of families who move frequently because of economics. And I

think it's also those families (.) that are very (.) worried about their privacy because they're new in the community or they've had troubles in their past community and they're not super excited to divulge a lot about themselves.

Interviewer: That's very interesting. So the next piece, um, and I suppose you actually what you were saying really leads into this. So, a bit of a I guess an explanation is that potentially traumatic experiences have been shown to increase the chances of disruptive behavior in young people. I'm sure, I don't have to tell *you* that. So examples might be divorce, separation of parents, having a family member who has addiction or mental health issues, neglect or seeing violence, things like that. Um, would you agree that these are sources of trauma for kids?

P5: Absolutely. And I feel like we're seeing them more. I don't know if the instances have increased in society or just (.) maybe the kids willingness to bring things forward to their teachers? Like in terms of-of what they're what their trauma-what their trauma has been and-and things that they seen, maybe kids are now a little more comfortable disclosing those things? Or maybe those instances are on the rise, I'm not sure, but I know that there's - we identified more kids with-with traumatic backgrounds than I think we have in the past.

Interviewer: And would you say there's any sources of trauma that you think are particularly important in the communities that you work with, like for-for psychologists to be aware of?

P5: Hmm. I would say (.) addictions, violence in the home, ostracism of the family or the kid in the community. That seems to be a big one like people feel – (.) people feel more (.) cut off from their-from the community members when their kid starts acting up. Umm.

Interviewer: That's something I've never considered before. That's, yeah.

P5: Like in a small town, so OK kid has trouble at school, gets in trouble lots. OK, pretty soon, everybody in town knows. Then the kid goes out to play hockey and they take those same behaviors to the rink. And so then the coaches try for a little while and then eventually they tell the kid and the parent, “You're not welcome to come back to the rink.” And so, in those terms, it-it definitely does feel like you're being ostracized by your community.

Interviewer: Right.

P5: I don't know if I can think of any others? Uh (…) I guess divorce, like the breakup of the nuclear family seems to be.

Interviewer: Not-not uncommon, hey?

P5: No, no and (.) like lots of times, you see really amicable divorces, but lately with s-with a lot of the kids I've been working with in other schools, the child is sort of a pawn in the middle of two parents who can't agree on things. (Interviewer: Mmm) Which I'm sure isn't coming as a shock to you.

Interviewer: No, but it's awful still so- (5: It’s absolutely). So the next bit, um, is - and then this is where I guess you'll-you'll-you'll have a really wide scope on this, I guess going to a few different communities, but, um, are there any kinds of local activities or cultural events or resources that you think that would be helpful for young people in the communities that you work with, um, to help them process anything that's going on, like, trauma-wise?

P5: OK, so in a couple of communities that I go to, they have, uh, youth centers that run on the weekend and I think-I think that's good for kids, you know, just to be able to go and hang out together in a different place that's not manned by teachers telling them what to do? (Interviewer: Mhm) But you know, I would say that's a total lack in most communities - is having something like that. Unless the family is involved in-in the local church and the

church group has something? I think if the kid is athletic and they choose to play sports, that is a good connection because it often puts them in contact with a - with another safe adult. That they can talk to, you know, like their coach. Often kids who are going through trauma develop a really strong relationship with their coach. Um, but if the kid is not athletic and not making connections at school there's not a lot for them in-in most rural communities.

Interviewer: And would-would your answer change at all when thinking about, um, behavioral difficulties versus trauma stuff? Are there-are there any activities or resources that are available for behavioral difficulties, or is it kind of the same thing there's?

P5: I wouldn't say there's much. Like unless you can connect a family through social services, or if the student carries a diagnosis, say the behavior is a – it's a cause or a product of-of ADHD, um not - less ADHD, but more like autism or cognitive disabilities. Then we connect - then we can get kids connected to [autism supports) or (cognitive disability supports) strategies, and then they provide people to come out and help. But if kids are ADHD or just coming from a, lack of a better term, a crappy background (Interviewer: Mmm) and boundary issues, and that results in-in behavior - what the school would perceive as behavior issues, there is virtually nothing in rural Saskatchewan.

Interviewer: OK, and so then the next bit is are there any supports for trauma or behaviour that you think are important but not available locally? [P5: Laughing] Paint your perfect picture, yes. [both laughing]

P5: Like first in a perfect world, I think everyone in rural Saskatchewan should have access to mental health professionals in their community. I think communities that are culturally diverse, it would be great if there was (.) elder or a say adult figure from the cultural background to work with the kids and work with the parents, cause I think sometimes

parents run out of strategies to try with their children. Um, when there's behavior involved. I also think, um, like I know through social services I've met a couple of ladies, or a behavior strategist? Um, and they work with kids. And I'm-I'm still a little foggy. I think there's a counseling aspect to that and then helping the kids (.) find a pathway, like I think that's what they do. Like these behavioral strategists? (Interviewer: Mhm) Um I also think it would really benefit schools to do more training in, especially with their young teachers, in classroom management, because I think we can curb a lot of potential behavior risks by having better classroom management. And then I guess the same could be said then for parenting support.

Interviewer: Right. Ah. Well, I like your perfect world, [name] [laughing]. Um, is there anything you feel like I haven't asked about, but it's kind of in the same vein that you'd like to share.

P5: Um, I think, from what I'm seeing say in the past (.) three-three years, like perhaps since I left [Job] was that (.) I think behavior in our school, we are seeing more behavior because kids are coming with more anxiety, and however that anxiety is brought on, if that's they're not good at school or they have-have a diagnosis and the teachers are unaware of it, so they're not making the adaptations that are needed. Or kids are undiagnosed and teachers are not making adaptations. But I think we're seeing a lot more behavior brought on by anxiety, so I feel like in the younger grades, if we could do something to help kids learn (..), I don’t know, better coping strategies to deal with anxiety? Um, we could possibly see less behavior - atypical behavior problems when they're older.

Interviewer: So like be kind of building up those foundational skills?

P5: I think so, yeah. Like maybe start working on some of that executive functioning (.) sooner? Or maybe not even sooner, just maybe it needs to be done differently, and I-I'm not

sure how it needs to be done differently. But, like, when you have third graders who need to be medicated because of their anxiety, (Interviewer: Mm) I feel like there's something we could have done that was more preventative in grades K, 1, 2, to help that little person - and you know what? Like that little person could need that medication because there body chemistry is different and, I get that - like I take anxiety medication too. Like I understand the need for it. But I just think, wow, when kids are eight? [Interviewer: Mm] Like to have that much anxiety in their life, I just, I-I feel like there's something… and - that we could do, maybe as a school, maybe as a community, maybe even at the parent level - like just providing more support to help. And I guess kind of that's where I in my perfect world, when it goes back to if we had an elder from every-every cultural group in your community accessible to kids. (Interviewer: Mhm) Like a strong, safe role model. (Interviewer: Yeah) You know, that might help. Because maybe some of the things that we're doing at school actually increases anxiety in some cultural groups instead of what we think of decreasing it? (Interviewer: Mm) You know, so maybe we-we, as educators perhaps need more-more training around different cultural norms? But I don't know that that's the only thing that we need to do. I think-I think it needs to be community, school, and parent level. I think there needs to be more support in all three of those.

Interviewer: Yeah, like a real wrap around system. (P5: Yeah. Exactly.) Kay. Well, thank you very much. That was super insightful. So I if you're OK, I will stop the recording.

Interview 6

Interviewer: OK. And so just to confirm that you are comfortable with the recording and you've had a chance to ask questions.

P6: Yes, I have.

Interviewer: OK. So the first question I'll get you to answer is, so psy-psychologists will usually assess behavior using interviews with parents and teachers, questionnaires and classroom observations. Is there anything that you would change about how behavior is assessed?

P6: Um, I think that it would be interesting and beneficial for students to meet with the-the psychologist - more one-on-one before the official - you know, when you take tests? In the past, we've had a student who was being tested for a learning disability but thought it had something to do with her parents' divorce and how well she did was going to be based on like who she got to live with.

Interviewer: Ohh wow.

P6: And so she just had no understanding of what was going on so she wanted to just fail the test, to, you know, I guess make a point. Whatever point she was trying to make. (Interviewer: Right) And so I think maybe e-establishing a bit of a rapport before going in for any sort of testing (.) might be beneficial and maybe help test scores, might alleviate some anxiety?

Interviewer: OK. Um, is there anything else you think might be missed by assessments the way that they're done now?

P6: Well, I think anytime you get a student in a room for only a short period of time, I don't know how you go about doing it any differently, but obviously there are so many factors that could impact that, right? Like, have they had breakfast that day, what was their

morning like? Um, so I think that those sorts of things could impact it. Also it would be interesting to see how - I'm not an SST myself, so I'm not sure how these assessments are created - but just looking at what sort of people, what sort of, you know, demographic is best served by these, and which ones aren't.

Interviewer: Well, that's interesting. Do you have any thoughts on what kind of patterns might be there?

P6: Well, I'm thinking, you know, we definitely have traditionally in education been very Eurocentric. And so as we start seeing more students coming in, you know, with traumatic pasts, like Syrian refugees, different languages being spoken. In the past, I feel like a lot of assessments have really negated those experiences or made them not as significant or like not valued them as much in our assessments. Yet there are so many things that could be- that we might be missing just even on a cultural level. So I'm thinking even when I took a French class in university, our professor was talking about how in French There's so many like different grades when you're talking about how your day was even. So in English, we tend to be very black and white. How's your day? It was good or it wasn't. But in French, it's like, you know, *comme ci comme ça*, it's a little bit of this, a little bit of that. And that's just normal and part of the culture that you don't have to (.) identify things in such harsh contrasts.

Interviewer: Right. (crosstalk) Ok

P6: So I think stuff like that, right? That's just a minor example, but something looking at the cultural - you know, who created these tests? With whom in mind?

Interviewer: Right. Kay. Um, and I suppose, speaking to the communities that you work in as well, is there anything that you can think of that would keep families or young people from working with psychologists or other mental health professionals?

P6: Yes, in my uh community, actually there's a number of cases where people just can't make it into [Larger City]. So - or the I guess, to not use the city center, just the nearest, larger center, where psychologists would be available. (Interviewer: Right) It has gotten a bit better with COVID because people were doing more online things. But as we go back to more face to face, that does make it difficult for rural students to access in the same way that their, you know, city counterparts could.

Interviewer: OK. Anything else that you think would be a barrier for those folks?

P6: I think stigma is still a thing. It has improved, I would say, even just when we have, you know, the counselor will call down to our classrooms and say, “Hey, can I speak to so and so?” and when people get up to go, uh, people generally know where they're going, but there doesn't seem to be *as* much of a stigma. It's like so many people have gone for so many different reasons there doesn't seem to be, at least in the classroom, maybe separately, you know, online or something, maybe they are being discussed about that. But it does seem to be better with that, but I would say the older generation, that would still be some stigma about going and accessing a psychologist, what does that mean about you?

Interviewer: Right. OK. Thank you for that. Um, the next bit, um, there's a little bit of an explanation for. So traumatic experiences have been shown to increase the chances of disruptive behavior in young people, so some examples you might be familiar with would be divorce or separation of caregivers, um, having a family member who has an addiction or mental health issue, neglect, abuse or seeing violence. Um, would you say that these things are examples of, um, events that you would think of as traumatic?

P6: Yes

Interviewer: Kay. Do you think there are any possible sources of trauma that are important for psychologists or other mental health workers to know about when working with young people in your community specifically?

P6: Like in my community specifically we have lost a number of students (Interviewer: OK) due to taking their own lives or a car accident a couple of years ago, um, by a very popular student who had many friends, well known in the community, played a lot of sports. You know, had a lot of connections. (Interviewer: Oh wow) And so yeah, that was pretty (.) pretty intense. And it was interesting because a small school, right? So everybody knows everybody, the people that were really close to him were obviously feeling it, but even people who maybe weren't super close with him, but were like, “Wow, he was in my class. We were partners every year.” (Interviewer: Yeah) You know? We sat beside each other in science the day before. You know, that kind of thing? (Interviewer: Okay) But I feel like that's already pretty on people's radar. Like a traumatic event that would (Interviewer: Right) impact a number of people.

Interviewer: Yeah, I think it's a good point though, because people, you know, if, let's say the-well because often I think the-the psychologists or other workers like that aren't from the community, they might not have the same background.

P6: Mm. True, true.

Interviewer: Um, so I think that, like, - do you think that things like that, um, because of the size of the community affected in unique ways?

P6: Uh, yes, I would say. So, because everybody seems to feel that when we had counselors come in, right, like they offered it, um, down to younger grades, even because, you know, sometimes they have cousins there, sometimes it was like, “Well, he helped coach my baseball team.”(Interviewer: Yeah) Those sorts of things? So I think especially in a K to 12

school, you're not really sure who's going to be impacted by it. And then at the same time, you don't want to cause a lot of stress for people that didn't know him to all of a sudden realize, you know, kind of go through those feelings of "What?! Young people can pass away? How does this happen?" It was an accident. "My dad gets sleepy at the wheel too." [Interviewer: Oh wow] "What if that sort of accident happens to me?" So it's kind of that fine line of not causing stress where people don't know him necessarily. You know, maybe grade 2. (Interviewer: Right) But at the same time, acknowledging that that is a-a shocking thing and everybody in the community probably saw him at some point, even if it was just at the baseball diamond.

Interviewer: Mm yeah. So I suppose, um, this kind of connects nicely to the next question, which is, um, what kinds of local activities or traditions or resources are, would you say, are helpful for the young people in your community who might get affected by something like that or another traumatic thing?

P6: Well, our school division does send out counselors. Um (Interviewer: Ok) unfortunately, this has happened a number of times in my career, so I have seen that they are consistent with - they'll send out counselors, open up the school to have a safe place for people to go and just talk through things. So on the night of the event, the school was opened - or I guess the next day, cuz it was in the middle of the night, and uh, you know, people had a place to go. Which was good. And then there is continuing counseling support, *but* they keep cutting those positions. [Interviewer: Mm] Which then I think impacts, right, going on, if you can't have somebody to talk to on the daily or the weekly, or even monthly, right? When that gets a little bit tricky, then I think you would start seeing it in psych assessments.

Interviewer: OK. And so I suppose connected to that, but thinking more about the behavioral outbursts and things, like that, that - I mean, they could be connected to an incident like this or could just be happening generally. Are there any activities or resources in the-in the community itself that are helpful for that? Like that people can access even if there's not, um, I suppose external people coming in?

P6: And not school?

Interviewer: Oh no. [tech issues]

P6: Ohh no, I hear you again.

Interviewer: Ohh, OK, there we go. You're back.

P6: (crosstalk) So do you mean not - oh, I was just wondering if you meant not school related.

Interviewer: Yeah. Yeah. Anything that it-it-yeah. In or out of school. Um, yeah.

P6: For behavior? Ah, you know what? I don't really think so, like, in a neighboring community - that's the problem: our school is only half an hour away from a larger center. And so a lot of people will just come in. So I'm thinking [Larger City] has the center, which is a youth - a place that youth can go to a little bit later at night, right, if you're not wanting to go home at 7:00 PM. And there's, you know, responsible adults there. (Interviewer: Right) Not so much in-in this place that I work - the small town. You know, I-I don't know of any youth groups or anything that might help just have people have a - besides sports, which a lot of people also mo-go to swift current to play their sports. Uh, to have something that might give them a sense of belonging that might help with behavior?

Interviewer: OK. (P6: Yeah) Has it – just out of curiosity, cause like I th-I've-I definitely know what you mean with people relying on kind of going to the bigger centers. Do you

ever have - have you ever worked with a student whose family was kind of limited by not being able to-to travel that far?

P6: Yes, absolutely. Like we have students who their teeth are terrible, but they have no vehicle to get into [Larger City] to go to the dentist. Got new glasses after five years. As a child, right? (Interviewer: Yeah) I mean, imagine how much your eyes change. And being in Grade 9 and getting new glasses for the first time in five years. (Interviewer: Right) So this-you know, and that's something you can't, you know, bring your eye doctor to [community]. (Interviewer: Yeah) Or your dentist, right? You have to get there. So absolutely that's something that - and it's only half an hour, so it doesn't impact a lot of people, which I think is why it doesn't get a lot of, you know, mention or acknowledgement.

Interviewer: Right. Um so if you were thinking about the-um the-the trauma part that we touched on before because you had mentioned, um, that the-the-the therapeutic services would be offered through the school normally, um, are there any, are there any kind of mental health supports outside of the school there?

P6: Not in the community, no. You would have to go into nearest center.

Interviewer: OK. Alright. So then the last question is kind of broadly, um, and this can be about trauma or behavior or both. Um, are there any supports that you think are important but aren't available locally?

P6: I think that (.) there's a big focus on sports in this community, and so it's very hard for people who might want to be in a Dungeons and Dragons club or (Interviewer: Mhm) a-a reading club to find a place. Um that's something that I personally try to do with my own extra cur. One I'm not super sporty [laughing] so that's not really where my interest lies, but also there's just a - there is an area that is - a group of students that is being missed of

having a sense of belonging. And like I said earlier, there aren't any, you know, youth groups of, you know? (Interviewer: Yeah) Like when I was growing up, there was a-a church youth group but it was not religious based. It was really just to give people a place to go and it was in a church basement. But there really is nothing like that. Like religious or non-religious - maybe 4H, you could say. But I think just having that sense of belonging, that you don't need to be able to, you know, hit a ball, catch a ball, and you can still belong. So there's a lot of people sort of going (.) out that - like, I just feel that. Sense of belonging is missing.

Interviewer: Right. Yeah. Um, kay. Is there anything that you feel like is kind of, that-that I haven't asked about that kind of comes to mind when you think of this topic that you'd like to share?

P6: Um, I just think that maybe the - also the connection between when these behaviors come out. In a negative way, teachers are very - like in the classroom, there are so many students, very little support, in terms of, you know, having EA support. Like lately, it has really gone towards EA's being more utilized for physical needs and less academic needs, which is sort of resulting in some more behavior issues because you're losing that support for people who maybe aren't as regulated. (Interviewer: Right) On a daily basis. And so I just feel like when these behaviors happen, the - and you've got, you know, 20-some kids in your class and one is alt and two are modified and the rest are regular stream. The patience and the understanding that you can give to somebody to, you know, talk to them outside of the room or calmly deal with it, tend to not be there.

Interviewer: Right. And when you say (crosstalk) ohh sorry go.

P6: I was just gonna say like, despite teachers best efforts. I think you know, you're just trying to keep everything running smoothly, you have so many things happening, you're

trying to get your lesson plan going. And I mean, you know, being a teacher, right? Then you're also wondering, “Is my room tidy enough?” Or “Does-Do the walls look decorated enough? Do the students see themselves here. And what about what happened at recess?” And “I have to go to the bathroom and [laughing]

Interviewer: Yeah. So yeah. When you mentioned the-the physical needs that the EA's are kind of responding to what -what kinds of needs are you thinking of?

P6: Well, we have some students who need to be, uh, tube fed.

Interviewer: Oh wow.

P6: And so that's - yeah, that's more so what they're doing. Or that need to be, like, changed - like a diaper or help in the bathroom? (Interviewer: Right) And so I know some schools like they're-the EA's are delivering insulin.

Interviewer: Oh gosh, yeah.

P6: And so the - which obviously is going - if you only have so much EA time, that's going to go towards (Interviewer: Right) making sure those things are done over certain students. But I do find we've got students who have been in, and I don't know if it's due to COVID or just, you know, slipping through the cracks or just tricky? Like we don't have a lot of access to Ed Psychs, so a lot of times we don't really know exactly what's going on, everybody's kind of just doing their best from year to yea, and then you realize, “Ohh this person did tap out in Grade 6 (Interviewer: Yeah), excuse me, academically or this person was capable of more, but was still put with a different class,” and you know, those sorts of things? And I feel like (Interviewer: Right) then they don't have the support because, the line that I've been given a lot is, “Well, now that we've decided that they're going to go in alt, uh, they should be able to do everything by themselves.” But we're talking about students (Interviewer: Mm) who have not been alone in a program for nine years. And then they're

going (Interviewer: Right) into grade 10, and they're supposed to just sit quietly. And again, in a class that has mod kids, behavior kids, and then twenty regular stream kids. That student is not going to be getting the help that they deserve, or the support that they need to be able to function. Privately, like they've been in small classes with four people. (Interviewer: Yeah) Now, they're being thrown into this, where half of the lesson does not concern them. And they're supposed to just sit there and-and be on task, (Interviewer: Yeah) because it's at their level. But there's so much more to teaching than just saying, "Well, you're grade 7, you should be able to do fractions. Let's go."

Interviewer: Exactly. No cause it's not just the content, right? It's the self-regulation.

P6: Yes, exactly. But those kids that are quiet, they always slip through the cracks. Because, "Well, he's not (Interviewer: Right) throwing a chair, and Joey is." And again, I mean from the admin point of view, I get it. You only have so many bodies. You're try-you know, you're trying to do a whole bunch of things. We-we've had a lot of English as an additional language learners come in, [Interviewer: Oh sure] and so that has taken away a lot of time as well. You know, so for sure, I don't know what the right answer is cuz I don't think hiring three more people is really on the table. (Interviewer: Yeah) But those students, definitely. So you have to have the right behavior to get the support you need, and unfortunately that's a negative behavior.

Interviewer: Yes. Yes, and that is the-the struggle. Kay, um. Well, I think. That's all I will keep the recording on for because I think that we've covered a good amount of information there. Unless is there anything else you wanted to add?

P6: No, I think that's everything.

Interview 7

Interviewer: OK. There we go. OK, so, um, we are just about to start the interview. Just to confirm that you are comfortable with going ahead with the interview and you've had a chance to ask any questions that you had?

P7: Uh, yes, I am. No questions at this point.

Interviewer: Great, great. Um, ok so the first question is, um, psychologists would usually assess the behavior of young people using interviews with parents and teachers, questionnaires, and classroom observations. Is there anything that you would change about how behavior is assessed right now?

P7: Honestly, I think i-i-in-in my experiences, I would say that all of that does happen if there's a student that is, um, showing some pretty severe behavioral, um, challenges in our school. I think the timeliness of some of those observations and conversations, um, needs to happen, um (.) I don't know, I feel like it's - I feel that it's often a reactory rather than proactive, right? And to have the follow up conversations, you know, when the student is doing really well? You know, obviously I feel like you would get further in-in supporting that student, you know, when there isn't an outburst or, you know, some sort of tr-behavior that has happened in the school that's unacceptable. (Interviewer: Mhm) So I find that there needs to be some comfortable way of having those planning conversations when student is doing really well. Then think everyone is feeling successful, um, and then, you know, trying to – and-and same with-same with the like the psychologist for example, when I have ed psychs come in and try to do an ed psych assessment, I have a couple of students who just refuse to talk. Right? (Interviewer: Mhm) Like there are certain people that they will talk to in the school, but when the ed psych is there, like, we've been waiting for an ed psych for a few years for one particular boy who has severe trauma in his past and we just

can't get that data because he just refuses to talk to anybody else, so. Um, so I think there's- there's relationships that need to be - real authentic relationships that need to be had with this - made with the students and the families. Be trying to find the right opportunity to have those proactive like planning supportive conversations. Um, so I think that timing is often a challenge as well.

Interviewer: Yeah. So, um, when you think about kind of like the-the perfect scenario for dealing with that kind of thing, what would be - you know, if you had unlimited resources in that situation, what would you envision?

P7: Like one of my students who I- uh, I have a really good relationship with this student and this person had a really wonderful year last year. But he did, he did, you know, go to fighting three times in the school year and he's-he's just a little guy, 13. Um, but that's just what he does, right? And he just goes into protection mode and doesn't see (Interviewer: Yeah) it any other way, so on the very last day at school, at 3:00, you know, there-there's a bit more chaos during that time, and right, and he doesn't do well in unstructured situations, so he punched another kid, and I was just like [exasperated sound]. Last day of school, I got 10 minutes left before the school bell, and, you know, of course I had to call Mom and Dad and just make sure everything is good and they were not happy, so. So now that we've had the summer to break and cool and chill and relax, you know, I would love for that conversation to happen in the fall, but not the first day of school, you know what I mean? (Interviewer: Right) Like, let's just kind of get rolling and let him feel like he's got a routine and everything's going to be OK and then try to catch that perfect time so we could have that conversation with - we also don't have a counselor right now, um. (Interviewer: Ohh) So, right? (Interviewer: Yeah) And so that's going to be a new person that I would say that maybe this isn't quite the right answer for this question, [Interviewer], but isolation is I

think very similar in rural Saskatchewan as it is in the North, right? We're-we're very isolated and supports are not nearby. (Interviewer: Right) So…

Interviewer: That, um, yep, that sounds familiar, yes. [laughing] Um

P7: Yeah. So as far as timing goes, I think if-if there could be like two or three weeks after an outburst, if the outbursts aren't that frequent and then let's have that calm conversation. And with the right people in the room, without it being overwhelming too, right? I don't want to have, like, everybody there cuz then that's very intimidating for the family and for the student (Interviewer: Yeah), but.

Interviewer: So it sounds like. (crosstalk)

P7: But I also feel like I need support, right? Cuz I-I'm not a psychologist, right? I'm-I have some student support training, but I don't-like I go to the [coworker name] of the world. I probably shouldn't have said her name, but I go to my-my-my people that I know have more expertise than I do for support, right?

Interviewer: Yeah. So it sounds like there's, um, a mix of, um,having the right like the-the availability and the flexibility of being able to kind of have, um, that uh consultation on tap, I guess, or on call.

P7: Yeah, yup. Exactly.

Interviewer: OK. And so the way that assessments are done now, what do you think might be missed?

P7: Well, in-in order-if we're talking like an ed psych. If you know, if that's the type of assessment you're referring to, I think, um, those ones, I think what - to get an authentic read on a student, relationships need to be developed. And I know that they're stretched and they can't spend a lot of time in all of our schools, but I think even if they could just pop in, um, you know, for-just for classroom visits, just to be like a familiar face, even if they have

just a half an hour between assessments or they happen to be driving by our school. Like just to have them just be a-a common face, so that when they do come and ask hard questions, then they think, “Oh yeah, I remember when you came in and when we were doing… whatever.”

Interviewer: There's a bit of rapport there.

P7: Rapport. Yeah.

Interviewer:

Yeah. OK. That's (crosstalk) mm-hmm.

P7: Our little people will talk and talk and talk like [both laughing] (Interviewer: Right) our K, one, two, three folks. They get-they get guarded, right, in middle years and high school and they're not gonna - many of them, aren't -they - the trust is broken in their lives, so why would they trust this person who's actually trying to help them?

Interviewer: Well, you have already anticipated my next question, uh, so yeah, which is great, but it - so is there, is there anything that you can think of that keeps families and young people in the community, um, from working with psychologists or other mental health pr-professionals?

P7: Yep. So definitely they've had, um. Well, like in a few situations, I think(.) Like the successful, I would say, in my experience, we have had more success with our ed psych assessments, mostly say ADHD, autism spectrum, those types of things, cuz (Interviewer: Mhm) the-the parents are really feeling-feeling it at home too and they're asking for help because of, you know, the behaviors that are happening at home as well? And so when we validate that we're also seeing those behaviors and they’re like, “Hey, what are we going to do?” So that that whole wrap around. So those-those-those ones are easier, it's the-it’s the, um, like ODD, um, violent, um, violence, like those types of behaviors are the trickier ones,

cuz I feel like there's - there's guarded, the parents are guarded. Um, whether it's something that they're protecting from, like the-themselves, or something that's happening at home, right? (Interviewer: Right) And so, that's hard to have those-those moments with those families because (.), you know, the parent might be the problem, right? (Interviewer: Mm). Like severe alcohol or drug abuse, which leads to other types of abuses that are happening or have happened at home, (Interviewer: Right) where RCMP and social services have been involved. Um, and I would say-so those, I don't know if I'm answering your question but, those are the - those are the tricky ones. Those are the ones that I worry about because when do I involve the RCMP and social services and when don't I, right? [Interviewer: Right, yeah] And and then those families don't then - because I also want to make sure cuz I-I-I believe that the best experiences that some of these children are having are during the school day with us. (Interviewer: Yeah) And so - which is why I'm curious about the-the outburst of the one boy at the end of the school year. I'm like -I feel like he's just gonna miss us [Interviewer: Yeah) and so that's why he acted out, right? And so (.) in those situations, I'm just not sure how to answer your question, but -

Interviewer: Well, yeah. And I think, yeah, no. I think you're (crosstalk) doing a great job

P7: Those are hard ones! [Laughing] (Interviewer: Yeah) Those are hard ones, but I think - all I've said to my staff, is like when those kids are acting out and - or if they haven’t been at school for a while, cause there's another couple situations with high school, like, welcome them back in. Don't say a word about, “Where were you?” and, “Why weren't you here?” and, “You missed this, this and (Interviewer: Mhm) this. Your homework is piling up.” Do you - I mean, that conversation needs to happen, but it doesn't need to happen the moment they walk in. Like, let them feel welcomed and safe (Interviewer: Yeah) and comfortable, and then give them a day or two, and then, like, you know, there's a couple of

things that we should really think about gettin done. And then - and don't tell them about the mountain. [Interviewer: laughing] Tell them about a little hill, right? And let's just start there.

Interviewer: It sounds like you are definitely, yeah, creating a warm environment for-for these students. So, yeah. Um, ok. Um, and I suppose also in that vein - so the-the next question has a little bit of a preamble, but, um, so potentially traumatic experiences have been shown to increase the chances of disruptive behavior in young people, which I think is exactly what you've been alluding to. Um, and so examples might be, um, divorce or separation of their-their parents or from their parents, having a family member with an addiction or mental health issue, neglect, abuse or seeing violence. Um, would you say that these things are, um, commonly understood kind of by you and your community as potentially traumatic experiences?

P7: Um, for sure, our staff, when you say community, I would say like I have the most amazing SCC, like student, or, School Community Council – just, like, outstanding. And I would say that they do as well. Um, as far as extended community, I would hope so, but I-I don't know. Sometimes small towns are hard too, because there's the rumor veil that makes things maybe (.) the truths are stretched and not, you know, (Interviewer: Yeah) entirely the case. But-but I would say that yes, they would understand that those are (.), um, considered experiences that would cause trauma.

Interviewer: Are-are there any sources of trauma, uh, that you think are particularly important for psychologists or other people working within the Community to know about, um, when working with your-the population that you serve specifically?

P7: Just, I think, like, we – uh - the-the one thing that is on my heart and mind is the-the high level of-of variety of types of anxiety (Interviewer: Okay) from all of our students.

It's-it's-it's starts in grades three, like our grade 3, 4, 5, 6 class was like - oh my gosh. I've never seen levels of anxiety like that ever before at a [Interviewer: Mm] at that age, so of course that's gonna continue. (Interviewer: Yeah) Right? And then that led to absenteeism. It led to, um, a family pulling their child out and homeschooling.

Interviewer: Oh my gosh.

P7: And she was in Grade 3, right? So-so when my heart has been with that particular group of students. Um, so I don't know if it's necessarily trauma, but it's causing trauma, right? Like they're-they're fearful to say things, or do their best, or come to school. Like the couple of them stopped riding the school bus. (Interviewer: Wow) You know? So when I'm looking at that - what I did this year though, is because they were in the triple grades, because we're small, (Interviewer: Mhm) and so I-I rearranged it so that there's only double grades, because what was happening is the little grade threes, who were very strong grade 2's coming into grade 3, didn't feel strong anymore because they were with grade 4 and 5. (Interviewer: Right) And-and those grade fives are going through puberty, right? And that even (Interviewer: Yeah) like that - what they're talking about, let alone how they're learning, is so different from a student in grade 3. So (..) is that trauma, like? It's not necessarily divorce, death, abuse. Like those really hard-hitting ones. But it's definitely affecting who they are becoming as little people because of what they are feeling and seeing and hearing.

Interviewer: Do you have (P7: So) any hunches as to what-what might have contributed to that.

P7: Well, the two-the – like, the one girl - oops, sorry - student that, um, I-I got really close to her, like she was kind of my like person when she was having, like, a moment. It happened in the winter. It happened when there was some performance anxiety and Mom

and Dad and I were very close, and still are. I invited them back into the school whenever they felt – like, whatever, like, if they want to come for play dates, etcetera. So there was performance anxiety. I think that there's some attachment happening at the parent level. I think Dad also struggles severely with anxiety. He hasn't said it, but I can kind of see it. So I feel like there's maybe some - just behaviors that are at home that she just is learning from Dad too. Mom's actually, um, a therapist, so she's (Interviewer: Ohh) [P7: laughing] got her hands full. Um, so there's that. And then with the other boy who stopped riding the school bus and he continued to come to school, but it was a struggle. But Mom and Dad just didn't give him the choice to stay home, whereas the other family, they gave the girl a choice or the student choice. (Interviewer: Uh huh) Um, he struggles, o-and Dad and him are very similar with levels of anxiety and perfectionism. (Interviewer: Ahh) And so, yeah. And so Dad and Mom was very like, and she's just very, like, open and flexible and, kind of like, vibey, if you will? [Interviewer: laughing] which I think is like the right connection. Like if her husband's a perfectionist and she's vibey, I feel like that's [laughing] a nice family (Interviewer: Yeah) you know? Um everyone's seeing therapy and counseling, so I think all of that is good. But I think there's that level of perfectionism and that little boy was in grade three. He was a very, very strong student, and just wasn't feeling successful. But there is one little piece in all of this: there is one boy in that classroom who has ODD, he's autistic, and his be - his violent behaviors are (..) alarming. (Interviewer: I see. OK.) So he is definitely a huge factor in the dynamics of that class. (Interviewer: Kay, yeah) So that's a whole other level. (Interviewer: Huh) Uh huh.

Interviewer: Yeah, it's like it sounds like because it *is* such a-a-a small group that it – that, you know, that-that one student - I mean, maybe in any classroom, one student can make a big impact, but, maybe more so in a smaller classroom.

P7: Yeah, yeah. He's got violent tendencies, he's destroyed classrooms [Interviewer: Wow]. We-we just remove all the other students. He, again, has had a way better year. He came from – he - this particular student came from another school (.) um, with very traumatic experiences, um, (..) where he was just put into another room for his- (Interviewer: Oooh) for his own safety. (Interviewer: Yeah) Um, and I-I w- get in - a fresh start for this boy, right? And-and I don't - and I support my colleagues in the other school who did the best they could with this particular student (Interviewer: Yeah), so, I mean, it is what it is but, um, in this case, Mom and Dad are really interesting. Like, I feel like there's, like, Dad does all the talking [Interviewer: Ahh] and mom just smiles and nods and listens. Right? So I've (Interviewer: Yeah) seen her kind of get, um, (.) overtaken by him. (Interviewer: Uh huh) You see? And so, um, I've learned how to be very like straightforward with the father in what I'm seeing from the behaviors of their son, (Interviewer: uh huh) because if I don't say it like exactly how it is, he doesn't hear what I'm saying, you know? For (Interviewer: Ah) like his artwork, he draws and doodles the sun, and, uh, it's very violent always. He uses red and black, it's always got teeth, it's always mean. He's-it's very compulsive. Like he will just color these crazy, odd, violent pictures and - rather than doing his schoolwork, right? (Interviewer: Ah) And every day like we've had - you know? And Dad doesn't see that as an unusual behavior. So (.) um (Interviewer: Right) I find that - and we have one-on-one, like, this particular student has an EA with him at all times, including the playground, (Interviewer: Oh kay) because he can just spin on a dime, right? (Interviewer: Yeah) And he's never hurt, uh, anoth - no. Oh, no. He got - actually, he got in a fight-fist fight with that other sparkly student that had the fight (Interviewer: Oh) at the end of the school year. Those two happen to pass in the hallways [laughing], I think “Oh no” (crosstalk) Interviewer: Oh, geez, yeah.

P7: I know I have a small school, but like (Interviewer: Yeah) a few sparkly students here though (Interviewer: Ah). So, in this case, I don't know like (.) So I feel like there's (crosstalk)

Interviewer: What a lovely way to refer to it though. [Laughing]

P7:

Right? [both laughing] (Interviewer: Yeah mhm) So I think there's some family dynamics, but, um, (Interviewer: Yeah) I-I feel like multi-grade, added with some students who have special needs, (Interviewer: Right) in a small school [laughing]. (Interviewer: Yeah) The violent behavior is a hard one too, right? Cause other -cause then families talk and - and the school bus? Oh my gosh, the school bus is a whole nother. Like, I've had to like step in and help the school bus driver have rules on our school bus, so there wasn't violent behavior happening there. Stop fighting. (Interviewer: Yes) [both laughing] Anyway, I don't know that was a very (Interviewer: Yeah) good luck transcribing that answer, [Interviewer]. [Both laughing]

Interviewer: No, I think but-but like I think, um, that-the-the-that's-that's actually quite a unique contribution in terms of, um, the, it's in the-like the-the way the individuals are interacting with each other is actually in some ways possibly a source of trauma because of how intimate those connections are.

P7: Yes, 100% because they're stuck with them until (Interviewer: That's right.) Grade 12, right?

Interviewer: Yeah. Yeah, that-that's very interesting, um, and so then, yeah, um, what kinds of local activities or traditional practices or resources do you think, um, would be helpful for young people who are in the community, um, who are affected by something traumatic? And these would be things that are already available.

P7: Oh. Well, I mean, as far as extracurricular, like-like do you mean, like, teams and things like that? Like-like horseback riding? (Interviewer: Yeah) Yeah, like there's horse therapy, um, that some of our students have-have started doing. They-they love that. Oh my gosh, all they do is talk about their horses. So, like hockey teams, sports teams. Umm (.) as far-like there's-there's some local therapists like they would - but like, they - or counseling. (Interviewer: Ok) So - but it is between 30 and 50 minutes away, or an hour, some go to [Large City Centre] for their counseling. [Interviewer: Ohh kay] Right? So I'm [Town Name]. I don't think I said that. So, I probably should have said that, actually. (Interviewer: That's OK.) [both laughing] That was a bit – I'm in a very small town. That's, um, it's a school of need. The location. So it's and it's right beside a beautiful lake, so this last year we had a grant for, um, I called it, um, a wilderness wellness, pro-project or program. Where we had funding so that we could take our students outside cuz we live right beside Lake [name]. So (Interviewer: Ohh) – right? So we-we went hiking, um, we took the high school kids out for sunrise breakfast. So we were with men (Interviewer: Aww) at like 7:00 in the morning in February and marched out to one of the pastures and, you know, made a fire and cooked breakfast in the winter, and then it snowed beautifully. It was just, like amazing. Uh, we went ice fishing. We were the first school division-school in our school division to ever go ice fishing cus we just passed - they just passed a new policy. Only caught one fish, but we had a lot of fun. Umm, uh beach walks, we've done those. So like we've done that as a school just to, you know, get outside and just be together connecting with the outdoors. I loved it. Everyone loved it so much.

Interviewer: And you-you mentioned that it's a school of *need*. Is that - is that what you said?

P7: Yeah, because the location. Yeah, school. Yeah. (crosstalk)

Interviewer: (crosstalk) Oh I see. OK, alright, I understand. Oh ok.

P7: Because of where we're located? Yeah. [Town 2] school closed many years ago, cuz [Town 2] is only 10 minutes away and [Town 2] is actually a larger [Interviewer: I see] community than [Town]. But just-just because of where the other schools - cuz then there's - the [Village 2] past [Village]. And then for us, it's like [Three town names] kind of (Interviewer: Right) there, so we are really just a school of location.

Interviewer: I see. OK. I understand, right. (P7: Yup) Because this is to do with, yeah, the amalgamation and all of that. Yeah. OK.

P7: Yeah, yeah, yeah.

Interviewer: Ahh. Um. So if I is the same same question I guess, um, but, um, would there be anything that you would add to that list, um, when thinking about supports that help for behavior difficulties?

P7: Oh no, there's nothing.

Interviewer: OK.

P7: So - like our school division would have some support for us. I should-should acknowledge that. Like, we have a student support consultant who would come and help us say with like, a behavioral plan or some strategies, um [Interviewer: Sure] right? Like your - like, our common friend (Interviewer: Yeah) right? Umm, we also have a mental wellness - what's her? Mental Wellness supervisor for the division. (Interviewer: Ok) So she's on call, but she's more like, we're doing a VTRA, right? like, it's like. (Interviewer: Ahh yeah) Like we are in like, almost locked down. (crosstalk) (Interviewer: Crisis, ok] Crisis. (Interviewer: Yeah, mhm). So she is more like the VTRA level. (Interviewer: Ok) Um, social ser- like she would be - yeah. If we're - if we're doing VTRA, calling in social

services, RCMP, those types of things, that's where – so- yeah, she's the "Uh oh, we're in trouble."

Interviewer: I see. And so, I suppose that tracks with what you were saying before about it's very reactive.

P7: Yeah, yeah, yeah.

Interviewer: Ok. Um, so then this leads to what is, I guess, basically the final question, which is when thinking about trauma or behavior supports, what things do you think are important but not available locally?

P7: Hmm, what's important, but not available.

Interviewer: Yes, this is the paint a picture of your perfect world with unlimited funding. [laughing]

P7: Well, like there isn't consistent, like, professional development for trauma-informed instruction in our division, (Interviewer: Mhm) um, we've had pockets of it like at-at like once a month, the school-based administrators all meet for a meeting and we've had like - and, you know, we build in PD, not just information on those days. So we've had some of it. We all have VTRA training. But I feel like. You know, it-it-it can't be a one and done. Cuz I remember, like, even myself, I've learned bits and pieces, but I don't feel like it's like (.) I can pull strategies right now. Do you know what I mean? (Interviewer: Right, yeah) Like, you know how you have to, like - it's like learning a second language. You have to keep practicing it, right? (Interviewer: Yeah) And so if I feel like maybe if-if there was continued - I feel that way with guest speakers in schools, right? Like you say a good message on whatever - depression, anxiety, and then you leave and then (Interviewer: Yeah) you forget everything they said. Like I feel like it needs to like - if you want really solid systematic implementation on something, it needs to have a long-term plan.

(Interviewer: Right) So I feel like we have pockets of trauma-informed PD. And-and-and the other thing too is we all experience it differently in our schools, like we're very diverse in in [School Division], right? So like [larger town] had a awful trauma, mm, like, is that four or five years ago? Where, you know, a family mom, dad and three children were killed in a car accident, it was awful, right? So that school spent, and still is spending, years, um, you know, being trauma informed, um, instructors.

Interviewer: Right. Right.

P7: So consistent PD I think is my answer.

Interviewer: OK. Yeah. (P7: Um) Anything else?

P7: Yeah, well, we need a counselor. (Interviewer: Yeah) Like we don't – we don't have a counselor. We had one last year (..) not effective, (Interviewer: Ohh) fo - you know she - the counsellor was there once a week-

Interviewer: Right, I was gonna ask. So this is an itinerant counselor, usually?

P7: Itinerant counselor that came on-came once a week. Um, that had been at our school for many, many, many, many years. (Interviewer: Okay) So and was not - like she saw one kid. And I'm like ugh, there's so many. But the families like, “Oh, no, we tried that. It didn't work”, you know, like that cuz, that's what the families would say. So then I tried to get the counselor, like, into classrooms, to do classroom presentation. I invited the counselor onto our wellness – uh, wilderness wellness, um, excursions. Just trying to find opportunity for her to make rapport with the students (Interviewer: Yeah) so they could just like pop in and say hello, like. So we need a counselor that has instant rapport with our students. (Interviewer: Yeah) I honestly have no idea who that person is at this point in time so that concerns me but.. [laughing]

Interviewer: Wow. Yeah, yeah, cutting it closer. (crosstalk)

P7: I'm sure they'll take - I know, I'm - it's only August 2nd. They'll have a plan in place on her.

Interviewer: I sure hope so, yeah.

P7: I'm sure they will.

Interviewer: Ohh God.

P7: Yeah, I think. Yeah, like even from a PD perspective, like, I have a huge turnover in staff this year. (Interviewer: Ahh yes) So I only have - and so I'm - and some new like new to the career as in - and then, like, young teachers. So I feel like - for sure they're not parents. So, I feel like you just become a different teacher when you become a parent. And I remember that because I taught for 10 years before I came-became a parent. So I was, you know, experienced both of those things. (Interviewer: Right) I-I think that, I don't know what type of training they have on trauma, and the look fors, so I think that's something that I'm thinking about. How to support them with these sparkly (Interviewer: Yeah) students? Yeah. Cuz I don't want them to feel like it's their fault. You know? Like that's often what happens with - you know, if a student has an outburst, and you're a young teacher, you think it's your fault. (Interviewer: Right) You know? And you have to realize that it's not your fault. (Interviewer: Yeah) And this is where they're coming from, and you got to put yourself in their shoes and just take a step back and -

Interviewer: Yeah. And I guess that's where what you were saying about the consistency around the professional development would help support that process.

P7: Yeah, and take the pressure off a small town principal who's – yeah! Supposed to know everything, and I-I'll be the, I mean, I-I will be the first to admit that I don't know everything. I am willing to learn and reach out and work together like, I'm definitely - that's my leadership style. But-but at home, when I go to bed at night, [Interviewer], I'm like, oh,

my gosh, I need to know th - like all those articles you're talking about? Like I need to know this and this and this and this, and I need to know it tomorrow by nine. [laughing]

Interviewer: Ohh. Yeah, that is a lot of pressure.

P7: Well, you know, our division has really good support between the admin team - like all of our, we have like, admin groups (Interviewer: Ahh) that are school alike. So we are-are each other's support. So that is great, right? Like we're very comfortable in reaching out to each other and asking for help or ideas.

Interviewer: Uh, that-that sounds like a (crosstalk) huge asset, yeah.

P7: So that's key. That's key, yeah.

Interviewer: Is-so is there anything that kind of goes with the-the flow of what we've been talking about that you, you feel like you wanna say that I haven't asked about directly yet or wanna add to any of those answers?

P7: No, but I was just - the one thing I didn't touch base on, um, I just cause I had it kind of a list of things I just wanted to remember to mention in this the um. (Interviewer: Sure) We had a refugee family moved to our community. (Interviewer: Mhm) Um, so they were from [Country], probably have to remove this from this transcript, but, um, we were really prepared for like-like trauma as they were coming. Cuz they were in a refugee camp for two years in limbo, you know, waiting for their next destination. And so we were, like, (.) very, uh, prepared for trauma. (Interviewer: Uh huh) Uh and when they came, it was exactly the opposite. Like they were so-so thankful to be in Canada. They were so grateful. And you know, they came in January, December-January. Come like, May-June they were starting to have - like they missed home right? (Interviewer: Ohh) Like-like they were grieving at different times because of-because of being away from their-their homeland. (Interviewer: Yeah) But-but that's different than being - cuz, like, the trauma they

experienced - cuz I taught the two older ones EAL (Interviewer: Uh huh). And they shared some very traumatic experiences and they were just so thankful that they were somewhere safe. Meanwhile, I'm the one that's crying [Laughing] (Interviewer: Oohh), you know? So I just thought that was a really interesting experience. (Interviewer: Yeah) So I don't think it actually - and I don't know if that helps with your research - but in our case, the refugee family that came (.) they were just super thankful and-and yes, they're only like in the honeymoon stage, but they are just grateful to be here, to have jobs, to be safe, to enjoy our landscape, and - we were just so wrong about who they would be when they came. [laughing]

Interviewer: Ah well that they, yeah. (crosstalk)

P7: Yeah. So I just thought that was maybe it was worth sharing.

Interviewer: Yeah, yeah, I think definitely, because I think that that-that, um, adds to, I think one of the challenges with trying to, um, well, you know anticipate, need, right? (P7: Mhm) Is that we-we don't know how those traumas wer- were – um, everybody gets affected differently. Um, so you can't look at a kid's file and think, “Oh! I know exactly how this child's gonna present,” because you really, you don't, right? Like (P7: No) because yeah, yeah. And-and the environment that you're creating, I think can-can have an impact on that as well. So (P7: Mhm, mhm) perhaps that that contributed to it. That they were able to slide kind of seamlessly - and *because* of all those preparations you had made.

P7: Yeah, that's true. Yeah. Yeah, they're just a lovely family. [laughing]

Interviewer: So glad. OK, so I'll, I'll stop the recording then.

APPENDIX F: STUDY TWO INTERVIEWS RECRUITMENT AND COMMUNICATION

Email to School Staff

Hi everyone/Hi **[name],**

Would you like to share your opinion and help improve services for students in your community? If so, please keep reading!

My name is Lisa Gaylor and I'm an educational psychologist who works with the Meadow Lake Tribal Council. I've met many of you while doing student assessments around the school over the last four years. I'm going to be in **[community]** doing research as a part of a PhD program that I'm doing at the University of Central Lancashire.

As a part of my research, I am hoping to speak with staff and other community members about their opinions on how we can do a better job helping students who struggle with behaviour at school (e.g., hitting, fighting, meltdowns, lying, and yelling). Research shows that having difficult experiences during childhood increases these types of behaviours. I would like to talk to people about what they think would be helpful for us to do differently when assessing students and supporting them both with potentially traumatic experiences and behaviour issues. I would also like to talk about community supports and what is available locally to help young people and their families.

You're getting this email because I want to know if you'd like to participate. This would involve meeting with me for 30-45 minutes to talk either in person at the school or online. I'd like to talk to people who are parents of school-aged kids or work with kids one day per week and live in **[the community]**. If you or anyone you know would be interested in participating, please email me, and I will contact you to set up a time!

If you have any questions or would like more information, please reply directly to this email. You can also contact my supervisor, Professor Jane Ireland: JLIreland1@uclan.ac.uk.

Thank you,

Lisa Gaylor

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APPENDIX G: STUDY TWO FILE REVIEW MATERIALS

The relationship between trauma and antisocial behaviour

You are being invited to share information as a part of a study being conducted by Lisa Gaylor, a Saskatchewan Psychologist completing a PhD project with the University of Central Lancashire (UCLan). The study aims to explore the potential connection between trauma and antisocial behaviours in children and youth (e.g., violence, rule-breaking). In the future, we hope that this information will help us develop better ways to support families that may have histories of trauma. We encourage you to read the following information.

What does taking part in the study involve and how will my data be used?

You have been contacted because you or your child had a psychoeducational assessment completed through a Meadow Lake Tribal Council school. These assessments are designed to help schools better understand how students learn and offer them ways to manage difficult behaviours. If you agree to take part in the study, the researcher will review the referral and assessment to look for patterns in the information. Specifically, they will read the background information shared about you or your child's development and measures related to behaviour. Digital copies of report information may be held for up to 14 days in a password-protected, encrypted form on a private Meadow Lake Tribal Council server. Anonymising will involve removing identifying pieces such as names, details about appearance, or specific information about past events that could make it possible to figure out who is being referred to. The anonymised data will be held on a secure server for 5 years following completion of the study.

Why am I being asked to take part?

In Canada, Indigenous people are a very important group to hear from on issues related to trauma because they are considered to have been unjustly and disproportionately affected by it. We hope that by using your data we can do a better job of designing

programs to address behaviour concerns in schools and communities that account for the possible role of trauma.

Do I have to take part and can I have my data removed?

Your participation in this study is entirely voluntary. If at any time before the data is anonymised (a minimum of 7 days following this consent meeting) you want to withdraw your consent, you can. Once the information has been gathered, it will not be possible to identify your individual data and remove it. Further information can be found by visiting https://www.uclan.ac.uk/data_protection/privacy-notice-research-participants.php

What are the possible benefits of taking part?

Your participation will help us to develop better programming to address behavioural issues with children and youth who have had traumatic experiences. The results from this study may be used to inform interventions in the future. Additionally, the results may also be used to develop education and training packages for professionals. Your anonymity is ensured in any reports of the findings. If you wish to receive information about the results of this research, please provide an email address, which will be stored separately from any data collected as part of the study. If you cannot be contacted by email, you can ask to be contacted by a member of the school team when this information becomes available.

What can I do if I am feeling upset about past traumatic experiences?

Past traumatic experiences can bring up negative feelings and memories at unexpected times. If you are feeling upset, it could be helpful to speak to someone who can support you. Talking to family and friends can sometimes be helpful. It can also be valuable to get support from a caring professional. Below is the contact information for some local and national groups that have experience helping people who have had traumatic experiences.

(LOCAL INFORMATION WITHHELD TO MAINTAIN CONFIDENTIALITY)

Indian Residential Schools Survivors Society https://www.irsss.ca/

- Services include:
    - Traditional healing methods and medicines
    - Counselling for families, groups, or individuals to process grief and loss, crisis, and trauma
    - Clinical, art, and alternative healing therapy
    - Energy healing
    - Emotional support for people in the settlement process

National Residential School Crisis Line 1-866-925-4419

Residential Schools Survivors Society Crisis Line 1-800-721-0066

- Crisis lines you can call at any time (24 hours, 7 days per week) to speak with helpers who have knowledge and skills specific to supporting people who have been affected by residential school-related trauma either directly or indirectly

COVID-19 Information

The COVID-19 pandemic continues to be a concern in Saskatchewan. Participation in this study does not require you to meet with the researcher in-person, though you may choose to do so during the consent process. If you decide to have an in-person meeting with the researcher the following precautions will be taken:

- The researcher (Lisa) will wear a mask at all times, and you will be encouraged to do the same unless there is a medical reason you cannot-
- All touched surfaces (i.e., seats, tables, and pens) are sanitised in between participants
- Every effort will be made to maintain a social distance of 2 metres between the researcher and yourself during the meeting
- Your contact information (documented on the **COVID-19 Contact**

Tracing/Information Form will be kept on file for 14 days following the meeting and will only be shared with the Saskatchewan Health Authority if the researcher or a member of the school staff tests positive for COVID-19

Who do I contact if I have any questions?

This study has been approved by the University of Central Lancashire (UCLan) Ethics Committee. If you have any questions you can email me directly at llegaylor@uclan.ac.uk or contact your school, who will put me in touch with you. My primary supervisor can be reached at JLIreland1@uclan.ac.uk.

Additionally, you can contact the UCLan officer for ethics on OfficerForEthics@uclan.ac.uk, if you wish to know more about the ethical approval process for this study, if you have any concerns that you do not feel can be raised with myself or my primary supervisor. Any correspondence of this nature should include the name of the study and the researchers' names.

Thank you for taking the time to read this information sheet.

Research Team

PhD Candidate

Lisa Gaylor
Registered Psychologist #989
(Saskatchewan College of Psychologists)
Email: llegaylor@uclan.ac.uk

Research Supervisors

Professor. Jane Ireland (Primary supervisor)
University of Central Lancashire, UK
Email: JLIreland1@uclan.ac.uk

Dr. Simon Chu (Co-supervisor)
University of Central Lancashire, UK
Email: SChu@uclan.ac.uk

Participant Consent Form

The relationship between trauma and antisocial behaviour

Providing my consent

Meeting type (tick one)**:** Phone ____ In-person ____

Consent acquired (tick one)**:** Verbal _____ Written ____

1. I confirm that I have either read or been read the information about this study and would like to participate. ☐
2. I am happy for my/my child's data from a referral form and psychoeducational assessment report to be included in this study. ☐
3. I understand that I can ask questions to help me decide and the researcher has given me the opportunity to do so. ☐
4. I understand I can remove my consent up until the data is taken from the assessment (7 days following this meeting), because once it is placed in the data set it will be anonymised. ☐
5. I understand that an anonymised version of my data (i.e., with no identifying information) will be stored on a secure UCLan server for 5 years following the completion of the study. ☐
6. I understand that allowing access to this data will not impact in anyway on the service provided to me/my child by the school. ☐

Information about COVID-19 safety process (only applicable when the consent meeting is in-person)

7. I understand that, while measures have been taken to reduce the chance of COVID-19 being spread (e.g., sanitising surfaces, social distancing, use of masks),
there is a risk of contracting the illness when entering a shared public space, such as a school, and meeting with others in-person. By choosing to meet with the researcher in-person, I am accepting this risk. ☐
8. I understand that my contact information will be retained within the COVID-19 Contact Tracing/Information Form for contact tracing through the Saskatchewan Health Authority, if needed, but this information will be destroyed 14 days after our last face-to-face interaction. ☐
9. I understand that my contact tracing information will be retained within the **COVID-19 Contact Tracing/Information Form** for contact tracing through ☐

the **Saskatchewan Health Authority**, if needed, but this information will be destroyed 14 days after our last face-to-face interaction.

Name (print):_____

Signature: _____

Date: _____

I am signing as (please tick one):

_____ The person who was assessed (and is now over the age of 18)

_____ The parent or guardian of the child who was assessed

_____ The researcher (verbal consent acquired) on behalf of the participant

APPENDIX H: STUDY THREE QUALTRICS QUESTIONNAIRES AND SUPPLEMENTARY INFORMATION

Qualtrics Questionnaire

Developing trauma-informed, culturally relevant intervention guidelines for antisocial behaviour in young people

This study includes three short questionnaires. The first will ask your views and beliefs about certain social expectations. The second will ask briefly about your own negative experiences when you were a child. These are limited and will ask about a range of possible experiences, including abuse, but will not ask you for details. A final questionnaire will ask your opinion on several potential approaches to treatment of trauma symptoms in young people.

Demographic Information

Age:

Gender: Male/Female/Non-binary/Other (specify)/I describe my gender in another way

Ethnicity:

Do you consider yourself to be a part of a First Nations, Metis, Inuit, or other Indigenous group? Yes/No

(If yes) Which band, tribe, or group would you consider yourself most connected to (if any)? (short answer)

Part One – Individualist v Collectivist Attitudes and Beliefs

In the following, please, rate each item a number from 1 to 9 (1, 2, 3, 4, 5, 6, 7, 8, 9), where 1 indicates disagreement/very seldom/not at all, and 9 indicates complete agreement/always.

1. I'd rather depend on myself than others. ___
2. If a co-worker gets a prize, I would feel proud. ___
3. It is important that I do my job better than others. ___
4. Parents and children must stay together as much as possible. ___
5. I rely on myself most of the time; I rarely rely on others. ___
6. The well-being of my co-workers is important to me. ___
7. Winning is everything. ___
8. It is my duty to take care of my family even when I have to sacrifice what I want. ___

9. My personality independent of others is very important to me. ___
10. To me, pleasure is spending time with others. ___
11. Competition is the law of nature. ___
12. Family members should stick together no matter what sacrifices are required. ___
13. I prefer to be direct and forthright when discussing with people. ___
14. I feel good when I cooperate with others. ___
15. When another person does better than I do, I get tense. ___
16. It is important to me that I respect the decisions made by my groups. ___

Part Two – Adverse Childhood Experiences

1) Please indicate which (if any) of the adverse childhood experiences below you were affected by **before the age of 18**:

    a. Physical abuse
    b. Psychological/Emotional/Verbal abuse
    c. Sexual abuse
    d. Physical neglect (i.e., unmet physical needs such as lack of food or affection)
    e. Emotional neglect
    f. Caregiver or member of the household with mental health and/or addictions issues
    g. Caregiver or member of the household was imprisoned
    h. Death or separation from caregiver
    i. Divorce or separation of primary caregiver(s)
    j. Witnessing violence or abuse
    k. Racial discrimination

    1a) **(IF ANY ACE IS SELECTED)** Did you receive support for these experiences? (e.g., emotional support from friends, family, or community members; therapy) Yes/No/Unsure or prefer not to answer

    1b) **(IF YES)** What did you find most helpful in your own treatment? (long answer)

2) ***Intergenerational trauma*** is the act of a traumatised person passing on their trauma, directly or indirectly, to their descendants (i.e., children, nieces/nephews, grandchildren, adopted or foster children). Examples may include an abuse victim abusing their own children or a war veteran teaching their children that the world is a very unsafe place.

    Would you consider yourself to be affected by *intergenerational trauma*? Yes/No/Unsure or prefer not to answer

Part Three – Treatment and Healing

This questionnaire asks you to think about ways to help young people who have had traumatic experiences and who may be showing behavioural symptoms as a result. ***Remember that young people are defined as*** people aged between 4 and 21 years.

1) The following are activities that may help *young people* who have a history of trauma and have behavioural challenges (e.g., acting out in class, being

aggressive with peers or siblings, stealing)

a. Spending time in nature
b. Talk therapy or counselling
c. Physical activity (e.g., going for a walk)
d. Skills training (e.g., social skills, parenting courses for caregivers)
e. Mindfulness, relaxation, or meditation
f. Participating in community events, cultural activities, or religious ceremonies (e.g., beading, praying, reading sacred scripts)

2) The activities listed above can be described in the following ways:

Either *Behavioral:* Requiring physical movement, action, or focusing on the body
OR
Cognitive: Involving communication, thoughts, or problem-solving
OR neither of these two,

and either *Diversion:* Distracting oneself or shifting attention away from an issue
OR
Engagement: Directly addressing an issue
OR neither of these two.

Please select which option best describes each activity. There is no right or wrong answer; we just want to know what you think about it.

E.g., Spending time in nature [Behavioral/Cognitive/Neither] [Diversion/Engagement/Neither]

3) Please rate the activities below based on how helpful/supportive you think they are:

e.g., Spending time in nature
[Unhelpful/Not supportive; Moderately helpful/Supportive, Very helpful/Very supportive]

4) The listed activities can be done individually or in a group. Beside each activity, indicate which format you believe is most helpful. [populated based on which options received a rating of 2 or 3 above]

e.g.., Spending time in nature
[Individually/In a group]

5) In your opinion or experience, what kinds of resources might be helpful for young people in your community who are affected by something traumatic during their childhood? (e.g., local activities, traditional practices, mental health services) (long answer)

Table H.1

Indigenous Bands, Tribes, and Language Groups Represented

Ethnic or Language Group (Band or Tribe)	n	% of sample
Algonquin (Abenaki, Anishinaabe, Chippewa, Maliseet, Menominee, Ojibwe, Pequot)	17	17.0
Apache (Mescalero)	2	2.1
Athabaskan	1	1.0
Aztec (Yaqui)	3	3.0
Cherokee	5	5.2
Muskogean (Chikasaw, Choctaw, Houma)	7	7.3
Coahuitlecan	1	1.0
Cree (Blackfoot)	9	9.4
Hidatsa (Crow)	2	2.1
Dene	1	1.0
Guachichil	1	1.0
Inuit	1	1.0
Iroquois (Haudenosaunee, Mohawk, Oneida)	3	3.0
Lumbee	2	2.1
Maori	1	1.0
Métis	5	5.2
Mi’kmaq	1	1.0
Navajo	4	4.2
Omaha (Nebraska, Ponca)	2	2.1
Osage	1	1.0
Pawnee	1	1.0
Seminole	1	1.0
Mohican (Stockbridge)	1	1.0
Tohono O’Odham	2	2.1
Tseshaht	1	1.0

APPENDIX I: STUDY THREE QUALTRICS COMMUNICATION MATERIALS

Study Description for *Prolific*

This study is a part of a broader PhD project focused on approaches to trauma-informed treatment of behavioural difficulties in children and youth from different cultures. Participants will be asked to share some basic information about themselves (e.g., age, cultural identity) and then to complete three short questionnaires. The first asks about beliefs and attitudes. The second asks generally about whether or not you have had a variety of experiences, including some that may have been traumatic. You will not be asked to share any details of these experiences. The final questionnaire will ask you to rate and categorise a variety of potential treatments for trauma and behavioural difficulties in young people.

The findings from this study may inform the development of trauma and behavioural treatments that are more effective when working with young people from a variety of cultural backgrounds. If you have any questions or would like more information, please contact me at llegaylor@uclan.ac.uk. You can also contact my supervisor, Professor Jane Ireland: jlireland1@uclan.ac.uk.

Participant Information Sheet

Title: Developing trauma-informed, culturally relevant intervention guidelines for antisocial behaviour in young people

You have been invited to complete questionnaires about trauma and behaviour concerns and how these can be best addressed in young people. Participation is completely voluntary. To inform your decision, it is important that you understand what the study will involve and why it is happening. Please read this sheet carefully.

What is the purpose of the study?

The goal is to gather perspectives from people with a variety of backgrounds on the treatment of behaviour issues in young people who may have had traumatic experiences.

What will my participation involve?

You will be asked for some demographic information (e.g., age, ethnic/cultural background) and then to respond to three brief questionnaires. The first asks about beliefs and attitudes. The second asks generally about whether or not you have had a variety of experiences, including some that may have been traumatic. You will not be asked to share any details of these experiences, simply whether or not they occurred. The final questionnaire will ask you to rate and categorise a variety of potential treatments for trauma and behavioural difficulties in young people. Completing all of the questionnaires is expected to take approximately 15 minutes.

Why have I been chosen?

The focus of this study is the views and experiences of people from a variety of cultural

and ethnic backgrounds. Information submited to the *Prolific* participant recruitment website suggested that you were eligible to participate.

Do I have to take part?

You do not have to participate. If you consent to take part, you can withdraw from the study at any time prior the final submission of the online questionnaires and any information provided up to that point will be destroyed. Data will be anonymised upon submission, so cannot be withdrawn afterward.

What are the possible benefits of taking part?

The data collected in this study is expected to help develop more effective treatments and programming for children and youth who have had potentially traumatic experiences and are demonstrating challenging behaviours. The findings will also inform future research for supporting at-risk populations.

What are the possible risks of taking part?

This study will ask you to reflect on topics related to behaviour issues and trauma, which can both be upsetting. You are able to withdraw from the study at any time during the completion of the questionnaires. If you feel the need for support following your participation in this study, consider connecting with one of the mental health organisations below:

Canadian resources

National Indian Residential School Crisis Line

Free confidential support for former residential school students and their families.

24-hr helpline: 1-866-925-4419

Missing and Murdered Indigenous Women and Girls (MMIWG) Crisis Line

Free confidential crisis line for families and others impacted by the issue of MMIWG.

24-hr helpline: 1-844-413-6649

Hope for Wellness

Emotional support and community referrals for Indigenous peoples across Canada available in English, French, Cree, Ojibway, and Inuktitut

24-hr helpline: 1-855-242-3310

Web chat available online: https://www.hopeforwellness.ca/

Wellness Together Canada

Free confidential mental health and substance use support available in English and French.

24-hr helpline: 1-866-585-0445

Website: https://www.wellnesstogether.ca/

American resources

The 988 Lifeline

A national network of crisis centres providing confidential mental health support in English and Spanish

24-hr helpline: 988 OR 1-800-273-TALK (8255)

Website: https://988lifeline.org/

Confidentiality

Questionnaire data will be kept in a secure, password protected computer database accessible only to the lead researcher. Any identifying information will be removed. Further information can be found by visiting https://www.uclan.ac.uk/data_protection/privacy-notice-research-participants.php.

How can I take part?

To confirm your interest in participating, please continue to the next page and complete the digital consent form.

Contacts

To express any concerns about this study or for more information, please contact the research team using the details below. If you would like to see the results of this study when analysis and write-up are completed, please contact the researcher directly at llegaylor@uclan.ac.uk.

If you would like more information about the ethical approval process, or to discuss concerns with the ethics board directly, their office can be reached at OfficerForEthics@uclan.ac.uk. Please include the title of the study and the names of the research team members in any correspondence of this kind.

Student Researcher
Lisa Gaylor (llegaylor@uclan.ac.uk)
PhD Student
University of Central Lancashire, Preston, UK

Research Supervisors
Professor Jane Ireland (JLIreland1@uclan.ac.uk)
School of Psychology and Computer Science, University of Central Lancashire, UK

Dr. Simon Chu (SChu@uclan.ac.uk)
School of Psychology and Computer Science, University of Central Lancashire, UK

Participant Consent Form (Electronic)

Title: Developing trauma-informed, culturally relevant intervention guidelines for antisocial behaviour in young people

1. I have read the information sheet for the above study and understand the information provided. ☐
2. I have had the opportunity to consider the information, ask questions and have had these answered. ☐
3. I understand that my participation is voluntary and that I am free to withdraw at any point during the study, without giving any reason. ☐
4. I understand that my data will be held electronically by the lead researcher in a secure password-protected environment. ☐
5. I understand that deidentified data collected throughout this study may be shared in a written form with research participants, in public or academic presentations, at conferences, or in peer-reviewed journals. ☐

I agree to all the above statements and consent to participating. ☐

I do not agree and wish to withdraw my participation. ☐

Participant Debrief Sheet (Electronic)

Title: Developing trauma-informed, culturally relevant intervention guidelines for antisocial behaviour in young people

Thank you for participating. The goal of this study was to gather opinions from people of a variety of cultural and experiential backgrounds about the treatment of behaviour issues in young people who have had traumatic experiences. Your responses are important for guiding future treatment of behaviour issues.

The data collected throughout this study will be kept confidential and you will not be identifiable based on your responses. Unfortunately the anonymous nature of this study means that it is not possible to withdraw data that has already been collected.

It is possible that participation in this study may have brought up difficult emotions. Please consider contacting the following organisations should you feel the need for support at this time:

Canadian resources

National Indian Residential School Crisis Line

Free confidential support for former residential school students and their families.

24-hr helpline: 1-866-925-4419

Missing and Murdered Indigenous Women and Girls (MMIWG) Crisis Line

Free confidential crisis line for families and others impacted by the issue of MMIWG.

24-hr helpline: 1-844-413-6649

Hope for Wellness

Emotional support and community referrals for Indigenous peoples across Canada available in English, French, Cree, Ojibway, and Inuktitut

24-hr helpline: 1-855-242-3310

Web chat available online: https://www.hopeforwellness.ca/

Wellness Together Canada

Free confidential mental health and substance use support available in English and French.

24-hr helpline: 1-866-585-0445

Website: https://www.wellnesstogether.ca/

American resources

The 988 Lifeline

A national network of crisis centres providing confidential mental health support in English and Spanish

24-hr helpline: 988 OR 1-800-273-TALK (8255)

Website: https://988lifeline.org/

A summary of the findings will be made available, upon request, once the data has been analysed. If you have questions or concerns please feel free to contact a member of the research team using the details below.

This study was reviewed and approved by the University of Central Lancashire (UCLan) Science Ethics Committee. For details on the approval process, or to discuss concerns with the ethics board directly, their office can be reached at OfficerForEthics@uclan.ac.uk. Please include the title of the study (at the top of this page) and the names of the research team members in any emails.

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Lisa Gaylor (llegaylor@uclan.ac.uk)

PhD Student, University of Central Lancashire, Preston, UK

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School of Psychology and Computer Science, University of Central Lancashire, UK

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School of Psychology and Computer Science, University of Central Lancashire, UK