Complex Psychological Trauma: An Evolutionary Concept Analysis

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Preface

This thesis has been conducted in line with the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans. As a work which draws exclusively from openly available academic sources, ethics board approval from the University of Ottawa was not required. Each source included in the preparation of any part of this thesis has been appropriately cited for credit to the author of each text.

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Finally, I wish to quietly and humbly acknowledge my own dedication and perseverance in completing this project, which has been a deeply personal work.

Dedication

For E.

“We continue

Lovingly

Despite

The crimes

Committed

Against any

And all

Of us.”

— Sherman Alexie, *You Don't Have to Say You Love Me*

Abstract

Complex psychological trauma is used to denote subtle, nuanced, and chronic experiences of trauma. Despite being prevalent in Canada, the conceptualization of complex trauma is shrouded with ambiguity. Rodgers' evolutionary method of concept analysis was used to clarify the concept of complex trauma. Results found antecedents included psychic vulnerability, inescapable context, and perverse relationships. Attributes entailed cumulative traumatic exposure to interpersonal acts of betrayal, which generate psychological distress. Consequences involved biological, somatic, cognitive, schematic, relational, affective, and behavioural effects, as well as post-traumatic growth. Related concepts included cumulative, interpersonal, developmental, and intergenerational trauma. Findings were interpreted using perspectives from critical social theory and trauma studies literature to highlight the role of social forces in perpetuating complex trauma, allowing for examination of the social construction of traumatic contexts which produce complex trauma and its' effects. Critique of pathologizing perspectives which situate trauma in individuals versus the social realm are discussed.

Table of Contents

Introduction

This thesis work is inspired by my professional experiences working as a mental health nurse. I hold a certain amount of privilege and power in my professional practice as a nurse. Practicing in the field of mental health, I have nursed innumerable patients who have disclosed histories of trauma. I have often felt helpless in my efforts to assist them in navigating the complexities of reconciling their experiences in the confines of our mental health system. With a mental health system that is too often structured in relation to diagnostic constructs and illness, those who do not fit these constructs are often forgotten. For most, their experiences did not neatly fit the understanding of psychological trauma that shapes our mental health system, with implications for the type of assistance, care, and treatment they were – or, more often, were not – provided. As a nurse, I have the opportunity and duty to reflect on critically and challenge structures influencing this reality. Through this thesis work, I hope to promote critical reflection within the psy-sciences – and nursing in particular – to challenge conceptualizations that shape our healthcare structures for the betterment of those seeking and providing care.

This thesis is divided into five chapters. Chapter one has introduced the research problem of the conceptual ambiguity of the concept of complex trauma with implications for nursing and the delivery of trauma-informed care. Chapter two details the relevant history and sociopolitical context that have shaped the concept of psychological trauma. Chapter three introduces the concept analysis methodology, details the chosen evolutionary method for concept analysis, and positions an alignment of the evolutionary method with post-modern and post-structural perspectives. Chapter four presents the results of this study, detailing the antecedents, attributes, and consequences of the concept of complex trauma. Surrogate terms and related concepts are also discussed. Details of the disciplinary and temporal evolution of complex trauma are

presented. Finally, chapter five discusses the results of the analysis in relation to critiques of trauma studies and discourse from the social sciences. Opportunities for health policy and nursing practice, education, and research are discussed.

Chapter 1: Research Problem

1.1 Psychological Trauma

Discussion of trauma has long been relevant to humanity, though understanding of the concept has evolved over time. The etymology of trauma is derived from the Greek word *trōma*, itself being related to the terms *titrōskein* (to wound) and *tetrainein* (to pierce) (Kolaitis & Olff, 2017). From these origins, trauma originally referred to physical wounding yet has evolved to include psychological wounding (Foli & Thompson, 2019; Leys, 2000). Reference to psychological trauma can be found in some of our earliest medical texts and artistic works, suggesting that the concept has been long deemed an important human experience worthy of representation and acknowledgement. Depictions of the psychologically traumatic effects of war and loss – including disturbed sleep and memory – can be found in works dating as early as 440 BC, while descriptions that would now be understood to be traumatic stress reactions are found in medical texts dating 1900 BC (Figley et al., 2017). Themes found in Homer's epic poems *Iliad* and *Odyssey*, such as survivor's guilt, grief, feelings of isolation and alienation, and growth and recovery, remain relevant to modern conceptualization and discussion of psychological trauma (Figley et al., 2017; Homer, 1990, 1997). More recently, psychological trauma has gained momentum in its recognition as a contributor to poor health (Federal Framework on Post-Traumatic Stress Disorder Act, 2018). Despite this, the conceptualization of psychological trauma and related concepts remain ambiguous (Isobel, 2021).

1.2 Psy-Science

Today, psychological terms are used to describe and understand concepts related to human experiences, including psychological trauma (Borgos et al., 2019). The disciplines with a shared interest in these concepts and that make use of these terms are collectively referred to as

psy-science. This collective of disciplines is diverse, each offering its own contribution to research, understanding, and application of these concepts. Some of these disciplines have found clinical applications for trauma-related concepts, as seen in medicine (Maté, 2022), psychiatry (Herman, 1992b), psychology (Cloitre et al., 2009), social work (Pearlman & Courtois, 2005), and nursing (Stokes, 2016).

In the clinical setting, psychological trauma is viewed synonymously with psychopathology and discussed in relation to diagnostic constructs (American Psychiatric Association [APA], 2022; World Health Organization [WHO], 2019). Within the frame of psychopathology, psychological trauma is narrowly defined for the precise application of psychiatric diagnoses. Manuals used for assigning these diagnostic constructs are the source for how psychological trauma is defined both in terms of the traumatic response and the provoking event. According to these manuals, traumatic experiences capable of precipitating psychological trauma are defined as extremely threatening or horrific situations, such as combat, life-threatening injuries/accidents, or physical/sexual violence (APA, 2022; WHO, 2019). Manifestations of mental illness are discussed as the outcomes of experiencing such events (Kiyimba et al., 2022), with post-traumatic stress disorder (PTSD) being a flagship diagnosis. Effectively, PTSD has come to be viewed synonymously with psychological trauma (Horowitz, 2018).

Yet, research within psy-sciences in recent decades has generated findings that challenge this construct of psychological trauma. In 1998, Felitti et al. published a seminal research article in which they reported that adverse childhood experiences (ACEs) contribute to the development of several leading causes of death for adults, including devastating mental health challenges and crises (i.e. substance use and suicide). ACEs refer to a variety of challenging experiences faced

by children. In the study conducted by Felitti et al. (1998), adult participants were asked about their childhood experiences of abuse (i.e. psychological, physical, and sexual) and household dysfunction (i.e. substance abuse, mental illness, mother treated violently, and criminal activity). The authors concluded that the greater the number of ACEs an individual is exposed to, the more likely they are to develop risk factors (i.e. smoking, obesity, depression, suicide attempts, substance misuse, high number of lifetime sexual partners, etc.) for the leading causes of death (i.e. ischemic heart disease, cancer, stroke, chronic pulmonary conditions, diabetes, liver disease, etc.). Strikingly, experiencing four or more ACEs was correlated with individuals being 12 times at greater risk of dying by suicide compared to those who did not experience ACEs (Felitti et al., 1998). These findings challenged the notion of what should be viewed as traumatic, given that several ACEs described in the study do not fit the definition of trauma within the dominant frame of trauma as psychopathology (i.e. psychological abuse, substance use in the home, caregiver with mental health concerns).

1.3 Complex Trauma

The ACE study was ground-breaking and bolstered an earlier proposition by an American psychiatrist, Judith Herman, of expanding how trauma is conceptualized within the clinical realm. In 1992, Herman published her book *Trauma and Recovery*. In this work, she draws on her experience as a clinician and the stories shared with her by her patients. Herman recounts how disclosure of abuse and neglect occurring within the private sphere of her patients' lives was too often dismissed in medicine. The term *complex trauma* was coined by Herman to describe these discreet traumatic experiences. She calls for recognition of more intimate adverse experiences as potentially traumatic alongside experiences that are extreme:

> It is a book about commonalities: between rape survivors and combat veterans, between battered women and political prisoners, between the survivors of vast concentration camps created by tyrants who rule nations and the survivors of small, hidden concentration camps created by tyrants who rule their homes (Herman, 1992b, p. 14).

She concluded by proposing that a new diagnosis, complex post-traumatic stress disorder (cPTSD), be included in psychiatric diagnostic manuals to account for experiences of complex trauma that were unrecognized in existing trauma-related diagnoses.

Herman's proposition, strengthened by the findings from the ACE study, was successful in prompting discussions about how psychological trauma is conceptualized in psy-science. The proposed inclusion of cPTSD in the diagnostic cannon sparked controversy and remains a heated topic of debate today (Achterhof et al., 2019; Resick et al., 2012). The opinions of psy-experts are divided regarding whether there is sufficient evidence for or clinical utility to expanding available diagnostic constructs following traumatic experiences (Pai et al., 2017).

Cook et al. (2005) agree that expansion is needed. In their study, they identified a variety of experiences as examples of complex trauma, including "emotional abuse and neglect, sexual abuse, and physical abuse, as well as witnessing domestic violence, ethnic cleansing, or war" (Cook et al., 2005, p. 390). Furthermore, they identified seven domains of impairment (i.e. attachment, biology, affect regulation, dissociation, behavioural control, cognition, and self-concept) related to exposure to complex traumatic experiences (Cook et al., 2005).

Cloitre et al. (2014) found that there is a cross-over in the effects following complex traumatic experiences and what is traditionally recognized as psychological trauma. These cross-over effects include hypervigilance, avoidance, and re-experiencing. However, their findings also showed that there are additional effects of complex traumatic experiences not captured in current

diagnostic constructs, such as affective sensitivity and feelings of self-worthlessness, self-guilt, loneliness, and emptiness (Cloitre et al., 2014).

Despite these findings, experts on the task force for revisions to the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-V) decided that cPTSD would not be included (Resick et al., 2012). More importantly, how trauma is defined in the Diagnostic and Statistical Manual of Mental Disorders (DSM) remains highly contested and controversial yet continues to guide clinical and general understanding of the concept of psychological trauma (Pai et al., 2017).

Conceptual ambiguity and the lack of recognition of complex trauma are problematic, given the prevalence of psychological trauma. National survey data from 2021 indicates that approximately eight percent of the population in Canada meets diagnostic criteria for PTSD, one of the highest rates globally (Statistics Canada, 2022). Statistics on the prevalence of complex trauma are even more alarming. Bader & Frank (2023) reported how results from the 2019 Canadian General Social Survey revealed that sixty-two percent of respondents (n = 43064) experienced emotional abuse and physical neglect. Together, these statistics illustrate that psychological trauma, and complex trauma in particular, are prevalent in Canada. Despite this prevalence, our conceptualization of the important issue of complex trauma is limited.

1.4 Trauma Studies

The field of trauma studies offers an alternative and supplementary view of psychological trauma that has important applications for understanding the issue of complex trauma. In trauma studies, social structures that commit violence against individuals and communities are examined as a source of trauma. In this way, trauma studies focus on the contexts in which trauma is generated. Furthermore, the social or public experiences of trauma are recognized alongside

violence that is committed in the private or personal realm. Trauma studies scholars suggest that social reform must occur to palliate the issue of psychological trauma instead of individualistic solutions, such as the application of psychiatric diagnoses and treatments.

Several scholars – including Cathy Caruth, Ann Cvetkovich, and Bonnie Burstow – are notable for their ideas and contributions to the field of trauma studies. Cathy Caruth, an American literary theorist, uses literature and film to examine public discourses and experiences of trauma. In her 1996 work, *Unclaimed Experience*, Caruth analyzes how history, trauma, and memory coalesce to complicate the recognition and retelling of the traumatic experience and its impacts (Caruth, 2016). She rejects the idea of trauma as a past event, instead putting forth her thesis that trauma is an ongoing process that makes itself known in the present, disrupting narratives and recounting the experience. In this way, the traumatic experience is 'unclaimed' because it is evolving and unspeakable. In disrupting the linear narrative progression, these unclaimed experiences have implications for personal, collective, and historical accounts (Caruth, 2016).

Ann Cvetkovich, a Canadian feminist scholar and professor in gender studies, writes about trauma as what she calls *public feelings*. She states that her aim is to:

> …create an approach to trauma that focuses on the everyday and the insidious rather than the catastrophic and that depathologizes trauma and situates it in a social and cultural frame rather than a medical one (Cvetkovich, 2007, p. 464).

In her work, she discusses oppressive forces impacting marginalized populations and how the normalization of these traumatic experiences renders their trauma invisible (Cvetkovich, 2003, 2007).

Bonnie Burstow, a Canadian anti-psychiatry scholar and psychotherapist, offered her pointed critique of psy-science's conceptualization and pathologization of trauma. She states that the construction of trauma as a psychiatric illness oversimplifies and flattens the issue by aiming "to separate who has an alleged disease from who does not" and "forc[ing] a simplistic yes or no onto a question of trauma" (Burstow, 2003, p. 1301). Instead, she advocates for a radical approach to addressing trauma that recognizes and fights against the role of structurally oppressive forces (Burstow, 2003). Additionally, she argues that psy-science – and psychiatry in particular – is one of such forces. By exerting control over trauma narratives and discourse over those with lived experience, applying stigmatizing labels, and forcibly administering treatments, psychiatry commits violence against those it claims to cure (Burstow, 2005, 2003).

The recognition of the contexts in which trauma is produced has relevance for the concept of complex trauma. Oppression produces social contexts in which trauma is normalized and repeated, fostering the repetitive, ongoing, and insidious nature of complex trauma (Bruckert & Law, 2018; Burstow, 2005, 2003; Cvetkovich, 2003, 2007). Furthermore, a lack of recognition in psy-science of the contribution of these contexts to the phenomenon of complex trauma further illustrates the shortcomings of that perspective, which can be supplemented with the application of trauma studies in our understanding of trauma-related concepts (Burstow, 2005, 2003; Cvetkovich, 2003).

1.5 Trauma-Informed Care

Trauma-informed care aims to provide healthcare in a way that is cognisant of psychological trauma and compassionate to people with traumatic histories seeking care (Goddard et al., 2022; Isobel, 2021). Delivering trauma-informed care requires healthcare practitioners to recognize the prevalence of psychological trauma, the effects of traumatic

exposure, and the potential for healthcare delivery to be distressing (Goddard et al., 2022; Isobel, 2021). The provision of trauma-informed care calls for the universal application of precautions, with the presumption that traumatic experiences are highly prevalent and anyone seeking care is far more likely to have experienced trauma than not (Goddard et al., 2022).

While the tenets of trauma-informed care honour an expanded recognition of more prevalent forms of complex trauma, how trauma is defined in this framework remains aligned with trauma viewed as psychopathology (Substance Abuse and Mental Health Services Administration [SAMHSA], 2014). S*AMHSA's Concept of Trauma and Guidance for a Trauma-Informed Approach* (2014) is considered a seminal work in trauma-informed care. In this document, trauma is defined as the following:

> Individual trauma results from an event, series of events, or set of circumstances that is experienced by an individual as physically or emotionally harmful or life threatening and that has lasting adverse effects on the individual's functioning and mental, physical, social, emotional, or spiritual well-being (SAMHSA, 2014, p. 7).

This definition relies on reference to lasting adverse effects to delineate what is traumatic, which maintains a focus on trauma as psychopathology.

1.6 Problem Statement

Complex trauma cannot be reconciled within the narrow margins of how psychological trauma is defined by psy-science in relation to psychopathology and diagnostic constructs. This conceptualization of trauma is omnipresent in the clinical realm. Without an alternative frame of reference to understand trauma-related concepts, complex trauma remains ambiguous. By calling into question how trauma is framed in psy-science and applied by nurses, an examination of the contexts in which trauma is produced can offer a more comprehensive understanding of complex

trauma without ceding to pathologizing conceptualizations. Given the prevalence of psychological trauma and complex traumatic experiences in Canada, conceptual clarity is paramount to the provision of trauma-informed care (Isobel, 2021). Conceptual clarity of complex trauma beyond the confines of psychopathology and diagnostic constructs can serve as a bridge for relevant perspectives from trauma studies and challenge the current conceptualization of psychological trauma that dominates and restricts understanding and application in clinical practice.

1.7 Research Objectives

The research objectives for this concept analysis were:

- determine the uses of the term complex trauma in the health science literature;
- identify concept characteristics such as antecedents, attributes, and consequences for the current use of the term complex trauma in the health sciences literature; and
- review how the use of the concept of complex trauma has evolved over time and by discipline in the health sciences literature.

1.8 Research Questions

In this work, the following research questions were answered:

- How is complex trauma currently conceptualized in the health science literature?
- How has the concept of complex trauma evolved over time in health science literature?
- What are the disciplinary similarities and differences in health science literature regarding conceptualizing complex trauma?

1.9 Paradigmatic Positioning

According to Guba & Lincoln (1994), a paradigm reflects "…a worldview that defines, for its holder, the nature of the world, the individual's place in it, and the range of possible

relationships to that world and it's parts" (p. 107). For researchers, inquiry paradigms indicate a set of given beliefs that relate to questions of ontology, epistemology, and methodology for the research they conduct. Ontology examines the nature of the world and responds to the question: What is reality? Epistemology examines the relationship between knowledge and inquirers, answering: What can be known of the world? Methodology is dictated by ontological and epistemological beliefs: How might inquirers go about answering the questions they have about the world? (Cheek, 2000; Guba & Lincoln, 1994). This thesis work is grounded in critical theory; more specifically, by post-modern and post-structural paradigmatic perspectives.

Critical theory is the umbrella under which several philosophical approaches that critique and challenge social and political structures of power fall (Gannon & Davies, 2014; Guba & Lincoln, 1994). Ontologically, it is asserted in critical theory that social and political history is manifested in structures that are accepted today as 'real,' 'true,' and 'natural.' Its epistemology is transactional, with the object of inquiry and the inquirer both exerting influence on each other. This transactional relationship and the values of the inquiry are recognized as influencing the outcomes of the inquiry. As explained by Guba & Lincoln (1994), "what can be known is inextricably intertwined with the interaction between a *particular* investigator and a *particular* object or group" (p. 110, emphasis in original). Methodologically, critical theorists promote dialogue between the researcher and the object of inquiry to challenge taken-for-granted structures of power. Doing so illuminates who and what has been historically subjugated with opportunities for transformation. The aim of critical research is to disrupt and emancipate (Gannon & Davies, 2014). According to Guba & Lincoln (1994), critical theory can broadly be divided into three categories: "post-modernism, post-structuralism, or a blending of these two" (p. 109).

1.9.1 Post-Modern and Post-Structural Perspectives

Post-modernism is a theory of society and culture derived from a critique of modernist thought (Cheek, 2000). In the late 17th and 18th centuries, the earlier scientific revolution sparked a newfound interest in the values of truth, knowledge, reason, and human progress (Horkheimer & Adorno, 2002). This period was termed the Enlightenment Era, a social movement that shifted away from divine ideals (Horkheimer & Adorno, 2002). From the early 19th to mid-20th centuries, modernist thought built on the Enlightenment Era's prioritization of reason and empiricism (Horkheimer & Adorno, 2002; Ritzer & Ryan, 2011). Modernism holds that history and social change are universally unidirectional, progressive, and improving with advancement (Cheek, 2000). It is contended that advancements are achieved through logic and objectivity to achieve a representation of universal truths. These alleged universal truths construct grand or metanarratives that represent the true essence (Essentialism) of phenomena (Cheek, 2000; Ritzer & Ryan, 2011).

The late 20th century saw a philosophical shift in analyzing relationships between language, language users, and the world. This shift challenged philosophers to consider how the structure of language is crystalized in social structures to privilege/marginalize certain positions, perspectives, and ways of knowing in society. Termed the Linguistic Turn, this philosophical movement prompted increased interest in how language influences philosophic and scientific inquiry. In the late 1960's, French intellectuals began questioning the tenets of modernism, prompting the emergence of post-modern and post-structural thought (Ritzer & Ryan, 2011).

The basis of post-modern thought is the recognition of various and fragmented perspectives (Cheek, 2000). Notions of universal truth, grand narratives, and social cohesion are rejected, and knowledge is viewed as a social construction. Therefore, nothing can be objectively

true or known. Instead, it was suggested that in constructing knowledge, certain perspectives and ways of knowing are privileged while others are subjugated and diminished. As summed up by post-modern philosopher, Jean-François Lyotard (1984), "simplifying to the extreme, I define postmodern as incredulity towards metanarratives. This incredulity is undoubtedly a product of progress in the sciences, but that progress in turn presupposes it" (p. xxiv). When grand/ metanarratives are questioned, hidden power structures influencing the construction of knowledge and truth are brought into view. In line with these beliefs, post-modernism supports a multiplicity of perspectives, approaches, and methods in uncovering an understanding of experiences in the world (Cheek, 2000).

While the scope of post-modernism broadly encompasses culture and society, post-structuralism is more narrowly focused on language and knowledge (Cheek, 2000). Just as post-modernism was prompted by the rejection of certain ideals in modernist thought, post-structuralism was born of a critique of structuralism. Structuralism is a form of modernist literary criticism that was prominent in France from the 1940s to the 1960s. This form of literary critique states that texts have an essential, true meaning to be uncovered in analysis (Holland, 1999). Furthermore, the essential meanings found in these texts were thought to represent the general state of the natural world and the logical human mind (Holland, 1999).

French literary critic Jacques Derrida took issue with the structuralist claim that there could be any one essential, true meaning found in texts or that this meaning could be generalizable to the world. In his critique, Derrida rejected ideas of essentialism, instead arguing that texts are generated in specific contexts which influence what is said to be true and why (Derrida, 1976; Holland, 1999). Additionally, he was critical of structuring language into binary oppositions and stated that these oppositions concealed taken-for-granted power structures.

Derrida's rejection of essentialism and argument that texts are contextually created is captured by the post-structural proverb: "we don't speak language, language speaks us" (Holland, 1999, p. 157). In focusing on language and knowledge, post-structuralism analyses the ways subjectivity and context manifest in texts. Language and knowledge are neither value-free nor objective and analysis can illuminate social influences, including power structures (Cheek, 2000).

Discourse is central to understanding post-modern and post-structural perspectives, particularly how discourse interacts with social structures and power (Cheek, 2000). Discourse is the inextricable interrelation of knowledge, language, power, and structure. According to Cheek (2000), discourse "provides a set of possible statements about a given area and organizes and gives structure to the manner in which a particular topic, object, process is to be talked about" (Ch. 2, p. 8). In this way, discourse shapes what can be said, by whom, and with what authority. Foucault (1980) highlighted that structures of power manifest in discourse by what perspectives are prioritized/ marginalized within discourses and what discourses are upheld in society as 'truth'. He states:

> Truth is a thing of this world: it is produced only by virtue of multiple forms of constraint. And it induces regular effects of power. Each society has its regime of truth, its 'general politics' of truth: that is, the types of discourse which it accepts and makes function as true (Foucault, 1980, p. 131).

In this passage, Foucault states that dominant discourses are not true in essence but are made to function as truth at the expense and marginalization of alternate discourses. Such exclusion results in further research and knowledge development related to the dominant discourse, bolstering arguments of the dominant discourse as absolute and universal 'truth' with counter or alternative discourses effectively silenced (Cheek, 2000).

1.9.2 Applicability to Research Problem

Post-modern and post-structural perspectives are increasingly being applied to nursing research (Cheek, 2000; Kiyimba et al., 2022). Conceptual clarity is paramount to philosophical discussion, theory development, and conducting quality research (Rodgers & Knafl, 1993). In this thesis, post-modern and post-structural perspectives are applied to understand how the concept of complex trauma is produced and understood.

The psy-science discourse, which (re)produces psychological trauma as mental illness, dominates in the North American context and has generally been accepted as true within the greater society. People who have experienced trauma are encouraged to seek help in the form of treatment from psy-experts, often in institutional mental health settings. In this way, people with past psychological trauma are "subject to intervention designed to restore the boundaries of normality" that are determined by psy-sciences. Furthermore, those who forego treatment for their traumatic experiences risk "being regarded as 'mad', 'deviant', and socially shunned" (Kiyimba et al., 2022, pp. 2 – 3). The general acceptance of this perspective is mirrored in other powerful social structures, as seen in federal research funding in Canada, where PTSD research has been deemed a priority. In this way, the inextricable relationship of knowledge and power is at work. Funding supports further research into "symptom-based explanations" (Kiyimba et al., 2022, p. 3) of psychological trauma to further legitimize dominant discourses, psy-experts, and the treatments they offer.

But what becomes of individuals and communities whose traumatic experiences do not fit within this discursive frame? With psychological trauma being narrowly defined in terms of experiences and consequences, many who have arguably experienced psychological trauma are excluded from recognition, particularly individuals and communities who have experienced

complex trauma. The experience of their trauma may be denied and framed as something other than trauma, as proposed by trauma studies scholars, or dismissed altogether. Further, the care and services they receive may be inadequate, ineffective, inappropriate, or otherwise problematic.

1.10 Relevance to Nursing

In Canada, nurses represent the largest proportion of health care practitioners (63%) (Galarneau, 2003) and have most frequent contact with individuals seeking care (Butler et al., 2018). With the assumption that trauma is highly prevalent (Goddard et al., 2022), nurses are likely to engage with individuals with traumatic histories. Additionally, therapeutic modalities used to assist individuals who have experienced trauma (e.g., counselling, psychotherapy, health education and skills development) are within the scope of practice for nurses (College of Nurses of Ontario, 2022). With nurses having the skills, ability, proximity, and duty to patients to deliver care that is trauma-informed, they must be able to understand, recognize, articulate, and intervene in situations where their patients are experiencing psychological trauma (Goddard et al., 2022).

By analyzing texts on the topic of complex trauma, conceptualization of complex trauma can be problematized to illuminate points of contention, ambiguity, or omission. With nursing situated within mental healthcare structures that (re)produce an exclusionary discourse on trauma, nurses are crucial actors who can challenge this narrative through critical reflection and action. As stated by Ruck et al. (2019),

> Systematic ignorance of blind spots and how they relate to one's own position within the matrices of oppression and privilege makes scientists and laypersons alike prone to

> assume their own experiences, perspectives, and theories as the norm and to reproduce and stabilize power relations (p. 17).

In challenging grand narratives of psychological trauma produced by dominant trauma discourse and accepted as truth, there is “an opportunity to question or deconstruct the ways in which we view ourselves and others, and for providing an explanatory or even emancipatory alternative to the dominant view" (Kiyimba et al., 2022, pp. 3 – 4). Analyzing the concept of complex trauma can complement, complexify, and problematize current conceptualizations of psychological trauma from a psy-science perspective and provide opportunities for exploring how this alternative conceptualization can be mobilized in nursing practice.

Chapter 2: Background

The concept of psychological trauma has evolved in relation to historical and sociopolitical contexts. Yet, complex trauma remains conceptually ambiguous as the concept continues to emerge and establish its margins within psy-science and be applied by health sciences. This chapter will review the historical evolution of the concept of psychological trauma and the emergence of complex trauma in psy-science in relation to important historical and sociopolitical contexts. The field of trauma studies, which pays greater recognition to the context in which trauma occurs, is introduced as an alternative discursive frame for understanding trauma, particularly complex trauma. Shortcomings of the dominant discursive frame for psychological trauma in relation to the recognition of the concept of complex trauma are also introduced.

2.1 The Diagnostic and Statistical Manual of Mental Disorders

Dominant understanding of psychological trauma is largely understood in the context of diagnostic constructs. Two diagnostic manuals are used in North America for psychiatric diagnosis: the Diagnostic and Statistical Manual of Mental Disorders (DSM) and the International Classification of Disease (ICD). The most recent edition of each diagnostic manual – the DSM, fifth edition, text revision (DSM-V-TR) published in 2022, and the ICD, 11th edition (ICD-11) published in 2019 – include statements defining how each manual conceptualizes traumatic experiences and how corresponding diagnoses are classified, with differences between the two (APA, 2022; WHO, 2019). While both manuals are applicable, the DSM-V-TR is most commonly applied in North American contexts.

The Diagnostic and Statistical Manual of Mental Disorders (DSM) is a pivotal tool in psy-sciences, shaping the provision of mental health care (Surís et al., 2016). Initially devised to

describe the statistical prevalence and generate a standardized classification system for mental disorders, it has evolved into an elaborate manual detailing the diagnostic taxonomy (American Psychiatric Association, n.d.; Surís et al., 2016). Beyond its diagnostic application, the DSM also significantly influences the understanding and treatment of mental and behavioural phenomena.

In the mid-1800s, the United States of America began collecting data about the prevalence of mental disorders. From these efforts, several categories of mental disturbance were identified, then described as 'idiocy' or 'insanity' (American Psychiatric Association [APA], n.d.; Gorwitz, 1974). In the early 1900s, the American Medico–Psychological Association coordinated with the National Commission on Mental Hygiene to devise a strategy to collect consistent information on the statistical prevalence of mental disorders from mental hospitals (APA, n.d.). The Bureau of the Census supported and adopted this strategy, and through this combined effort, mental health data was analyzed and categorized for improved clinical utility (Carlisle et al., 1911).

The American Medico–Psychological Association became the American Psychiatric Association (APA) in 1921 (American Psychiatric Association, n.d.; Gorwitz, 1974). The APA continued to collaborate with other institutions – notably, the New York Academy of Medicine – to devise a standard diagnostic manual of mental disorders to be adopted nationally for application in psychiatric settings (APA, n.d.). The first iteration of these efforts was the publication of a classification of psychiatric and neurological disorders in the first edition of the American Medical Association's Standard Classified Nomenclature of Disease in 1933, the precursor to the DSM.

The conception of disorders following traumatic exposure has undergone significant revisions throughout the various renditions of the psychiatric diagnostic manuals since that time in relation to historical and sociopolitical contexts, as described below (North et al., 2016).

2.2 Early Interpretations of Psychological Trauma

The mid-late 19th century marked a shift in the understanding of the concept of trauma from a solely physical injury to also including psychological injury or wounding (Figley et al., 2017; Leys, 2000). This shift in the conceptualization of trauma is generally attributed to French neurologist Jean-Martin Charcot and his work investigating the phenomena of hysteria.

2.2.1 Charcot and Hysteria

Charcot's work related to psychological trauma took place at a French asylum, the Salpêtrière (Herman, 1992b). Here, Charcot studied and treated patients experiencing symptoms, including "convulsions, contortions, fainting and impairment of consciousness" (Waraich & Shah, 2018, p. 49). Before Charcot's investigations, the cause of hysteria was believed for centuries to originate in the uterus and, therefore, only affect females. According to Herman (1992b), the "term *hysteria* was so commonly understood at the time that no one had actually taken the trouble to define it systematically" (p. 20, emphasis in original).

At the time, it was a fundamental belief in medicine that any legitimate condition must originate in pathophysiology. Otherwise, it could be assumed that their symptoms were mere fabrication (Figley et al., 2017; Herman, 1992b). Such was the accusation against hysterics, and they were cast out of society and locked away in institutions like the Salpêtrière for such charges. Charcot began his clinical investigations of hysterical patients under the same assumption of an organic cause as his medical counterparts. However, he challenged their notion of the disease originating in the uterus, having seen similar reactions in victims of railway accidents in Britain,

which were usually men (Waraich & Shah, 2018). Prior to Charcot's investigations, these men were believed to be experiencing a condition called railway spine (Figley et al., 2017; Leys, 2000). These symptoms occurred in the absence of an observable physical injury. Still, they were thought to be caused by "microscopic abrasions or lesions to the spine attributable to the (physical) shock created by the accident" (Figley et al., 2017, p. 4). Charcot hypothesized that men demonstrating symptoms of railway spine and women afflicted by hysteria were experiencing the same neurological condition.

In his clinical observations of these patients, Charcot noticed that several of them were prone to states of altered consciousness and suggestibility, which prompted his interest in hypnosis to understand their condition better. Indeed, interest from Charcot and his contemporaries in legitimating hypnotherapy as a sound treatment is inextricably linked to the study of trauma (Leys, 2000). He found that while under hypnosis, his patients' neurological symptoms could often be reproduced and relieved (Herman, 1992b). With this discovery, Charcot proclaimed that there was a psychological connection to his patients' symptoms in addition to a possible pathophysiology (Figley et al., 2017; Herman, 1992b).

2.2.2 Janet, Freud, and Psychoanalysis

This discovery piqued the interest of several physicians, most notably Pierre Janet in France and Sigmund Freud in Austria (Leys, 2000). Unlike Charcot, who prioritized describing and cataloguing the symptoms he observed, Janet and Freud prioritized listening to their patients during sessions with them to uncover the underlying cause of their symptoms (Herman, 1992b). Both Janet and Freud continued to make use of hypnosis as the basis of their treatments and spent hours engaging with and listening to their patients' accounts of their past, often troubling, experiences (Leys, 2000). Their patients' symptoms tended to subside after recounting these

memories and reliving the difficult emotions accompanying them (Herman, 1992b; Leys, 2000). With these findings, both Janet and Freud concluded that the symptoms their patients were experiencing were a result of psychological trauma, though they differed in terms of how much credence could be afforded to the claims of their patients while under a state of hypnosis (Herman, 1992b).

Freud undoubtingly believed his patients' accounts. His female patients recounted time and time again histories of horrific abuse, often sexual in nature and originating in childhood (Herman, 1992b). He noted that these early memories were often repressed from consciousness, only later to be reignited by an experience prompting the memory's retrieval and manifestation of their symptoms (Figley et al., 2017; Herman, 1992b). With conviction in his analysis, Freud published his findings in his 1896 paper *The Aetiology of Hysteria,* which outlined his theory of inappropriate and premature childhood 'seduction' as the cause of hysterical symptoms (Bourke, 2012; Figley et al., 2017; Leys, 2000). Much to his dismay, the publication was not well received. Symptoms of hysteria were extremely common, meaning if what Freud claimed was true, sexual exploitation of children was rampant (Herman, 1992b). This idea was so outrageous and offensive that his findings were rejected despite Freud's detailed descriptions and meticulous analysis, and he was shunned by the medical profession (Figley et al., 2017; Herman, 1992b). Unwilling to accept this lot in life, Freud later recanted his claims and abandoned his seduction theory to restore his professional credibility (Herman, 1992b; Leys, 2000).

He went on to develop instead a theory of psychoanalysis, a practice based on denying sexual exploitation by reframing it as a repressed desire (Figley et al., 2017; Herman, 1992b). He claimed that the shame these desires provoked is what prompted symptoms of hysteria. This new perspective manifested poorly in his clinical work with his patients resenting his accusation that

they desired the abuse they endured (Herman, 1992b). Despite this, Freud's new psychoanalytic perspective was widely accepted and prevailed as the "dominant psychological theory of the next century" (Herman, 1992b, p. 25).

2.3 The Influence of Wartime on the Concept of Psychological Trauma

War, which marred the 20th century, was influential in shaping the conceptualization of psychological trauma. The First and Second World and Vietnam Wars each left their mark on understanding traumatic experiences and how victims of trauma are constructed and recognized.

2.3.1 The First World War and Psychological Trauma

From 1914 to 1918, the compounding effects of military conscription and advanced military technology put significant pressure on civilians-turned-soldiers of the First World War (Figley et al., 2017; Jones & Wessely, 2006). Modern warfare subjected soldiers to the horrors of "trench warfare, the constant shock of explosions from large artillery shelling, and the automated death brought on by deafening machine guns" (Figley et al., 2017, p. 4). Alarming numbers of soldiers experienced exhaustion, agitation, and memory impairment (Leys, 2000). As was similarly believed of patients exhibiting railway spine, these symptoms, in conjunction with somatic complaints, led physicians to believe that these soldiers endured either micro-hemorrhagic neurotraumas, concussion, or toxic effects from shelling in battle (Bourke, 2012; Figley et al., 2017; Jones & Wessely, 2006). This condition was termed *shell shock* (Figley et al., 2017; Jones & Wessely, 2006; Leys, 2000).

Despite a hypothesized physiological explanation for their symptoms, soldiers who exhibited signs of shell shock were met with suspicion by military authorities, medical professionals, and civilians back home. They were accused either of being psychologically weak or attempting to shirk their military duties. For example, suspicion from military psychotherapist

Paul-Charles Dubois can be summed in his statement: “We do not know whether to believe in their hurts and put them in the infirmary, or to handle them roughly and send them back to the ranks” (Leys, 2000, p. 87). In this way, their fortitude, integrity, and morality were questioned, as these soldiers were accused of being cowards and malingerers (Herman, 1992b; Jones & Wessely, 2006). Some military officials viewed shell-shocked soldiers with such disdain that they argued such soldiers were not worthy of medical treatment, instead arguing for dishonourable discharge and charges for violation of military regulations by court-martial (Herman, 1992b). Attitudes and opinions as exemplified by and promoted by Dubois ultimately also resulted in the decline of hypnotherapy as treatment (Leys, 2000).

Shortages of manpower in the military soon forced military authorities to change their standpoint on the matter. Shell shock was taking a significant toll on soldiers, and finding a feasible solution to the problem was deemed a priority (Jones & Wessely, 2006). Progressive thinkers in the medical profession were adamant that the symptoms characteristic of shell shock were a result of the psychological harm inflicted on soldiers (Jones & Wessely, 2006), describing the condition as *combat neuroses*, and argued that the affliction could “occur in soldiers of high moral character” (Herman, 1992b, p. 33).

In contrast to previously punitive measures, treatment was recommended to promote the military agenda of easing manpower shortages by providing soldiers returning from battle with treatment (Herman, 1992b; Jones & Wessely, 2006). The foundational pillars of this practice were that soldiers receive immediate treatment in proximity to the battlefield with the expectation of returning to military service (Jones & Wessely, 2006). This approach also incorporated a form of psychoanalysis where soldiers were encouraged to speak of the horrors of war they encountered (Herman, 1992b).

In 1922, psychiatrist Abram Kardiner returned home to New York after spending a year in Vienna and taking an interest in Freud's psychoanalysis (Herman, 1992b). Moved by the distress of former soldiers troubled by combat neuroses and driven to advance the discoveries of Freud and his contemporaries, Kardiner began offering psychiatric treatment to former soldiers in conjunction with the Veteran's Bureau. In 1941, he published a culmination of his clinical observations in *The Traumatic Neuroses of War* (Herman, 1992b; Leys, 2000). In this work, Kardiner detailed the hypervigilance and hypersensitivity to perceived threats observed in his patients and put forward his thesis that traumatic neuroses are fundamentally physioneuroses (Kardiner, 1941; van der Kolk, 2015). He suggested that psychologically harmful (traumatic) experiences produce lasting neurobiological effects on the individual, which manifested in the symptomology observed in these patients (van der Kolk, 2015). It was in this work that Kardiner first coined the term post-traumatic stress disorder (Bourke, 2012).

2.3.2 The Second World War and Psychological Trauma

The debate on the conception of psychological trauma and how its victims should be viewed and treated continued to provoke controversy during and after the Second World War. Military officials recognized that shell shock had a significant effect on soldiers and their ability to return to combat and resorted to stigmatizing and punitive measures to deter soldiers from leaving the frontlines (Jones & Wessely, 2006).

In the United Kingdom, the *Horder Committee on War Neuroses* was tasked with researching the psychiatric conditions of military personnel and developing mental health policies to maintain military effectiveness (Jones & Wessely, 2006; Leys, 2000). The committee elected to ban the term shell shock, instead dictating that soldiers be diagnosed with exhaustion. Where abreaction and ventilation were previously noted to be effective in treating the traumatic

experiences of war, these treatments were no longer considered to be appropriate. Instead, fear resulting from soldiers' experiences of war was thought to be contributing to soldiers' exhaustion, which was to be managed with rest. Additionally, pensions for psychiatric injuries were denied (Jones & Wessely, 2006; Leys, 2000). The shift from recognizing the traumatizing effects of war to reduction as exhaustion effectively minimized the potentially profound consequences of combat on military personnel to a transient and self-limiting condition (Leys, 2000). Furthermore, punitive measures functioned to coerce soldiers into maintaining their commitment to the military despite these detrimental consequences.

Conversely, military psychiatrists maintained that combat stress reactions were bona fide responses worthy of treatment and that should not be stigmatized (Herman, 1992b; Leys, 2000). Research by psychiatrists Dr. Joeseph W. Appel and Dr. George W. Beebe claimed that 200 – 240 days of combat exposure was the limit at which any individual would break down under the pressures of war. Herman (1992b) quotes Appel and Beebe (1946):

> There is no such thing as 'getting used to combat.' . . . Each moment of combat imposes a strain so great that men will break down in direct relation to the intensity and duration of their exposure. Thus psychiatric casualties are as inevitable as gunshot and shrapnel wounds in warfare (p. 37).

Publication of these findings formalized a shift in trauma discourse from a stigmatizing to a supportive stance for soldiers' psychological strife.

Psychiatrists also pushed back against the recommendation of rest as the primary treatment for traumatized soldiers (Herman, 1992b; Jones & Wessely, 2006). Various military psychiatrists continued to be intrigued by the work of Breuer and Freud and the induction of altered states of consciousness for the relief of traumatic symptoms (Leys, 2000). Kardiner

continued his influential work during the Second World War along with psychiatrist Herbert Spiegel. Together, Kardiner and Spiegel rediscovered the utility of hypnoses to induce healing altered states of consciousness in traumatized soldiers (Herman, 1992b).

Drs. Roy Grinker and John Spiegel were more critical of the psychoanalytical underpinnings of Freud and Breuer's work. They believed that it was the intense emotional response – referred to as abreaction – that was therapeutic in relieving symptoms not the recollection and processing of the traumatic experience (Leys, 2000). Grinker and Spiegel noted that barbiturates had been used to provoke emotional responses in soldiers in the First World War and experimented with the application of other substances to provoke similar reactions. They noted that sodium amytal (ether) provoked the most intense reactions and, therefore, was thought to produce a more therapeutic effect (Leys, 2000). They termed the use of pharmacological agents to provoke altered states of consciousness, abreaction, and relief of traumatic symptoms *narcosynthesis* (Herman, 1992b; Leys, 2000). These treatments were found to be very effective, yet military psychiatrists warned that abreaction was not a long-term solution for war-related trauma.

It is estimated that with treatment, approximately 80% of soldiers returned to some form of military duty within one week, with 30% returning to combat (Herman, 1992b). However, there was no follow-up with these soldiers once they were discharged from their military duties and returned to civilian life. Because war-related trauma was rebranded as exhaustion, it was believed that soldiers quickly recovered from the condition. It was believed that they had recovered if they maintained a level of minimum functioning (Herman, 1992b).

Upon return home, Second World War veterans experienced a delayed onset of trauma-related symptoms (Figley et al., 2017; Jones & Wessely, 2006). However, these are not well

detailed since there was no effort to detail the long-term effects of war until years later (Herman, 1992b). Due to this onset of delayed war trauma symptoms, there was an influx of veterans seeking outpatient psychiatric care, which prompted the U.S. military to devise a more detailed classification of mental disorders in 1945 (known as Medical 203) to account for the experiences of soldiers and war veterans (Houts, 2000). Concurrently and in response to the effects of war on military personnel, the International Classification of Diseases 6 (ICD-6) – a manual published by the World Health Organization on the global causes and consequences of disease and mortality – published in 1948, included descriptions of mental disorders in its classification for the first time (APA, n.d.; Harrison et al., 2021).

Strongly influenced by the release of Medical 203 and the ICD-6, the American Psychiatric Association published the first edition of the DSM in 1952. The DSM acknowledged the possible detrimental effects on mental health for individuals faced with stressors (North et al., 2016) by including the diagnosis of Gross Stress Reaction (GSR) in its nomenclature. This diagnosis was created to account for the symptoms of veterans from the Second World War but also recognized the experiences of civilians who experienced catastrophe (Figley et al., 2017). The diagnosis of GSR was merely descriptive and lacked diagnostic criteria, characteristic symptomology, or an operationalized definition (Jones & Wessely, 2006; North et al., 2016). In 1968, the DSM II was published. This second edition omitted GSR without explanation, instead including the terminology *Transient Situational Disturbance* (Figley et al., 2017). Both the DSM I and DSM II focused on the transient nature of stressful or traumatic events and the subsequent distress caused by them (Jones & Wessely, 2006). Symptomology produced by their distress was believed to be short-lived, and individuals would recover without long-term effects if there were

no pre-existing mental problems (North et al., 2016). In other words, 'normal' and healthy people make a full recovery from stress and trauma.

2.3.3 Vietnam War and Post-Traumatic Stress Disorder

The Vietnam War and the controversy generated by it was a prominent force in beginning to shape the conceptualization of trauma as it is understood today. Extensive media coverage provided civilians with insight that cemented the tragedy of war for the first time (Jones & Wessely, 2006). Significant casualties of United States soldiers and Vietnamese civilians, military conscription, and the financial burden of war contributed to the growing unpopularity of the Vietnam war. Upon return home, soldiers were not viewed as heroes as the veterans in previous wars were, but as the perpetrators of a cruel and unpopular war (Jones & Wessely, 2006).

As with soldiers returning home from previous wars, Vietnam veterans also experienced negative repercussions due to their war experiences (Herman, 1992b; Jones & Wessely, 2006; van der Kolk, 2015). The public outcry against their war compounded these effects, rendering returned soldiers isolated and misunderstood (van der Kolk, 2015). Vietnam veterans experienced a variety of delayed reactions to their war experiences, which were not accounted for as a transient situational disturbance, per the DSM's description. Therefore, there was no recognition or treatment of their symptoms (Figley et al., 2017).

Vietnam veterans felt a general sense of distrust in military administration and medical professionals employed by Veterans Affairs due to their poor treatment during and after the war and a sense that these entities were poorly equipped to assist with the various challenges with which they were faced (van der Kolk, 2015). Instead of seeking assistance for their trauma from

these official channels, veterans organized their own support peer-support groups (van der Kolk, 2015).

Along with a group of researchers, activists, and psychoanalysts, Vietnam veterans lobbied the APA for the inclusion of a 'post-Vietnam syndrome' to account for their experiences (Figley et al., 2017; Jones & Wessely, 2006). The lobby was successful and served as the impetus for the eventual inclusion of Post-Traumatic Stress Disorder in the third edition of the DSM III which was published in 1980 (Bourke, 2012; Jones & Wessely, 2006; Leys, 2000). PTSD was arguably the first diagnosis to be included based on political/social pressure rather than "epidemiological or nosological research" (Jones & Wessely, 2006, p. 219).

2.3.4 Holocaust Survivors

While establishing the effects of wartime trauma as a psychiatric diagnosis functioned to improve individualized support for soldiers, it inadequately recognized or addressed the collective impacts of the traumatic experiences of war. The delayed recognition of Holocaust survivors as trauma victims challenged the notion of trauma solely as an individual experience by shedding light on the manifestations of public or cultural experiences of trauma. Decades passed before there was recognition of psychological trauma for Holocaust survivors. The notion of the Jewish people as victims was a controversial proposition, with them often being accused of being complicit in their victimization due to their 'passive' response to Nazi attacks (Figley et al., 2017). Following the Holocaust, the world noted that survivors were quick to return to normal life, seemingly unphased by the horrors they faced. Decades later, the first study was published on the traumatic effects of the Holocaust. Because of this delay, traumatic effects were studied in the first and second generations of survivors rather than in victims directly (Figley et al., 2017). For the first time, the intergenerational effects of trauma were recognized.

Dori Laub – a physician and child survivor of the Holocaust – writes about the notion of witnessing and testimony to the horrors of the Holocaust. Laub suggests that, in a way, there are no witnesses, even of those who were present and survived (Laub, 1992). He describes how survival after liberation from singular events such as the Holocaust hinges on the necessary retelling but that surviving the atrocities impacts the psyche in such a way that it is impossible to give justice to the experience in the retelling (Laub, 1992). Along with Shoshana Felman, an American literary critic, Laub has significantly contributed to understanding trauma as a collective experience in which survivors grapple with notions of witnessing, testimony, and truth.

2.4 Violence Against Women and the Women's Movement

As we have seen, wartime throughout the 20th century had a significant influence on the construction and understanding of psychological trauma. However, social responses to war were not the only political movements that contributed to the modern conceptualization of trauma. Several social movements of the 20th century – including the women's movement – were significant in shifting perspectives on what constitutes violence and who may be recognized as victims of trauma.

Research and lobbying by feminist scholars and activists have promoted an increased recognition of violence against women, particularly the issues of intimate partner violence (IPV) and sexual assault (Bruckert & Law, 2018; Herman, 1992b). IPV – previously or elsewhere also described as domestic abuse or domestic violence – is unique in that the abuser is positioned intimately with the victim, producing a context that allows for more pervasive and enduring violence to be committed (Bruckert & Law, 2018). Examples include:

- "Physical aggression (e.g., hitting, slapping)

- Sexual abuse (e.g., sexual violence, unwanted sex acts, use of penetrating objects),
- Harassment (e.g., surveillance, repeated phone calls/texts)
- Financial abuse (e.g., sabotaging efforts to acquire or sustain employment, interfering with educational endeavours, limiting and controlling financial resources)
- Verbal abuse (e.g., put downs, name calling, accusations of infidelity); and
- Emotional abuse (e.g., threatening suicide, harming pets, sleep deprivation)" (Bruckert & Law, 2018, p. 135).

When recognizing the particular social positioning held by individuals who are female-presenting and that the overwhelming majority of IPV and sexual assaults are experienced by women, these experiences are described collectively as violence against women (VAW) (Bruckert & Law, 2018). The construction of victims and perpetrators of VAW are continually being shaped alongside the evolution of trauma discourse.

Historically, VAW has been normalized, excused, justified, or even encouraged. This is particularly so in societies that adhere to Judeo-Christian beliefs, according to which women are depicted as devious, deceitful, and generally weaker physically and intellectually than their male counterparts (e.g. Eve as the locus of original sin and being moulded from the rib of Adam) (Bruckert & Law, 2018). This construction positions women as inferior to men and underlies a narrative made manifest in social norms that women should submit to men in accordance with the natural order. Women who do not comply are thus seen as pathological and in need of correction (Bruckert & Law, 2018).

An obvious case of women being victimized for challenging the social construction of a docile and 'good' woman can be found in the witch trials of the 14th-17th centuries. Women who were viewed as too sexual, too powerful, or too challenging to male authority were declared

witches and executed. Throughout the 16th century, the Catholic church took a stance of "judicious discipline" by husbands of their wives, warning against excessive disciplinary measures which advocating for "corporal punishment… not out of anger, but for the good of her soul" (Bruckert & Law, 2018, p. 131).

VAW was not only accepted and promoted by the church, but it was also solidified in law. During the first half of the 19th century, British common law –also applicable in the Canadian context – stated that wives forfeited their legal autonomy to their husbands. As such, husbands were granted the right to discipline their wives by corporal punishment or containment since he could be held legally accountable for her behavior (Bruckert & Law, 2018). Furthermore, when women recounted excessive disciplinary measures (or abuse), judicial actors prioritized maintaining patriarchal dominance over women's safety (Bruckert & Law, 2018). Additionally, the 1882 Married Woman's Property Act entitled a woman's father to financial compensation should she be raped due to the destruction of her social standing (Bourke, 2012).

Towards the end of the 19th century, alcohol was suggested as the provoking factor spurring husbands' violence (Bruckert & Law, 2018). This argument supported women's contestation that the violence they experienced was not disciplinary; it was abuse. Also, it shifted the perception of IPV from a personal matter to a social problem. However, as the Women's Movement shifted attention to women's suffrage from the end of the 19th century to the beginning of the 20th century, direct interest in and discussion of IPV dissipated with first-wave feminists believing that securing the right to vote would advance their agenda of holding men accountable for their violence (Bourke, 2012; Bruckert & Law, 2018).

An aim to restore social stability following the Second World War galvanized men's social positioning. The heterosexual nuclear family, which maintained clear gender roles, was

viewed as instrumental in establishing social stability (Bruckert & Law, 2018). As such, men continued to be granted absolute authority within their homes and women were expected to comply. Women were frequently blamed for the violence they endured and discouraged from 'abandoning' their families, including by psy-experts. Originally quoting Walker (2001), Bruckert & Law (2018) sum up the perspective they communicated: "good wives don't get beaten" (p. 132).

The late 1950s-60s saw only marginal recognition of the psychological effects of sexual assault (Bourke, 2012). However, by the 1960s and 70s, the growing feminist movements shifted trauma discourse to include women's and children's experiences of trauma, as were initially recognized in earlier work with hysteria (Herman, 1992b). Feminists challenged the very conception of trauma, noting that the most common traumatic experiences in society were not those of men at war but those of women and children being victimized in their own homes (Herman, 1992b).

Throughout the 1970s, feminist activists and scholars engaged in consciousness-raising groups to promote awareness of IPV and sexual assault and create a safe space for survivors to connect, share their stories, and receive support. These efforts were expanded to include "places of refuge" (Bruckert & Law, 2018, p. 132) such as drop-in crisis centres and shelters located in private homes run by volunteers. Before the establishment of these supports by grassroots organizations, access to and availability of support services for women fleeing abusive home lives for the safety of themselves and their children were scarce to nonexistent. In fact, a survey of health authorities in areas with the highest rates of rape in the 1960s found that there were no services to provide emergency care or follow-up for victims of sexual assault (Bourke, 2012).

The Women's Movement prompted an increased investigation into sexual assault and rape which eventually legitimized Freud's initial suspicion of the high prevalence of these experiences for women and challenged assumptions about IPV and sexual assault. Previously, rape had been conceived as a sexual act that was a fulfillment of women's desires rather than an act of violence (Herman, 1992b). Psychiatric textbooks went as far as essentially condoning father-daughter incest, citing that the act was beneficial to the daughter by diminishing her risk of psychosis and allowing for better adjustment to the outer world (van der Kolk, 2015). Furthermore, when there was discussion about the harms of sexual assault, physical consequences (e.g. injury, sexually transmitted infections, pregnancy) were the focus with no mention of psychological harm (Bourke, 2012). Such perspectives are reminiscent of Freud's seduction theory and his shift from believing to blaming victims of childhood sexual abuse.

The '70s and '80s saw a rapid expansion of publications as testimony to the rates and severity of IPV, VAW, and sexual assault, which fueled the anti-VAW movement (Bruckert & Law, 2018). A sophisticated epidemiological study conducted in 1980 by sociologist and human rights activist Diana Russel on the prevalence of sexual assault found that one in four women had been raped and one in three had been sexually abused in childhood (Herman, 1992b). The same year, Linda MacLeod – a Canadian researcher and activist – published her report *Wife Battery in Canada: The Vicious Circle* (Bruckert & Law, 2018). Her report detailed the striking prevalence of IPV, systemic failures and negligence, and victim impact with calls to action, including changes to legislation and funding for victim support services. The Macleod report garnered national attention, including in the House of Commons, and prompted eventual provincial and federal funding for support services and women's shelters (Bruckert & Law, 2018).

In 1982, the publication of the *Charter of Rights and Freedoms* prompted legal reforms concerning sexual assault (Bruckert & Law, 2018). These reforms had implications for how sexual assault was constituted, by whom it could be perpetrated, and who could be victimized. The definition of sexual assault was expanded, making the crime gender-neutral (i.e. women could also commit sexual assault) and recognizing marital rape, which was previously described as "forced love" (Bourke, 2012, p. 32).

Increased awareness and recognition of VAW also prompted changes in how trauma was conceptualized within psy-science with implications for medico-legal discourse (Bruckert & Law, 2018). In 1970, *rape trauma syndrome* was proposed by American nurse Ann Wolbert Burgess and sociologist Linda Lytle Holstrom in recognition of the psychological effects observed in the patient who presented to the Boston City Hospital for treatment after being raped (Bourke, 2012). Symptoms included disruptions in memory and cognition, altered sensory experiences including numbing or hypersensitivity, physical responses such as nausea and vomiting, and emotional or affective disturbances including fear and anxiety. Rape trauma syndrome was revolutionary in that it attributed the symptoms experienced as resulting from the exceptionally traumatic and life-altering experience of rape in contrast to the previously accepted narrative that sexual assault is psychologically unharmful and any ill effects are due to a prior deficiency in the individual (Bourke, 2012). In 1979, *battered woman syndrome* was proposed by American psychologist Lenore Walker as an explanatory framework for why women stay in abusive situations. The framework described a 'learned helplessness' of abused women, which included "an inability to conceptualize alternatives, feelings of powerlessness, and being paralyzed with fear" (Bruckert & Law, 2018, p. 137). The theory of learned helplessness and battered woman syndrome was quickly adopted by psy-experts and feminist scholars and

activists alike and is considered an important precursor influencing the construction of the PTSD diagnosis in the DSM (Bruckert & Law, 2018).

Before the feminist lobbying of the APA, the DSM-III-R, published in 1987, described the precipitating stressor for diagnosis of PTSD as an "event that is outside the range of usual human experience and that would be markedly distressing to almost anyone, involving serious threat to life or physical integrity" (North et al., 2016, p. 200). The staggering rates of domestic violence, sexual assault, rape, and childhood abuse made it difficult to maintain the argument that trauma is beyond what is normally encountered in human experience, particularly for women and girls (Cvetkovich, 2003; Figley et al., 2017). As stated by Herman (1992b), "hysteria is the combat neurosis of the sex war" (p. 45). The term *insidious trauma* was proposed to situate normalized experiences of rape and sexual assault as trauma of the everyday repercussions of sexism (Cvetkovich, 2003).

In 1994, the DSM-IV published an expanded definition of trauma for a PTSD diagnosis that included a subjective component that the experience provokes fear, helplessness, and horror to recognize the impacts of traumatic events that involve exposure to death, serious physical injury, or sexual violation (North et al., 2016). The DSM-IV also included a vague *Disorders of Extreme Stress, Not Otherwise Specified* (DESNOS) category to describe the symptoms and experiences of individuals with chronic traumatic histories (American Psychiatric Association, 1994). The DSM-V, published in 2013, made an explicit inclusion of sexual violence in the definition of trauma, which previously was simply assumed to be implied by the description (Figley et al., 2017). See Table 1 from North et al. (2016) for an overview of the changes in the definition of trauma between the DSM-III and the DSM-V.

Medico-legal discourse is the intersection and cooperation between medical and legal frameworks for mutual support of the legitimacy of these frameworks. Examples include the enactment of medico-legal discourse, such as the involvement of health professionals in providing expert testimony during court proceedings. In relation to trauma, diagnostic constructs and frameworks have been applied to victims of IPV and sexual assault. For example, the increased recognition of the prevalence of sexual assault coupled with the description of rape trauma syndrome functioned to legitimate sexual assault survivors as genuine victims of trauma and prompted legal reform (Bourke, 2012). Similarly, the wide acceptance of battered woman syndrome prompted an expansion of the "legal doctrine of self-defence to include the battered woman's defence" (Bruckert & Law, 2018, p. 138).

While second-wave feminism and the Women's Rights movement successfully advocated for greater recognition of IPV, sexual assault, and their traumatic impacts, they did so by constructing the 'true' victims of these experiences as middle-class, heterosexual, white women (Bruckert & Law, 2018). Additionally, a focus on legal reform situated the issues of IPV and sexual assault as a legal issue instead of being rooted in systemic social oppression (Bourke, 2012; Bruckert & Law, 2018).

2.5 Emergence of Trauma Studies

While psy-science is the dominant discursive frame of reference for viewing psychological trauma in relation to the administration of mental health care, the field of trauma studies offers an important alternative perspective on the issue. Stemming from sociology and literary studies, trauma studies consider the social implications of psychological trauma. Several conflicts and social movements of the 20th century prompted the field's emergence, and its application and relevance to the 21st century have resulted in a proliferation of publications

(Bruckert & Law, 2018; Cvetkovich, 2003; J. Herman, 1992b). In contrast to psy-science, which views psychological trauma as a personal experience with individualistic solutions, trauma studies recognize that trauma is often the product of social inequality, intersectional oppression, structural violence, and systemic injustice.

2.5.1 Social Inequality and Intersectional Oppression

The emergence of trauma studies is rooted in an understanding of social inequality and intersectional oppression. With perspectives from psy-science focusing on the experiences of privileged individuals, trauma studies developed to consider how systemic forces shape and produce traumatic experiences (Bruckert & Law, 2018). The field of trauma studies recognizes that trauma is not only a personal psychological response but also a social phenomenon based on structures of power and inequality, such as the "intersecting forms of systemic oppression, including sexism, heterosexism, transphobia, racism, classism, and ableism" (Bruckert & Law, 2018, p. 139).

Trauma studies scholars have reflected on significant historical events – such as VAW, second-wave feminism and the Bosnian War (to name only a couple) – to examine how marginalized groups (i.e. women and girls, ethnic minorities, and LGBTQIA+ individuals) disproportionately experience trauma (Begicevic, 2024; Bruckert & Law, 2018; Cvetkovich, 2003; Herman, 1992b; Rajiva & Takševa, 2021). For example, the push by governance feminists for legal reform by constructing the ideal victim of VAW as "a passive, middle class, white woman cowering in the corner" (Bruckert & Law, 2018, p. 134) failed to account for the intersections of race and class impacting the experiences of violence for lower-class and BIPoC women (Bruckert & Law, 2018). Also, Rajiva & Takševa (2021) discuss the systematic rape and forced impregnation of Bosnian Muslim women and girls during the Bosnian War as acts of

genocidal ethnic cleansing intended to destroy the social fabric and collective identity of Bosnians (Begicevic, 2024; Rajiva & Takševa, 2021). These acts committed against Muslim Bosnian women and girls highlight the intersection of gender and ethnic identities impacting VAW and the production of cultural and collective trauma. Together, these perspectives from the trauma studies literature highlight how intersecting inequalities contribute to experiences of violence and trauma. From trauma studies, the understanding of psychological trauma is expanded beyond individual pathology to include a critical analysis of social contexts and power dynamics.

2.5.2 Structural Violence and Systemic Injustice

Beyond recognition of the situation of trauma within social contexts, trauma studies scholars are also critical of individualistic approaches to redress. Instead, there is discussion and advocacy for social reform to address the underlying marginalizing forces that produce trauma. The concept of *structural violence* was coined by Johan Galtung (1969) to describe "the injustice is embedded in social institutions that cause harm and undermine peoples' ability to realize their potential" (Bruckert & Law, 2018, p. 247). Because structural violence does not typify the "subject-action-object relationship" (Bruckert & Law, 2018, p. 45) characteristic of other forms of violence (i.e. physical or sexual assault), it is often overlooked as being capable of causing genuine harm.

The actions (or inaction) by the state and its authorities (e.g. law, courts, government) that either create or fail to prevent harm to individuals or collective groups in society are an area of focus within trauma studies. For example, the colonial disruption and interference in the Ruanda-Urundi government and a willful refusal by the United Nations to intervene upon being warned of imminent violence is now recognized as an inciting force for the Rwandan Genocide

(Totten & Ubaldo, 2013). Similarly, decolonial theory is also applied in trauma studies in the recent proliferation of publications on the intergenerational and cultural trauma experienced by Indigenous peoples. Colonial structural violence continues to be seen today in the overrepresentation of Indigenous people in the carceral and foster care systems. Bruckert & Law (2018) cite that 25% of all men imprisoned for sexual violence are Indigenous, which highlights "the discriminatory way racialized and marginalized men are held to count by the criminal justice system while middle and upper-class white men are given a pass" (p. 124). While governance feminists saw legal reform as the solution to VAW, structural violence serves as a barrier for women with intersectional identities. Racialized individuals and those of lower socioeconomic class are viewed as more likely to perpetrate violence and are perceived as less believable or imperfect victims.

2.6 Contemporary Understandings of Psychological Trauma in Health Sciences

A growing recognition that common experiences, chronic exposure, and lasting consequences challenged the classic conception of psychological trauma as resulting from exceptional, catastrophic experiences with temporary consequences. Adaptations have been made over the years to the DSM and ICD in terms of the definition of traumatic experiences and their consequences in an attempt to account for these challenges. However, the concept of psychological trauma, as described according to psychiatric diagnostic manuals, continues to generate significant controversy and debate. Despite this controversy, a contemporary understanding of trauma maintains adherence to these diagnostic manuals as a frame of reference in health sciences. Current research in trauma-related studies in psy-science focuses on expanding and improving the diagnostic canon to better account for the array of traumatic experiences and the efficacy of various modalities for treating trauma.

2.6.1 Complex Trauma

The recognition of the prolonged traumatic exposure characteristic of trauma, which is generally experienced by women and children, challenged the notion that trauma is a distinct event. American psychiatrist and feminist Judith Herman coined the term in her proposition that the diagnosis of complex post-traumatic stress disorder (cPTSD) should be included in the DSM-V (Herman, 1992a). Herman states that experiences thought to be associated with psychological trauma have typically been characterized as time-limited, discrete events. She argues that this understanding does not account for the chronic, prolonged, repeated, and diffuse experiences of trauma characteristic of abuse, neglect, and interpersonal violence. Furthermore, Herman states that complex trauma generates more diverse impacts than what is recognized in PTSD diagnoses. She argues that her proposed diagnosis of cPTSD would address this discrepancy by accounting for prolonged traumatic experiences and their consequences, not just the circumscribed events and symptoms described by the PTSD diagnosis.

Another American psychiatrist and colleague of Herman, Bessel van der Kolk, also proposed the inclusion of Developmental Trauma Disorder (DTD) as a corresponding pediatric diagnosis to cPTSD (van der Kolk, 2005). van der Kolk's influential work has drawn attention to the possible neurobiological underpinnings of psychological trauma and the relationship between the brain, body, and mind (van der Kolk, 2015; van der Kolk, 1998). van der Kolk argues that traumatic memories fundamentally differ from memories of ordinary events. He states that memories can be divided into implicit and explicit memory. Implicit memory retains "memories of skills and habits, emotional responses, reflexive actions, and classically conditioned responses" (van der Kolk, 1998, The Complexity of Memory Systems section). Explicit memory is the "conscious awareness of facts or events that have happened to the individual" (van der

Kolk, 1998, The Complexity of Memory Systems section). Explicit memory is also described as declarative or narrative memory in recognition that it is a social process in which memories are recalled in relation to the emotional responses and conveyed to others as an account of the experience. van der Kolk (1998) states that in response to emotional and cognitive disruptions of trauma, memories of the traumatic experience become fragmented or dissociated. Therefore, Traumatic memories may be recalled as partial memories in the form of intense emotions or bodily sensations instead of coherent and integrated recollections of the experience (van der Kolk, 2015). He argues that when traumatic experiences occur early in life within caregiving contexts, the neurobiological implications and subsequent emotional, relational, cognitive, and behavioural consequences are more profound and are not well accounted for by the current diagnostic construction of trauma, prompting his advocacy of DTD (van der Kolk, 2005).

Ultimately, neither diagnosis was included in the DSM-V. Instead, a dissociative subtype of PTSD was included in the DSM-V in an attempt to capture the consequences of complex traumatic experiences (North et al., 2016). However, the work by both Herman and van der Kolk has been highly influential in challenging conceptions of psychological trauma, particularly in clinical settings.

2.6.2 Acute Stress Disorder and Post-Traumatic Stress Disorder: DSM-V-TR

Trauma- and stressor-related disorders per the DSM-V-TR exist on a spectrum in relation to the duration of the symptoms provoked by a traumatic experience. Diagnostic criteria stipulate details of experiences that are considered traumatic. ‘Criterion A’ defines what constitutes a traumatic experience and states that for an experience to be traumatic, the individual must either have directly experienced or witnessed “actual or threatened death, serious injury, or sexual

violence"(APA, 2022b). Furthermore, the trauma must be experienced in one of the following ways:

- Direct experiencing;
- In-person witnessing;
- Learning of a violent or accidental Criterion A event occurring to a close family member or close friend, or;
- Exposure to extreme or repeated details of traumatic experiences of others.

An individual must have encountered a traumatic experience as described in Criteria A to be diagnosed with a trauma- or stressor-related disorder.

When recognition of traumatic experiences is reduced to that which is included in Criteria A, recognition of complex traumatic – such as neglect and non-physical forms of abuse – are excluded. This is significant considering the prevalence of traumatic experiences not captured by Criteria A. For example, thirty-three percent of Canadians experience non-physical abuse in the absence of physical abuse before the age of 15 (Bader & Frank, 2023).

Four categories of symptoms are described for a trauma- and stressor-related diagnosis to be applicable:

1. One or more intrusive symptoms, such as nightmares and flashbacks;
2. Two or more mood or cognitive symptoms, such as persistent negative affective states, difficulty experiencing positive emotions, or poor memory;
3. Avoidance of internal or external cues of the traumatic experience, and;
4. Two or more arousal symptoms, such as hypervigilance and increased startle responses (APA, 2022b).

When these symptoms are experienced 3 days to 6 months following the traumatic experience, the individual meets the criteria for Acute Stress Disorder. If symptoms persist for longer than 6 months, a diagnosis of post-traumatic stress disorder may be given.

2.6.3 PTSD and c-PTSD: ICD-11

The DSM-V-TR and ICD-11 differ in their recognition of complex traumatic experiences in relation to their PTSD diagnoses. The ICD-11 includes two diagnostic categories relating to psychological trauma: PTSD and complex-PTSD (cPTSD) (WHO, 2019). For a diagnosis of PTSD, an individual must have "exposure to an extremely threatening or horrific event or series of events" (WHO, 2019, sec. 6B40). Examples given in the ICD-11 of traumatic events include "combat, serious accidents, torture, sexual violence, [and] assault" (WHO, 2019). The characteristic features of PTSD are identified as re-experiencing the traumatic experience, "avoidance of thoughts and memories of the event", and "perception of heightened current threat" (WHO, 2019, sec. 6B40) following the experience.

A separate diagnostic category for cPTSD in the ICD-11 provides a description of traumatic experiences and consequences of exposure that are more fitting with the experience of complex trauma. In cPTSD, traumatic experiences are described as "exposure to an event or series of events of an extremely threatening or horrific nature, most commonly prolonged or repetitive events from which escape is difficult or impossible" (WHO, 2019, sec. 6B41). However, a PTSD diagnosis is prerequisite to receiving a cPTSD diagnosis (Kiyimba et al., 2022; WHO, 2019). In this way, PTSD is the gatekeeper to receiving a cPTSD diagnosis, meaning the expanded conceptualization of trauma in the cPTSD diagnosis is only relevant for those who also meet criteria for PTSD and continues to exclude those who do not (Kiyimba et al., 2022).

2.6.4 Other Psychiatric Disorders Associated with Trauma

Several other psychiatric disorders are also found to be associated with psychological trauma. Herman (1992a) described the widespread symptomology of trauma and warned of the "heterogeneity of PTSD" (p. 378) manifesting very differently across individuals. As such, several disorders may be comorbid with trauma-related disorders or be frequently diagnosed in individuals with traumatic histories (D'Andrea et al., 2012; van der Kolk, 2005). Comorbidity of PTSD with other psychiatric diagnoses may account for the same symptoms as in the proposed diagnosis of cPTSD, which was a considerable factor in the controversial decision to exclude cPTSD from the DSM-V-TR (Resick et al., 2012).

Personality disturbances are generally recognized as being associated with traumatic exposure. The ICD-10 included the diagnostic category *enduring personality change after catastrophic experience* (EPCACE) which described "a change of at least [four] years duration in how one perceives, relates to or thinks about the environment and self following the exposure to catastrophic trauma" (Munjiza et al., 2019, p. 2) while excluding individuals with a pre-existing personality disorder prior to the traumatic experience. This diagnosis has since been excluded from the ICD-11, being replaced by the addition of cPTSD (WHO, 2019). EPCACE has never been recognized in the DSM. Instead, individuals adhering to the DSM recognize the association between having a trauma history and *borderline personality disorder* (BPD), which is characterized by persistent instability of emotional regulation and relationships (APA, 2022b).

Internalizing behaviours in adulthood are also recognized as being associated with trauma. Depressive and anxiety disorders are frequently diagnosed, *major depressive disorder* (MDD) and *generalized anxiety disorder* (GAD) in particular (Pfluger et al., 2022). The proximity of the trauma- and stressor-related disorders chapter to the depressive disorders and

anxiety disorders chapters of the DSM-V-TR is meant to reflect the close relationship between the symptoms of these disorders (APA, 2022a). Difficulties with attention are also noted, complicating differentiating PTSD and neurocognitive diagnoses, particularly in children (Kliethermes et al., 2014). Attention deficit/ hyperactivity disorder (ADHD) is diagnosed in ~20% of children with a history of trauma (Matte-Landry et al., 2023).

As stated by D'Andrea et al. (2012), "comorbidity seems to be the rule, rather than the exception" (p. 188) for individuals with traumatic histories. Diagnostic complexity has implications not only for how trauma is understood and recognized but also for the selection of appropriate treatment strategies.

2.6.5 Treating Trauma

The APA makes recommendations for treating psychological trauma, including an emphasis on the importance of a PTSD diagnosis, identification of an index trauma (the most significant traumatic event thought to be provoking symptoms), and guidelines for evidence-based PTSD treatments (Watkins et al., 2018). Planning treatment for psychological trauma must consider the individual's stage of recovery. Phase-based treatment is recommended to ensure alignment of treatment goals with the individual's needs. Trauma treatment is generally divided into three stages: stabilization, processing, and reintegration (Herman, 1992b; Kliethermes et al., 2014).

The stabilization phase focuses on establishing safety and buffering the potential for re-traumatization. This phase may also involve preliminary work in building coping skills prior to approaching and addressing traumatic memories (Herman, 1992b; Kliethermes et al., 2014). Once safety is established, the focus of treatment shifts to processing problematic traumatic memories. Most of the strongly recommended PTSD treatments prioritize the processing phase.

Examples include prolonged exposure therapy (PET), cognitive processing therapy (CPT), cognitive behavioral therapy (CBT), cognitive therapy (CogT), and eye-movement desensitization reprocessing (EMDR) (Watkins et al., 2018). Finally, the reintegration phase of treatment focuses on building individual resilience and a meaningful life (Herman, 1992a; Kliethermes et al., 2014).

Existing research finds that PTSD treatments are efficacious in treating complex trauma, however results tend to focus on common symptoms between PTSD and cPTSD as opposed to consequences that are more specific to the experience of complex trauma. De Jongh & Hafkemeijer (2023) studied the effectiveness of EMDR for a patient diagnosed with cPTSD. They described the consequences of experiencing complex traumatic exposures, including negative self-concept and difficulties with emotion regulation and interpersonal relationships (De Jongh & Hafkemeijer, 2023). These consequences were described collectively as disorders of self-organization (De Jongh & Hafkemeijer, 2023) and represent the subset of symptoms that must be present in addition to symptoms of PTSD to receive a cPTSD diagnosis (WHO, 2019). The study concluded that EMDR is useful for treating symptoms of cPTSD (De Jongh & Hafkemeijer, 2023), however symptom improvement was found for PTSD symptoms only, not the disorders of self-organizations exclusively associated with cPTSD. While these findings indicate that effectiveness of EMDR is not hindered by presentation of disorders of self-organizations, there were no findings that treatment is effective in reducing symptomology specifically associated with complex traumatic experiences (Cloitre et al., 2014). Similarly, a quantitative review by Dorrepaal et al. (2014) reviewing the effectiveness of evidence-based PTSD treatments for women with cPTSD found that treatments were not as effective.

Recent advancements in treatment have explored the application of various pharmacologic agents in addressing the symptoms of trauma. Beyond the use of typical agents such as antidepressants and anxiolytics to manage internalizing symptoms, the experimental use of psychedelic agents is being explored (Read & Papaspyrou, 2021). Some agents are thought to induce lasting neurobiological changes (i.e. neurotransmitter function, neuroplasticity, etc.) to reduce trauma symptomology, such as the infusion of ketamine. Others – such as psilocybin (as derived from mushrooms), lysergic acid diethylamide (LSD), and 3,4-Methylenedioxymethamphetamine (MDMA) – are used in tandem with other non-pharmacological modalities to improve the therapeutic effect. Reminiscent of the use of hypnosis, barbiturates, and sodium amytal to promote abreaction in wartime, the use of psychedelics is thought to assist in accessing traumatic memories for their processing and integration. Additionally, substances traditionally used ceremonially – such as ayahuasca, peyote, and kambo – are also being investigated scientifically for their efficacy and clinical application in trauma treatment (Read & Papaspyrou, 2021).

2.6.6 Priority Populations

The Canadian government (Federal Framework on Post-Traumatic Stress Disorder Act, 2018) and the Canadian Institutes of Health Research (CIHR) deem psychological trauma a research priority for the health and well-being of Canadians. In establishing its strategic plan for 2020 to 2022, CIHR hosted a roundtable with several trauma experts and identified seven groups as priority populations when conducting trauma research:

- “Chronic disease patients (e.g. cancer survivors);
- Communities recovering from natural or human-made disasters;
- Front line workers including public safety and medical personnel;

- Indigenous Peoples surviving inter-generational trauma and abuse;
- Military personnel and veterans;
- Refugees and immigrants, and;
- Women, children and youth survivors of abuse" (Canadian Institute of Health Research & Institute of Neurosciences, 2020, p. 20).

Historically, psychological trauma has largely been studied and understood within the context of war, with veterans eventually being established as the priority population for understanding and addressing psychological trauma. Recent scientific advancements and shifting sociopolitical contexts have expanded recognition of the traumatic experiences of other populations.

Problematically, trauma research for these priority populations in conducted in relation to PTSD when their experiences are better recognized as complex trauma (Kogan & Paterniti, 2017; Watkins et al., 2018). Women, while already diagnosed with PTSD twice as often as men (Olff, 2017), also experience higher rates of interpersonal violence (Gatov et al., 2019). Interpersonal violence is the misuse of power over another resulting in harm or neglect (Heidinger, 2022). Interpersonal violence includes intimate-partner violence (IPV), which is physical or psychological harm produced by a romantic partner (Heidinger, 2022). Sixty percent of Indigenous women in Canada have experienced non-physical IPV such as controlling behaviours, coercion, and emotional abuse (Heidinger, 2022). More broadly, members of Indigenous communities experience intergenerational trauma*,* the transmission of effects from a traumatic past between generations, resulting from the abusive Canadian residential school system (Burrage et al., 2022). Interpersonal violence (including IPV) and intergenerational trauma are examples of complex traumatic experiences more commonly experienced by PTSD research priority populations, yet not captured by the description of traumatic experiences

thought to produce PTSD. Ironically, when psychological trauma is conceptualized as an illness, such as PTSD, traumatic experiences of PTSD priority research populations may be excluded.

Conclusion

Complex trauma is an emerging concept in psy-science with application in health sciences, including nursing. Indeed, it is largely absent from our contemporary understanding of psychological trauma and how it is treated. Because the dominant understanding of psychological trauma continues to be largely influenced by understandings as described by diagnostic manuals, the debate about how to account for complex traumatic experiences within the diagnostic framework has produced an incomplete and ambiguous description of the concept of complex trauma, rendering a concept analysis of complex trauma an important endeavour. Trauma studies offer an interesting alternate perspective of psychological trauma that is particularly relevant to understanding and describing complex trauma. Notably, the systemic and social factors influencing many populations identified as priorities for PTSD research are accounted for in trauma studies discourse. Conceptualization beyond the frame of diagnostic constructs can better encompass the experience of complex trauma by while minimizing the pitfalls of the dominant trauma discourse.

Chapter 3: Methodology

3.1 Concepts

The term concept is employed so ubiquitously in our daily language, one might assume that its' understanding is clear. While it is generally accepted that concepts are cognitive renderings, there is significant philosophical debate about the nature of concepts and their relationship to reality, cognition, language, and knowledge (Rodgers, 1993b). Two overarching streams of philosophical thought account for the various perspectives that produce understanding of concepts: *entity theory* and *dispositional theory*. Each of these theories has implications for concept analysis methodology and disciplinary knowledge production. A variety of methods for concept analysis have been devised based on these philosophical understandings, each of which will be examined before detailing the chosen design for this study and its congruence with the research questions and the researchers paradigmatic positioning.

3.1.1 Entity Theory

The central tenets of entity theory focus on concepts as abstract ideas that correspond to objective reality that can be understood in relation to stable and universal essences (Rodgers, 1993b). Concepts are entities in that they are the objects of thought. These objects are mental constructions that correspond universally with the natural world. From this perspective, humans mentally construct concepts through a process called *successive generalization* (Rodgers, 1993b). In this process, patterns of similarities are observed in groups of objects to create broad categories. Categorization allows for distillation of essential features deemed necessary to be a true representation of the concept. Objects that embody these essences are viewed as a representation of the concept. Central to the entity theory of concepts, these categorizations and essences are thought to be stable and generalizable representations of reality (Rodgers, 1993b).

Because concepts are believed to be representations of the real world in entity theory, their clarification has an important relationship to the construction of knowledge. Based in a positivist paradigmatic perspective, scientific pursuits grounded by the entity theory of concepts aim to determine clear margins and essential features of concepts (Weaver & Mitcham, 2008). Once clearly established, concepts are thought to be the "basis for human knowledge" (Rodgers, 1993b, p. 14).

Entity theory's alignment with essentialism is also the basis of critique for lacking recognition of contextual factors (Rodgers, 1993b). Social and cultural influences cannot be reconciled within this philosophical framework. Furthermore, the view that concepts are stable does not allow for the possibility for concepts to evolve over time or in relation to clarification or emergence of other concepts (Rodgers, 1993b). Recognition of these shortcomings prompted the emergence of the alternate dispositional theory of concepts.

3.1.2 Dispositional Theory

The dispositional theory of concepts maintains that cognition plays an important role in the construction of concepts yet diverges from entity theory in emphasizing how concepts are used and the behaviours they allow for. In dispositional theory, concepts are understood as social constructions that allow for communication about and engagement with abstract phenomena (Rodgers, 1993b). Because concepts are viewed as social constructions, dispositional theory rejects the notion that concepts correspond with objective reality. Furthermore, contexts in which concepts exist are recognized in shaping the concept. It is understood that concepts can evolve and change over time and do not possess any intrinsic, essential features (Rodgers, 1993b).

Concepts are conceived based on familial resemblances and communicated through language (Rodgers, 1993b). The language used in speaking about the concept provides a medium

for understanding the mental construction of the concept. The ability to communicate about concepts provides a means for concerted effort in working with concepts. In this way, concepts are viewed as tools which a provide a means to navigate the world (Rodgers, 1993b).

In clarifying concepts, dispositional theory aims to clarify how words are used in representing concepts. In examining the language used to speak about a concept, the gist of the phenomena can be ascertained. Examples of a concept are viewed incrementally, instead of all or nothing. This view of concepts has been referred to as a "fuzzy set" (Rodgers, 1993b, p. 21) for recognizing concepts and communicating about them. The margins of concepts are far more fluid from this theoretic perspective, making clear distinction of a concept more difficult, though it is argued that clear distinction is rarely necessary. Ludwig Wittgenstein, an influential German philosopher in the discussion of concepts, argued that a fuzzy view of concepts may be a more reasonable contestation over concepts viewed as fixed. He states:

> Is an indistinct photograph a picture of a person at all? Is it even always an advantage to replace an indistinct picture by a sharp one? Isn't that indistinct one often exactly what we need? (Wittgenstein, 1958, p.34).

As such, the fuzzy demarcation of concepts in the dispositional view can be highly relevant and often necessary in analyzing more abstract concepts.

3.1.3 Conceptual Clarity and Disciplinary Knowledge Development

Concepts are often discussed in relation disciplinary knowledge development. Concepts serve as tools for members of a discipline to engage with phenomena to produce knowledge. According to Rodger & Knalf (1993), scientific progress relies on "achieving balance between empirical advances and conceptual dilemmas" (p. 2). Concept development contributes to the overall scientific enterprise of nursing, particularly knowledge development (Rodgers & Knafl,

1993). Concepts are often the object of research and form the basis of theory and philosophy. Conceptual clarity is therefore prerequisite to conducting quality scientific, theoretical, and philosophical inquiry (Rodgers & Knafl, 1993). Language used to describe concepts represents a disciplinary perspective (Fitzpatrick, 2015) and the academic goals of a discipline are best achieved with concept clarity, improvement, or development (Rodgers & Knafl, 1993). When conceptual clarity is lacking, inconsistent use of language and poor understanding serve as a barrier to knowledge development.

Disciplinary perspective captures the shared, incontestable beliefs and "reason for being" (Newman et al., 1991, p. 1) of a group. For professional disciplines, beliefs and perspectives, related values, social commitment and service, and realm of knowledge expertise are expressed (Newman et al., 1991). Many disciplines share areas of interest (e.g. health care professions share interest in the care of patients). Disciplinary statement of values, service, commitment, and expertise demarcates the margins of each discipline and indicate a disciplinary perspective in contributing to the shared interest (e.g., medicine focusing on the diagnosis and treatment of disease and nursing in caring for patients). As mentioned by Bender (2018), members of a discipline share

> a special coherence which separates them from neighboring groups—and this special bond means they have a shared set of values and a common commitment which operates as they work together to achieve a common goal (p. 3).

In other words, the perspective or worldview of a discipline can be described as a disciplinary philosophy which "motivates all practice and inquiry" (Bender, 2018, p. 5). In this way, it is philosophical perspective that delineates a discipline over an "object of inquiry or methodology" (Bender, 2018, p. 3).

3.2 Concept Analysis Methodology

Concept analysis is a research methodology to achieve conceptual clarity to lay the foundations for knowledge production (Rodgers & Knafl, 1993). Several methods exist for conducting a concept analysis, and "concept analysis typically entails synthesizing existence views of a concept and distinguishing it from other concepts" (Knafl & Deatrick, 1993, p. 35). While each method is employed to achieve conceptual clarity for the concept being analyzed, each approach differs in their intellectual underpinnings, purpose of analysis, and steps for conducting the analysis (Knafl & Deatrick, 1993). These considerations are important when choosing a method that aligns with the researcher's aims for analyzing the concept of interest. Wilsonian methods, Walker & Avant's in particular, and Rodgers evolutionary concept analysis methods are most frequently used by the nursing discipline and are examined below.

3.2.1 Wilsonian Methods

In 1963, philosopher and high school teacher, John Wilson, published a high school textbook titled *Thinking with Concepts*, now considered a seminal work, to describe concepts, their importance, and how they can be clarified (Rodgers, 1993b; Weaver & Mitcham, 2008). In this work, he discusses how language used to describe concepts can vary and how conceptual clarity is important to philosophical inquiry. Wilson describes 11 steps for his concept analysis method in achieving conceptual clarity (Wilson, 1963). Wilson's method relies on the identification of a variety of cases to illustrate exemplars and deviations to illustrate the concept of interest (Avant, 1993; Wilson, 1963) and includes steps for analyzing the context in which the concept is used. Wilson's 11 steps include:

1. "Isolating questions of concept.
2. 'Right answers'.

3. Model cases.
4. Contrary cases.
5. Related cases.
6. Borderline cases.
7. Invented cases.
8. Social context.
9. Underlying anxiety.
10. Practical results.
11. Results in language" (Wilson, 1963, section B. *Techniques of Analysis*).

Wilson's method has served as a jumping-off point for others to adapt and devise their own methods for concept analysis. This has been particularly true for nurse scholars interested in concept analysis, several of whom have built on Wilson's work (Gunawan et al., 2023; Rodgers, 1993b; Weaver & Mitcham, 2008). Such methods continue to be some of the most frequently employed methods of concept analysis in nursing in North America (Weaver & Mitcham, 2008).

3.2.1.1 Walker & Avant. Building on the work of Wilson, two nurse scholars, Margaret Walker and Kay Avant, adapted the Wilsonian approach to develop their own method of concept analysis for application in nursing. The aim of concept analysis in this method is to generate a clear definition of the concept (Gunawan et al., 2023). Being a literature-based method, data pertaining to the concept is drawn from available literature, including academic sources and dictionary definitions. Their method consists of eight steps and, like Wilson's method, illustrates the concept with the use of model, contrary, related, and borderline cases (Knafl & Deatrick, 1993). Walker & Avant simplified Wilson's 11-step method to eight, removing steps identified

that related to examining the social context and use of language. The eight steps of their method include:

1. “Select a concept.
2. Determine the aims for purposes of analysis.
3. Identify all uses of the concept that you can discover.
4. Determine the defining attributes.
5. Identify a model case.
6. Identify borderline, related, contrary, invented, and illegitimate cases.
7. Identify antecedents and consequences.
8. Define empirical referents” (Walker & Avant, 2019, p. 170).

The simplicity of Walker & Avant’s method allows for ease of use. This method is frequently used in the nursing discipline for the clarification of concepts. Key examples include the analyses of secondary traumatic stress in nursing by Kellogg (2021) and parental emotional transference to children by Oh et al. (2019). This simplicity is also the source of critique. Gunawan et al. (2023) and Weaver & Mitcham (2008) suggest that Walker & Avant’s method oversimplifies concepts, limiting their context-specific application and their utility in generating theory.

3.2.1.2 Chinn & Jacobs/Kramer. Another Wilsonian method, produced by Peggy Chinn and Maeona Kramer (also known as Maeona Jacobs), remains more faithful to Wilson’s original perception of concepts while adapting their method to produce nursing theory. The aim of concept analysis in the Chinn & Jacobs/Kramer approach is to “create meanings by considering the word label, phenomenon represented, and associate feelings, values, and attitudes” (Weaver & Mitcham, 2008, p. 185). Concepts are defined by Chinn & Jacobs (1978) “as complex mental

formulations of events, objects, or properties which are derived from an individual's perceptual experience" (p. 5). Data is drawn from a wider range of sources in this method, including literature including poems, visual arts, music, and individual perspective and opinions of those interacting with the concept (Gunawan et al., 2023).

The process for conducting concept analysis is less linear that Walker & Avant's method, allowing more fluidity between phases and encourages reflection on the context in which the concept emerged. There are four steps in Chinn & Jacobs/Kramer's method:

1. "Select a concept.
2. Establish purpose for creating conceptual meaning.
3. Examine data sources.
4. And develop criteria for validating the soundness of tentative conceptualization" (Weaver & Mitcham, 2008, p. 185).

This method maintains the importance of establishing criteria for identifying examples that are representative of the concept and those that are not. However, concepts are not viewed as static, therefore it does not aim to conclude with fixed definition of the concept. Instead, Chinn & Jacobs/Kramer claim that concepts can evolve and must be re-evaluated as new pertinent data emerge (Gunawan et al., 2023).

Chinn & Jacobs/Kamers method's strength is in the recognition of context contributing to development and application of concepts. Critique of this method is due to a claim that it may be less scientifically rigorous than other methods (Gunawan et al., 2023).

3.2.1.3 Schwartz-Barcott & Kim. In response to the proliferation of nursing theory development in the 1970's, nurse scholars Donna Schwartz-Barcott and Hesook Suzie Kim took inspiration from Wilson's original method in developing their *Hybrid Model* for application to

clinical settings in training nursing students (Schwartz-Barcott & Kim, 1993). This method is divided into three phases:

1. Theoretical
2. Fieldwork
3. Analytical (Gunawan et al., 2023; Schwartz-Barcott & Kim, 1993).

During the theoretical phase, a concept is selected, and a preliminary definition is decided to conduct a literature review (Gunawan et al., 2023). The aim of the theoretical phase is to establish a theoretical basis of the inquiry. In contrast to strictly literature-based concept analyses, Schwartz-Barcott & Kim's hybrid model for concept analysis draws data from the clinical setting during the fieldwork phase in addition to literature review (Weaver & Mitcham, 2008). A combination of qualitative and quantitative methods are employed during the fieldwork phase for data collection during observations of the concept in the clinical setting. These observations are used to further refine understanding of the concept. The fieldwork phase was created to be used during a clinical placement, allowing several months for observations of the concept and data to be collected (Gunawan et al., 2023). In the final analytical phase, theoretical assumptions and observations from the field are synthesized and discussed in terms of their relation to nursing practice (Gunawan et al., 2023).

Strengths of Schwartz-Barcott & Kim's Hybrid Model include incorporation of clinical observations in addition to literature review in clarifying concepts (Gunawan et al., 2023). The Hybrid Model is critiqued for concepts being clarified in relation to a single clinical area without recognition of this context, limiting the clarified concept's applicability to other contexts (Gunawan et al., 2023; Weaver & Mitcham, 2008).

3.2.2 Evolutionary Method

Unlike the above-mentioned methods to concept analysis, Rodger's evolutionary method is not derived from Wilson's approach. A concept is not the word used to represent it, but the cognitive picture or abstraction represented by the words. This cognitive abstraction is influenced by socialization and can be identified by common characteristics (Rodgers, 1993a). For this reason, the abstraction of the concept of interest can be viewed differently. Conceptual abstraction can be expressed via discursive and other linguistic representations or non-linguistic representations, such as the arts (Rodgers, 1993a). Evolutionary concept analysis allows researchers to examine how concepts are shaped and represented over time, differences in conceptual evolution in various disciplines, and how these understandings may be transferrable to other disciplines seeking conceptual clarity (Rodgers, 1993a). The evolutionary method consists of eight steps:

1. Identify the concept of interest.
2. Select an appropriate setting and sample.
3. Data collection.
4. Identify concepts related to the concept of interest.
5. Data analysis.
6. Conduct interdisciplinary and temporal comparisons.
7. Identify a model case.
8. Identifying implications (Rodgers, 1993a).

The steps in the evolutionary method are more fluid than in other approaches. Rodgers (1993a) states that concept analysis is an iterative process which requires movement between phases of analysis.

The evolutionary method has strengths in being flexible and adaptable, both in its application and in the various sources of data that can be used in this method for analysis. Despite transparency is discussing the view of concepts as context-dependent in this method, some have critiqued the results produced by the evolutionary method as being limited in their generalizability.

3.2.3 Philosophical and Theoretical Underpinnings of Concept Analysis Methods

A major critique of nursing methods for concept analysis is a general lack of transparency of their philosophical underpinnings (Weaver & Mitcham, 2008). Philosophical and methodical congruence is important in conducting quality inquiry. Failure to disclose the underpinnings of methods to concept analysis has left nursing scholars and researchers struggling to identify their philosophical and theoretic bases in many cases. Furthermore, closer analysis of these foundations can reveal problematic incongruencies in some cases.

Despite being a philosopher, Wilson does not make his philosophical standpoint in relation to concepts explicit. Analyzing the steps included in his method can provide some insight. His emphasis on empirical evidence and logical analysis suggests positivist leanings. In fact, Wilson's original method of concept analysis, and those derived from it, are generally identified as being guided by a positivist positioning philosophically (Weaver & Mitcham, 2008). The best example of this is Walker and Avant's method, aiming to conduct analysis of concepts with objectivity, provide empirical evidence of the concept's existence, and operationalize the definition of the concept for measurement in the real world (Endacott, 1997); Knafl & Deatrick, 1993). Walker and Avant's view of concepts as measurable, clearly defined objects aligns with entity theory of concepts and can be reconciled within the positivist

paradigm. Congruence between philosophical and conceptual theoretical assumptions is a credit to Walker and Avant's method.

Such congruence is not found in all methods. For example, Chinn & Jacobs/Kramer's method is a Wilsonian method based by positivist positioning, evidenced by their emphasis on validating the concept in the final step of their method. However, view of concepts in this method as fluid and influenced by context algins with dispositional theory which is incongruent with positivist positioning.

Rodgers was intentional in disclosing her positioning in developing the evolutionary method. Philosophical underpinnings of evolutionary concept analysis reject the idea that concepts are universally understood or applied (Rodgers, 1993a; Rodgers & Knafl, 1993). The evolutionary approach is founded in the *interpretive paradigm*, with concepts being viewed as dynamic, evolving, and context dependent (Rodgers, 1993; Weaver & Mitcham, 2008). Rodgers also aligns her perspective of concepts with the dispositional theory. As does the congruence between positivistic philosophical positioning and adherence entity theory of concepts in Walker & Avant's method, Rodgers' alignment with constructivism and entity theory of concepts strikes congruence between the evolutionary method and its' philosophical and theoretical bases.

3.3 Design

Rodger's evolutionary method to concept analysis was selected for analysing the concept of complex trauma in this work. The evolutionary method was selected for its' ease of use, clear philosophical and theoretical basis, and alignment with the research problem. While other methods to concept analysis exist that would also be appropriate, the evolutionary method is well established in its' use within nursing research, making it an appropriate choice for an early-career researcher conducting thesis work within the nursing discipline.

3.3.1 Philosophical, Theoretical, and Methodological Congruence

While the evolutionary method is based on the interpretive paradigm (Weaver & Mitcham, 2008), similarities between this paradigm and post-modern / post-structural perspectives align the method with the researcher's paradigmatic position. Both paradigms reject the notion of an objective reality and grand narratives. They support a multiplicity of perspectives and recognize the use of language in constructing knowledge. Both recognize structures of power and how context and identity influence how power is held and enacted. These underlying values and beliefs are reflected in a focus on context-dependence and adherence to the dispositional theory of concepts in the evolutionary method.

While sharing similarities, some incongruencies between post-modern/post-structural perspectives and the evolutionary method to concept analysis exist that are worth noting. Although essentialism is rejected in the evolutionary method, the method's aim to generate terms by which a concept can be defined may be considered problematic from a post-modern/post-structural perspective. Furthermore, the evolutionary nature of this method may be suggestive of progression towards improvement, which is rejected in post-modernism. Nonetheless, the post-modern / post-structural philosophical perspective does not directly dictate the methodology employed, and there is sufficient alignment between these philosophical perspectives and the evolutionary method for philosophical congruence.

The alignment of the evolutionary method with the dispositional theory of concepts also makes the method applicable to the concept of complex trauma. Psychosocial and process concepts, such as complex trauma, are "likely to evidence greater ambiguity, variation and overlap" and "may not have a clearly identifiable beginning or end point" (Rodgers, 1993b). These subtleties can make concepts more difficult to analyze and define according to empirical

measures and methods. Methods that incorporate a dispositional theory of concepts can better account for these nuances.

Philosophical, theoretical, and methodological congruence between the researchers' post-modern / post-structural paradigmatic perspective, dispositional theory of concepts, and the evolutionary method and alignment with the concept of complex trauma provide a rationale for the chosen method. Rodger's eight-step method (as described above) guided the study design.

3.3.2 Identifying the Concept of Interest

Complex trauma is identified as the concept of interest. Complex trauma cannot be reconciled within the narrow margins of psychopathology and diagnostic constructs. Without an alternative frame of reference to conceive of trauma-related concepts, complex trauma remains ambiguous. Conceptual clarity of complex trauma beyond the confines of psychopathology and diagnostic constructs can challenge the current conceptualization of psychological trauma, which dominates and restricts understanding and application in clinical practice.

3.3.3 Selection of Setting and Sample

The setting for evolutionary concept analyses is the literature used for the analysis; more specifically, setting refers to the disciplinary perspectives and timeframe from which data is collected (Rodgers, 1993a). The aim is to capture a broad scope of literature relating to the research questions. The use of systematic and random sampling strategies and the inclusion of sources from various disciplines generates a sample that is more likely to be representative of the population of articles published on complex trauma within psy-science (Rodgers, 1989). The Joanna Brigg's Institute (JBI) is an international organization that supports and promotes synthesis research with guidance for search design and study selection. To ensure the breadth and depth of the literature search, guidance from JBI was followed to devise a search strategy.

The scope of the review indicates the type of participants, concept, context, and type of evidence sources, which generates eligibility criteria for data sources. In this thesis, articles discussing any population were eligible for inclusion so long as the concept of complex trauma was discussed broadly. Articles that analyzed how particular populations experienced complex trauma or their experience of specific traumatic experiences were excluded to maintain a focus on the broader concept of interest for this analysis: complex trauma. Context of this review related to publication date, disciplines, and databases searched. Publication date was limited to articles published from 1980 to the present. This date was chosen since it is an important year related to the discussion of psychological trauma as it is currently conceptualized. The DSM included PTSD as a diagnostic category in 1980 (Kiyimba et al., 2022) and the Sanctuary Model – an organizational model for the implementation of trauma-informed care – was developed in the early 1980s (Esaki et al., 2013). Literature from any discipline was eligible for inclusion in analysis. However, searches were conducted in databases that relate primarily to psychiatry, psychology, sociology, and nursing disciplines to capture various perspectives among the psy-sciences. Database searches were conducted in APA PsychInfo (OVID), Cumulative Index of Nursing and Allied Health Literature (CINAHL) (OVID), EMBASE, Medline (OVID), Nursing and Allied Health Premium, and Sociology Database (see Appendix 1 for database descriptions). Evidence sources were limited to academic articles with full-text and online availability in English for feasibility. The eligibility criteria that were used to determine the inclusion or exclusion of sources during screening can be found in Table 2.

Table 2: Eligibility Criteria

Inclusion	Exclusion
Peer-reviewed academic articles	Books, book chapters, dissertations, theses, commentaries, letters to the editor, grey literature
English language	Non-English Language
Published after 1980	Published before 1980
Full-text available online	Full-text not available online
Article discusses the concept of complex psychological trauma	Articles relates predominantly to physical trauma without discussion of psychologically traumatic effects
	Article focuses on: - efficacy of treatments or interventions - prevalence or incidence - a specific symptom - a specific population - a specific traumatic experience - psychiatric diagnosis - Validation of psychometric test or tool

The sample was drawn from literature that is "available, relevant, [and] pertinent" (Rodgers, 1993, p. 80) to the analysis of complex trauma. A three-step search strategy, as advised by JBI, was used to devise the search strategy in collaboration with a librarian at the Royal Ottawa (Peters et al., 2020). The final strategies were peer-reviewed and approved by two additional librarians at The Royal Ottawa and the University of Ottawa.

The initial step was a limited search conducted in Medline (OVID) and APA PsychInfo (OVID) using general search terms related to complex trauma. Words in the titles, abstracts, and

index terms from sources generated in the initial search were analyzed and revised, then applied for step two of the search. These keywords and index terms were searched across all databases (see Appendices 3 – 7 to audit search strategies by database). Step three of the search strategy involved the researcher conducting a search of the reference lists of included articles (Peters et al., 2020) with *citationchaser* software (Haddaway et al., 2021) for seminal works related to the concepts of interest that may not be captured in the selected sample (Rodgers, 1993a). Any source that was included in >20% of references lists was added to the sample and screened according to eligibility criteria for possible inclusion.

Eligibility criteria was piloted with two independent reviewers, the primary investigator (JN) and thesis supervisor (JLD). A random sample of 25 articles was generated and screened independently by the two reviewers according to eligibility criteria (Peters et al., 2020). The agreement threshold to proceed with screening the full sample was set at a 75% agreement rate for interrater reliability (Peters et al., 2020). 84% interrater reliability was achieved in the screening pilot (see Table 3) and no changes to eligibility criteria were necessary. The two reviewers met to review discrepancies and resolve conflicts before proceeding to screening titles and abstracts for the full sample of articles. Interrater reliability for the full sample was 89% (see Table 4). Full-text screening was completed by the primary researcher while tracking methodological decisions and meeting with the thesis supervisor to debrief. *Covidence* software was used for title and abstract and full-text screening to determine the final sample of articles (see Table 5 for PRISMA diagram).

3.3.4 Data Collection and Management

Due to the iterative nature of evolutionary concept analysis, data collection and data analysis stages were fluid, with the researcher conducting aspects of each process

simultaneously. Data collection involves analyzing the literature sample to identify attributes, antecedents, consequences, surrogate terms, and related concepts for complex trauma (Rodgers, 1993a). Attributes illustrate the defining characteristics or cognitive rendering of the concept, make the concept identifiable in a variety of contexts, and allow for identification of situations the concept may be applicable to (Rodgers, 1993a). Antecedents describe necessary circumstances or characteristics that precede the concept, while consequences demonstrate those produced following existence of the concept (Rodgers, 1993a). Surrogate terms are other words or phrases used to describe the concept, other than those used in the analysis, while related terms are words or phrases that describe concepts distinct from that being analyzed, though associated (Rodgers, 1993a).

Various software (i.e. *Microsoft Excel*, Covidence, and NVivo) were used throughout data collection and analysis. A Microsoft Excel spreadsheet was created to manage data extracted from external software. Sources were input to this spreadsheet as the sample was selected. Basic demographic data (i.e. title, publication date, authors, discipline, country, article type, setting, and population/sample) was collected from Covidence and exported to the spreadsheet. The sample of articles was catalogued according to their publication date, discipline, author, title, and Covidence number (see Appendix 8). Article demographics were also noted, including country of publication, article type, setting, and population/sample (see Appendix 9). This information was used to organize articles according to publication year and discipline and assign each source a catalogue code. Catalogue codes consist of two to four letters indicating the discipline and a number indicating the article's listing within its' respective disciplinary collection (Rodgers, 1993a). Each of the articles' related discipline was determined based on that of the first author since they made the most significant contribution to the article.

Catalogue codes provide a means to identify and refer to articles by discipline, which is important when conducting disciplinary analysis in evolutionary concept analyses.

Data was collected from each source according to each of the domains of analysis in evolutionary concept analyses (i.e. attributes, antecedents, consequences, surrogate terms, and related concepts). Articles included in the final sample were uploaded to *NVivo* software to conduct data collection. Each source was read in its entirety to assess the tone – the way the author presents their argument – of each source (Rodgers, 1993a). While reading each article, the researcher used NVivo software to record quotes with respective page numbers and assign codes to data that may be relevant according to the domains of analysis for complex trauma (Rodgers, 1993a). Coding data involves determining themes and relationships within the data being analyzed. Coding was conducted independently by the primary researcher and reviewed by their thesis supervisor. All methodological decisions were discussed, debriefed, and taken jointly.

3.3.5 Data Analysis

The goal of analysis is to generate a "cohesive, comprehensive, and relevant system of descriptors" (Rodgers & Knafl, 1993) for the concept being analyzed. Thematic analysis was conducted (Rodgers, 1993a) for the collection of themes coded from articles in NVivo. Collective analysis of data extracted from all articles was used to determine attributes, antecedents, consequences, surrogate terms, and related concepts for complex trauma. This allowed for convergences and divergences related to the conceptualizations of complex trauma to be identified and problematized. In-depth descriptions of the domains of analysis are provided with sufficient detail for further exploration and application to various contexts. The final analysis in determining antecedents, attributes, consequences, surrogate terms, or related concepts was not conducted until all data were collected (Rodgers, 1993a). Collectively, readings

formed the researchers' overall sense of the concepts of complex trauma. Following analysis, data (i.e. quotes and page numbers) was input under the appropriate domain of analysis column (e.g. attribute) to the spreadsheet from NVivo for data management.

Following identification of the concept characteristics, the findings were analyzed in relation to trauma studies literature grounded in critical social theory. This method of analysis allowed for a broader understanding of the results beyond the confines of the sample used for analysis. Trauma studies literature was selected to demonstrate an alternative perspective with relevance to the concept of interest that was not captured in the sample.

Thoughts, revelations, and methodological decisions throughout the research process were tracked (Rodgers, 1993a) either in a research journal (Microsoft Word document) or using the note-taking functions in Covidence and NVivo and have been retained for transparency. All methodological decisions for analysis were discussed and debriefed with the thesis supervisor.

3.3.6 Interdisciplinary and Temporal Comparisons

Temporal and interdisciplinary comparisons were also conducted using thematic analysis to determine if the use of complex trauma as a concept has changed over time, and similarities and differences in conceptual understanding of complex trauma between disciplines. Coded themes that emerged for the concept were analyzed according to discipline and decade of publication.

3.3.7 Identifying Model Cases

Once conceptual clarity of complex trauma was established, a model case demonstrating the concept was selected for inclusion. The model case demonstrates the attributes, antecedents, and consequences of complex trauma. Because evolutionary concept analysis is an inductive

method, a model case was sought from the literature, not constructed by the researcher (Rodgers, 1993a).

3.3.8 Identifying Implications

Following the analysis, research findings were discussed in relation to their implications for the nursing discipline. Implications are presented in the discussion chapter of this thesis. Conceptual clarity of complex trauma will be discussed in relation to opportunities for critical reflection, research, and clinical practice.

3.4 Positioning the Researcher

Research grounded by the critical theory paradigm, including post-modern and post-structural perspectives, supports disclosure of personal standpoint of the researcher for transparency. Positionality related to elements of my personal experience and identity contribute to my interest in complex trauma. I am intimately aware of how each of our identities and experiences entail intersecting positions of power, privilege, and marginalization, which manifest as realities that are privileged, violent, or simultaneously, both. The combination of my personal and professional identities shapes my interest in complex trauma.

3.5 Validity

The notion of rigour is controversial in qualitative studies (Polit & Beck, 2019). It is argued that rigour is a concept derived from a positivistic philosophical perspective and can undermine the potential for quality research from alternate philosophical standpoints, particularly that from a critical perspective (Polit & Beck, 2019). For this reason, validity is proposed to evaluate trustworthiness as an alternative measure of quality in qualitative studies, supporting research that is “just, sound, and well-founded” (Polit & Beck, 2019, p. 567). Guba & Lincoln

(1994) indicate that criteria for validity must align with research design, philosophical standpoint, and methodology.

Quality of inquiry for critical research is assessed based on "historical situatedness, erosion of ignorance, and action stimulus" (Guba & Lincoln, 1994). Situatedness is defined by Chandler & Munday (2020) as:

> …the dependence of meaning (and/or identity) on the specifics of particular sociohistorical, geographical, and cultural contexts, social and power relations, and philosophical and ideological frameworks, within which the multiple perspectives of social actors are dynamically constructed, negotiated, and contested (p. 151).

In this way, critical research aims to challenge taken-for-granted assumptions, referred to as *false-consciousness* (Guba & Lincoln, 2005), in research and science by examining structures and contexts that influence researchers, their findings, and the construction of knowledge and truth. *Erosion of ignorance* and *action stimulus* elaborate on situatedness and speak to the emancipatory aims of critical research. According to Ravenek & Rudman (2013), the transformative capacity of critical research manifests in clarifying misapprehensions and prompting action for change. As stated by Guba & Lincoln (2005):

> Thus the "foundation" for critical theorists is a duality: social critique tied in turn to raised consciousness of the possibility of positive and liberating social change. Social critique may exist apart from social change, but both are necessary for criticalist perspectives (p. 204).

This thesis work, being underpinned by post-modern and post-structural perspectives, honours criteria for quality critical research. Research is situated in describing the philosophical and paradigmatic perspectives underpinning this work, historical overview of the evolution of

the broader concept of psychological trauma, and disclosure of the researchers positioning. By clarifying the concept of complex trauma, assumed truths about psychological trauma which crystalize in mental health care structures are questioned and problematized. Furthermore, the researcher encourages fellow adherents of psy-science in health care to critically reflect upon and liberate themselves from false-consciousnesses related to psychological trauma to improve delivery of trauma-informed care for those with complex trauma histories.

3.6 Ethical Considerations.

Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans dictates standards for ethical research conduct in Canada. According to Interagency Advisory Panel on Research Ethics (2019), research that "relies exclusively on information that is publicly available" (article 2.2) does not require research ethics board approval. Data collected and included in the analysis for this thesis were derived solely from academic sources that are openly available via academic databases. Therefore, research ethics board approval from the University of Ottawa was not required. Each source included in any part of this thesis has been appropriately cited for credit to the author of each text.

Chapter 4: Results

In this chapter, the conceptualization and evolution of complex trauma are described in relation to the context of the literature sample analyzed, disciplines that used the concept from this sample, and changes over time. Antecedents, attributes, consequences, surrogate terms, and related concepts are discussed.

4.1 Sample

The final sample used for analysis consisted of 20 academic articles. Articles included in the final sample were published between 1992 and 2023 by five disciplines: psychiatry, psychology, social work, nursing, and mental health counselling. Fourteen articles (70%) were published in the United States of America; two articles were published in Australia (10%); and one article (5%) was published in each of the following countries: Belgium, Italy, Switzerland, and Canada. A total of 15 articles (75%) were published in North America, with the remaining 25% published in Europe. No articles were included from South America, Asia, or Africa. Eight (40%) articles were literature reviews, and five (25%) were conceptual articles. One of each of the following were included, each representing 5% of the sample respectively: a combined literature review and conceptual article, a survey study, a qualitative study, a theoretical article, a descriptive repeat cross-sectional review, a comparative and mediational study, a systematic review/ meta-analysis. Because most studies were literature-based or theoretical, the setting was irrelevant for many articles included in the sample. The qualitative study (catalogue code SW02) and the survey study (catalogue code PSY02) both drew their study participants from inpatient, outpatient, and community settings. The comparative mediational study (catalogue code PSY11) recruited from the community. The population of interest for most studies (12) in the sample were children and/or adolescents (60%). Three studies (15%) focused on adults/ older adults.

One article (5%) included children and adults. One article (5%) focused on clinicians. One article (5%) focused on families. The remaining two articles (10%) focused on samples of literature pertaining to complex trauma without specifying a population.

4.2 Concept Characteristics

According to Matte-Landry et al. (2023), the National Child Traumatic Stress Network considers the term complex trauma to reference both exposure to what could be regarded as complex traumatic experiences and the consequences of such exposure. This analysis considered complex traumatic events as attributes, while the effects of exposure to such events were interpreted as consequences. When preceded by certain conditions, discussed as antecedents in this analysis, the traumatic experience may produce consequences. Therefore, the context (antecedents), traumatic exposure (attributes), and aftermath (consequences) together generate the larger concept of complex psychological trauma.

4.2.1 Antecedents

Antecedents of a concept account for the precipitating conditions that prompted its emergence. For this analysis, antecedents were understood as complex traumatic contexts. The context in which complex trauma occurs is understudied in the literature (Van Nieuwenhove & Meganck, 2019). Kliethermes et al. (2014) stated that a combination of individual and environmental factors produces the preconditional context in which complex trauma is produced. These antecedent conditions were distilled into three overlapping themes: (1) the context being inescapable, (2) the vulnerability of the victim's psyche, and (3) perverse relationships. See Appendix 10 for quotations from articles supporting findings related to the antecedents of complex trauma.

4.2.1.1 Vulnerability of Psyche. The timing of trauma exposure was discussed as being a crucial factor in producing the consequences of complex trauma. In particular, periods during which the psyche is vulnerable were identified as an important antecedent to the production of complex trauma.

Most frequently, childhood or adolescence was discussed as a typical period of vulnerability (Dye, 2018; Fimiani et al., 2020; Ford, 2017; Kliethermes et al., 2014; Lucero, 2018; Mahoney & Markel, 2016; Matte-Landry et al., 2023; B. A. van der Kolk, 2005; Williams, 2006). Childhood and adolescence were described as "sensitive developmental periods, which are characterized by higher sensitivity of brain regions to toxic stress" (Matte-Landry et al., 2023, p. 2744). The psychic functions of children and adolescents are immature and developing. During this time, children and adolescents undergo cognitive, neural, and personality formation that lay the foundations for "self-definition and self-regulation" (Fimiani et al., 2020, p. 119). Kliethermes et al. (2014) suggested that the consequences observed following trauma exposure may be correlated with the area of the brain undergoing development when the trauma occurred. Trauma occurring during brain development also results in lasting changes to neural structures. Lucero (2018) stated: "[m]altreatment is a chisel that shapes a brain to contend with strife, but at the cost of deep, enduring wounds" (p. 443). Trauma that occurs in early childhood results in poorer outcomes due to the neurological and psychological development that occurs in early life (Dye, 2018; Ford, 2017; Matte-Landry et al., 2023), with trauma occurring in the first decade of life having the most significant impact (van der Kolk, 2005).

While trauma occurring in early life was identified as an incontestable period of psychic vulnerability, such vulnerability was also noted to be provoked throughout the lifespan (Fimiani et al., 2020; J. L. Herman, 1992a; Isobel et al., 2019; McCormack et al., 2022). Dye (2018)

identified that the developmental stage – including cognition and language skills – influenced how individuals perceived and responded to trauma, rendering children more vulnerable than adults to the effects of trauma. As stated by Williams (2006), “although adult trauma… damages the adult formed personality, the trauma that a child experiences deforms the personality’’ (p. 322). Because adults' psychic functions and personalities are consolidated by adulthood, it was hypothesized that the conditions producing vulnerability in a healthy adult psyche tend to be more severe to produce the consequences of complex trauma (Fimiani et al., 2020; Ford, 2017). Van Nieuwenhove & Meganck (2019) identified that fixation on the condition of trauma occurring during developmental periods results in the understudy of antecedents to complex trauma in adulthood.

4.2.1.2 Inescapable. Contexts conducive to producing complex trauma were described as being inescapable by the victim (Fimiani et al., 2020; Ford, 2017; Herman, 1992a; McCormack & Thomson, 2017; Resick et al., 2012; Van Nieuwenhove & Meganck, 2019; Zilberstein, 2014). Resick et al. (2012) contextualized this claim by clarifying that “escape is not possible due to physical, psychological, maturational, environmental, or social constraints” (p. 242). Such contexts created conditions in which “the victim is in a state of captivity, unable to flee, and under the control of the perpetrator” (Herman, 1992a, p. 377). Indeed, situations of extreme inhumanity that forcibly confine or restrict individuals from exercising free were exemplified. Examples include human trafficking, cults, and acts of war (i.e. recruitment of child soldiers, torture, genocide, concentration camps, imprisonment, and civilian victims of war) (Herman, 1992a; Van Nieuwenhove & Meganck, 2019).

However, given the contextualization of this inescapability, it was clear that this extended beyond situations of captivity as it is classically understood. Herman (1992a) drew parallels between experiences that are inescapable:

> Captivity, which brings the victim into prolonged contact with the perpetrator, creates a special type of relationship, one of coercive control. This is equally true whether the victim is rendered captive primarily by physical force (as in the case of prisoners and hostages) or by a combination of physical, economic, social, and psychological means (as in the case of religious cult members, battered women, and abused children). The psychological impact of subordination to coercive control may have many common features, whether that subordination occurs within the public sphere of politics or within the supposedly private (but equally political) sphere of sexual and domestic relations (p. 378).

Often, the *perpetrator* is a close and trusted other (Herman, 1992a; Isobel et al., 2019; van der Kolk, 2005). Lack of agency to change the context of their life produced this inescapability, particularly for children victimized at the hands of their parents (van der Kolk, 2005). In the case of adults who may be thought to possess agency in their lives, coercion led individuals to stay in traumatic situations. This learned helplessness results from social forces, such as being broken down from enduring abuse and systemic injustice that fail to respond adequately when help is sought (Herman, 1992a).

4.2.1.3 Perverse Relationships. The inescapable nature of the circumstances results in relationships in this context becoming distorted, taking on a perverse quality. As stated by Herman (1992a), “in situations of captivity, the perpetrator becomes the most powerful person in

the life of the victim, and the psychology of the victim is shaped over time by the actions and beliefs of the perpetrator" (p. 383).

In the case of individuals requiring care, perversion occurs when the supposed caregiver cannot be trusted to meet the needs of the dependent or protect them from harm. In the case of parent and child, there may be a reversal of roles, with the child taking on inappropriate roles of protector or provider to meet the parents' or their own needs independently. For adults, relationships lack healthy mutual respect; one is expected to abate to the desires or demands of the other, such as in cases of domestic violence or hostage-taking. Distortions in these relationships often are accompanied by the isolation of the victim by the demands of the perpetrator. Isolation from close others maintains the intensity of the relationship needed to exercise control over the victim. In any case, the victim develops an unhealthy yet necessary preoccupation with the perpetrator for the sake of their actual or perceived safety and well-being (Herman, 1992a).

Together, the inescapability of distorted and perverse relationships during a period of psychic vulnerability creates a context of isolation for the victim. Without support or the possibility of escape from such a context, exposure to complex traumatic experiences produced the profound consequences associated with complex trauma.

4.2.2 Attributes

According to Rodgers (1993a), the attributes of a concept are how it is defined. In the case of complex trauma, attributes delineated the type or characteristics of traumatic exposure that contributed to the production of the concept of complex trauma. Attributes in this analysis described exposure to complex traumatic experiences. Traumatic experiences considered to be complex entailed prolonged exposure to interpersonal acts of betrayal that caused psychological

distress (McCormack et al., 2022). See Appendix 11 for quotations from articles supporting findings related to the attributes of complex trauma.

4.2.2.1 Interpersonal Acts. Complex traumatic experiences involved harmful acts committed by another person, referred to as interpersonal trauma (Cloitre et al., 2009; D'Andrea et al., 2012; Dye, 2018; Fimiani et al., 2020; Ford, 2017; Herman, 1992a; Isobel et al., 2019; Kliethermes et al., 2014; Matte-Landry et al., 2023; McCormack et al., 2022; Pfluger et al., 2022; Resick et al., 2012; van der Kolk, 2005; Van Nieuwenhove & Meganck, 2019). The interpersonal descriptor distinguished such experiences from environmental traumas (Isobel et al., 2019). D'Andrea et al. (2012) used the term *victimization* to make this distinction. Victimization was described as:

> …the range of maltreatment, interpersonal violence, abuse, assault, and neglect experiences encountered by children and adolescents, including familial physical, sexual, emotional abuse and incest; community-, peer-, and school-based assault, molestation, and severe bullying; severe physical, medical, and emotional neglect; witnessing domestic violence; as well as the impact of serious and pervasive disruptions in caregiving as a consequence of severe caregiver mental illness, substance abuse, criminal involvement, or abrupt separation or traumatic loss (D'Andrea et al., 2012, p. 188).

Furthermore, D'Andrea et al. (2012) identified that "elements of malevolence, betrayal, injustice, and immorality" characterized the victimization of interpersonal trauma that did not apply to environmental traumas such as "accidents, diseases, and natural disasters" (p. 188). Fimiani et al. (2020) stated that "perceived trauma severity" was related to "the overall degree of intentionality attributed to the perpetrator of the trauma" (pp. 118-119) and contributed to more severe outcomes seen in complex trauma. When victimization was endured at the hand of a trusted other

(i.e. a parent or guardian), such experiences represented a specific subset of interpersonal acts, referred to as *relational trauma* (Isobel et al., 2019). *Maltreatment* was another commonly used term in the literature which refered to the interpersonal acts of complex trauma (D'Andrea et al., 2012; Dye, 2018; Ford, 2011, 2017; Herman, 1992a; Isobel et al., 2019; Kliethermes et al., 2014; Matte-Landry et al., 2023; Pfluger et al., 2022; van der Kolk, 2005; Zilberstein, 2014).

Cloitre et al. (2009) clarified that when an individual relied on another for their survival or well-being, such as in childhood, interpersonal acts consisted of acts of commission, acts of omission, or both. Acts of commission were understood as events that were perpetrated against the victim, including all types of abuse and assault (i.e. emotional, verbal, psychological, physical, sexual, etc.) (D'Andrea et al., 2012; Dye, 2018; Ford, 2011; Herman, 1992a; Isobel et al., 2019; Kliethermes et al., 2014; B. van der Kolk, 2005). Abuse that occured in childhood was most frequently cited as being associated with complex trauma (Mahoney & Markel, 2016; McCormack et al., 2022), particularly childhood sexual abuse (Cloitre et al., 2009; Cook et al., 2005; D'Andrea et al., 2012; Dye, 2018; Fimiani et al., 2020; Ford, 2011, 2017; Herman, 1992a; Isobel et al., 2019; Kliethermes et al., 2014; Matte-Landry et al., 2023; Pfluger et al., 2022; Resick et al., 2012; van der Kolk, 2005; Van Nieuwenhove & Meganck, 2019; Zilberstein, 2014). More broadly, acts of commission were understood as any form of violence (Dye, 2018; Ford, 2017; Herman, 1992a; Isobel et al., 2019; Kliethermes et al., 2014; Mahoney & Markel, 2016; van der Kolk, 2005; Williams, 2006).

Conversely, acts of omission involved "the absence or withdrawal of certain resources may create a threat to… survival and… well-being" (Cloitre et al., 2009, p. 405), including abandonment and neglect (Cloitre et al., 2009; Cook et al., 2005; D'Andrea et al., 2012; Dye, 2018; Ford, 2011, 2017; Isobel et al., 2019; Kliethermes et al., 2014; Lucero, 2018; Mahoney &

Markel, 2016; Matte-Landry et al., 2023; Resick et al., 2012; van der Kolk, 2005; Van Nieuwenhove & Meganck, 2019; Williams, 2006; Zilberstein, 2014). While neglect typically conjures an image of unmet physical needs, emotional, medical, and physical neglect were all recognized as contributing to the production of complex trauma (D'Andrea et al., 2012; Fimiani et al., 2020; Isobel et al., 2019; Pfluger et al., 2022; van der Kolk, 2005). It is important to note that neglect was not always discussed as a malicious, intentional act. It may result from caregivers who were "too preoccupied, distant, unpredictable, punitive, or distressed to be reliably responsive" (Cook et al., 2005, p. 392) as in cases of "caregiver mental illness, substance abuse, criminal involvement, or abrupt separation or traumatic loss" (Isobel et al., 2019, p. 552).

Witnessing acts of violence is a particular combination of interpersonal factors that were recognized as being associated with complex trauma (Cloitre et al., 2009; D'Andrea et al., 2012; Dye, 2018; Ford, 2017; Herman, 1992a; Isobel et al., 2019; Kliethermes et al., 2014; van der Kolk, 2005; Williams, 2006). When traumatic acts committed against another were witnessed, individuals were exposed to the combined force of acts of commission and acts of omission (Zilberstein, 2014). Mainly, when the act was committed against a close other and the witness was unable to intervene, such as children who witnessed parental domestic violence, witnesses are exposed to violence due to failed protection from exposure. This failure to protect was often the result of the inescapable context in which the trauma occured.

4.2.2.2 Betrayal. In addition to being interpersonal, the experience which produced complex trauma also incorporated an element of betrayal (D'Andrea et al., 2012; Isobel et al., 2019; Kliethermes et al., 2014; McCormack et al., 2022; van der Kolk, 2005; Van Nieuwenhove & Meganck, 2019; Williams, 2006). This betrayal denied humanity and defiled the social code of honour fundamental to societies. Ford, 2017 described this as:

> …a violation of the fundamental moral/ethical principles of beneficence (that people act in the best interest of others as well as themselves), dignity (that people are unconditionally respected for their unique, authentic selves), autonomy (that people have the freedom to determine and follow their own path in life), and justice (that people and institutions will act responsibly and treat one another with fairness) (pp. 221-222).

Isobel et al. (2019) concluded by referencing Freyd (1994) when stating that this betrayal entailed "a sense of having been fundamentally cheated by another person" (p. 552).

Betrayal was apparent when the source was a should-be-trusted other, such as a parent, guardian, or partner. While these close relationships were often the source of betrayal, entities further removed from the individual may also perpetrate a violation. Trusted authorities on which individuals are dependent committed betrayal when they failed to administer services that maintained the safety and well-being of those reliant on them. Examples of such authorities included clergy, educators, and supervisors (Ford, 2017).

4.2.2.3 Cumulative Trauma Exposure. Traumatic exposure was deemed complex due to its' characteristic multiplicity. Several descriptors were used in the literature to describe the complexity of traumatic events.

Poly-victimization described exposure to multiple interpersonal traumas (D'Andrea et al., 2012; Ford, 2011, 2017; Kliethermes et al., 2014). Chronic trauma was characterized by prolonged exposure to traumatic experiences (Cloitre et al., 2009; Cook et al., 2005; D'Andrea et al., 2012; Dye, 2018; Fimiani et al., 2020; Herman, 1992a; Isobel et al., 2019; Kliethermes et al., 2014; Mahoney & Markel, 2016; McCormack et al., 2022; van der Kolk, 2005; Van Nieuwenhove & Meganck, 2019; Zilberstein, 2014). Experiences of chronic trauma tended to be related or similar and prolonged due to contextual factors. Chronic trauma contrasted with

multiple trauma (Cloitre et al., 2009; D'Andrea et al., 2012; Dye, 2018; Fimiani et al., 2020; Isobel et al., 2019; Kliethermes et al., 2014; Matte-Landry et al., 2023; McCormack et al., 2022; Pfluger et al., 2022; Resick et al., 2012; van der Kolk, 2005). Multiple traumas refered to "multiple types of trauma" (Kliethermes et al., 2014, p. 341) and "in multiple forms (e.g., physical, sexual and verbal abuse, neglect)" (Matte-Landry et al., 2023, p. 2743).

Cumulative trauma was an umbrella term that captured the enduring nature of chronic trauma and the multi-faceted nature of trauma exposure that was characteristic of interpersonal traumatic experiences (Cloitre et al., 2009; Dye, 2018; Fimiani et al., 2020; Ford, 2017; Isobel et al., 2019; McCormack et al., 2022; Pfluger et al., 2022; Van Nieuwenhove & Meganck, 2019; Williams, 2006). Isobel et al. (2019) defined cumulative trauma as "[s]everal episodes of trauma exposure; sustained, repeated or multiple… [o]ften involve[ing] a sequence of similar or dissimilar traumas that happen across the lifespan" (p. 552). Findings from Cloitre et al. (2009) indicated that the complexity of presentation following trauma exposure was related to cumulative trauma exposure.

4.2.2.4 Psychologically Distressing. For an experience to produce consequences, it must impact the individual. In the case of complex traumatic exposure, the exposure must be psychologically distressing (D'Andrea et al., 2012; Ford, 2011, 2017; Isobel et al., 2019; Kliethermes et al., 2014; Lucero, 2018; McCormack et al., 2022; Resick et al., 2012; van der Kolk, 2005; Van Nieuwenhove & Meganck, 2019). Other researchers referenced this distress following potentially traumatic exposure as the notion of harm. Mahoney and Markel (2016) described traumatic experiences as causing "harm" (p. 3), while Dye (2018) described them as "emotionally harmful" (p. 381). It was the distress or harm done that qualified the experience as traumatic. For this reason, McCormack et al. (2022) used the term "potentially harmful event"

(p. 246) when discussing experiences thought to be predictive of trauma. As explained by McCormack et al. (2022):

> [a]lthough experiencing a potentially traumatic event does not cause ongoing psychological difficulties for the vast majority of people, for a minority it can be debilitating… a variety of responses reported following exposure to horrific events suggests individual distress falls on a continuum from none to severe (p. 246).

The distress that followed the experience did not need to fall on a particular timeline for the experience to be considered traumatic; for some, the distress was immediate, while for others, it was protracted.

4.2.3 Consequences

Rodgers (1993a) describes consequences as the effects following the concept. These consequences result from exposure to the antecedents and attributes and are closely related to these conditions. Williams (2006) referenced van der Kolk in stating, the ‘‘[b]rain, body, and mind are inextricably linked… Alterations on any one of these will ultimately affect the other two’’ (p. 327). In the case of complex trauma, several domains of impairment, as well as opportunities for growth, were recognized. Though delineated for this analysis, it was crucial to recognize that these consequences were intertwined and existed with significant overlap. Furthermore, consequences were mere possibilities, not fated existences. The intricate array of potential consequences associated with complex trauma is illustrated in Figure 1. See Appendix 12 for quotations from articles supporting findings related to the consequences of complex trauma.

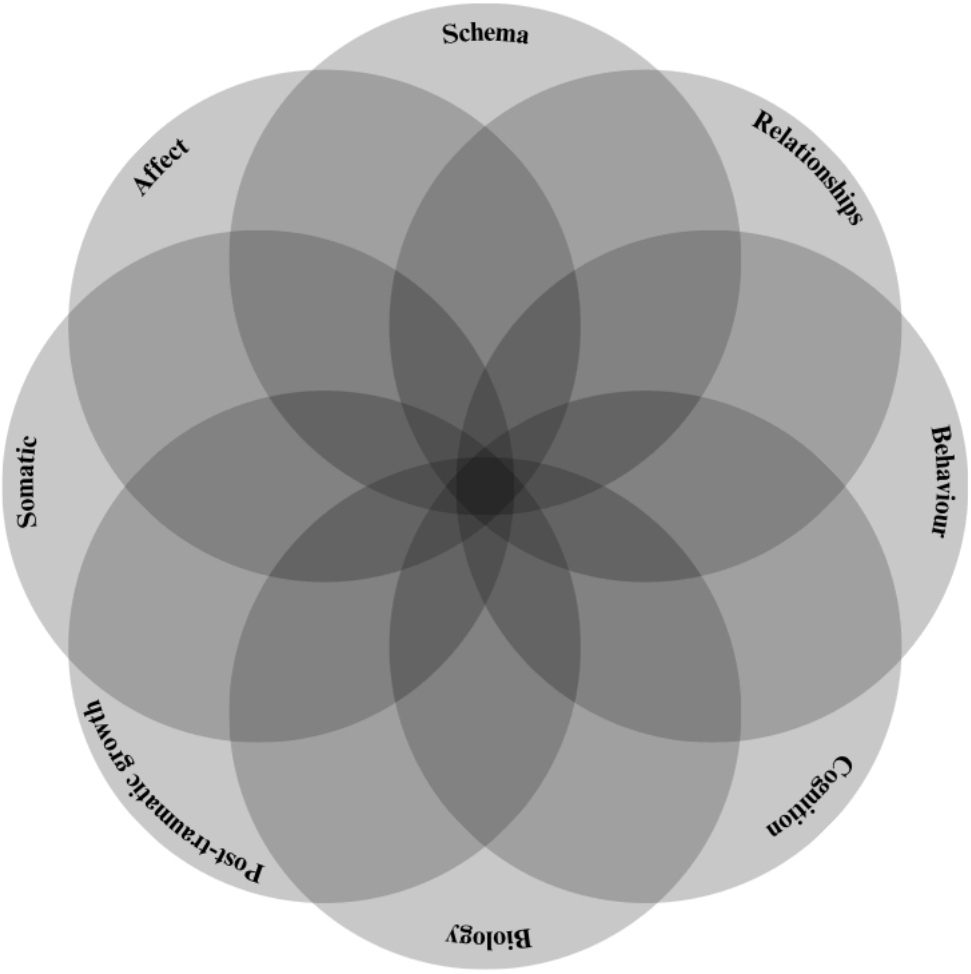

Figure 1: Consequences of Complex Trauma

4.2.3.1 Biology. Recently, significant scientific interest has been in elucidating the biological implications and mechanisms that follow enduring complex trauma (D'Andrea et al., 2012; Dye, 2018; Fimiani et al., 2020; Ford, 2011, 2017; Isobel et al., 2019; Kliethermes et al., 2014; Lucero, 2018; Williams, 2006; Zilberstein, 2014). Broadly, complex trauma exposure was correlated with general poor physical health (D'Andrea et al., 2012; Ford, 2011, 2017; Kliethermes et al., 2014; van der Kolk, 2005). These findings aligned with findings from Felitti et al. (1998) in their landmark ACE study. van der Kolk (2005) stated that complex trauma in childhood was associated with a greater risk of a variety of physical health challenges in

adulthood, including “heart disease, cancer, stroke, diabetes, skeletal fractures, and liver disease” (p. 402). These outcomes may be associated with altered metabolism (Dye, 2018; Lucero, 2018) or behaviours negatively impacting health – such as smoking, substance use, and unbalanced nutrition (van der Kolk, 2005).

Neurobiological changes were associated with complex trauma, including changes in brain structure (Cook et al., 2005; D’Andrea et al., 2012; Dye, 2018; Fimiani et al., 2020; Ford, 2017; Isobel et al., 2019; Kliethermes et al., 2014; Lucero, 2018; Matte-Landry et al., 2023; Resick et al., 2012; van der Kolk, 2005; Williams, 2006; Zilberstein, 2014). These changes were considered the underlying biological mechanism of several other consequences associated with complex trauma, including behavioural, cognitive, and affective domains (D’Andrea et al., 2012; Kliethermes et al., 2014). Dye (2018) described how changes in specific brain structures affected by complex trauma manifested, identifying several key areas:

> …the brainstem where stress-regulation, survival, and metabolism are regulated; the midbrain and diencephalon, which plays a role in sensory-motor activity, sleep, and appetite; the limbic system, which regulates emotions, attachment, affiliation, mood, and pleasure; and the cortex, which is associated with cognition, language, and reasoning (p. 383).

These reconfigurations were considered biological adaptations to traumatic exposure, allowing the individual to be hypervigilant of ongoing threats to safety and wellbeing, yet at the expense of other areas of functioning, such as learning and accurate interpretation of social cues (Zilberstein, 2014).

The hypothalamic-pituitary-adrenal (HPA) axis was also cited as being influenced by complex trauma (Dye, 2018; Isobel et al., 2019). The HPA is associated with stress regulation

through corticotropin release to modulate corticosteroid levels, including cortisol (D'Andrea et al., 2012; Kliethermes et al., 2014; Lucero, 2018; Matte-Landry et al., 2023). During increased stress, cortisol levels increase (Kliethermes et al., 2014). When stress is chronic or prolonged, as in the case of complex trauma exposure, extended periods of increased corticosteroid exposure cause the HPA axis to become dysregulated (Dye, 2018; Matte-Landry et al., 2023). HPA dysregulation results in an impaired ability to moderate "behavioural and cognitive responses to subsequent stress" (Dye, 2018, p. 383). Changes to neuroanatomical structures and endocrine function were collectively described in the literature as neuroendocrine changes (D'Andrea et al., 2012; Dye, 2018; Isobel et al., 2019; Kliethermes et al., 2014; Lucero, 2018).

Lucero (2018) described how biological implications of trauma influenced individuals and up to four generations that follow, partly due to epigenetic effects. These epigenetic effects were referred to as "molecular scars" (Lucero, 2018, p. 444). They stated that increased and prolonged corticosteroid production causes methylation of genes that influence glucocorticoid receptors, the receptors that bind cortisol once it is released in the bloodstream. These epigenetic effects can impact subsequent generations during preconception via "germ cells" (Lucero, 2018, p. 448) or in utero. Further, they drew parallels between increased corticosteroid exposure due to stress and other known harmful substances in utero:

> Though it is accepted that chemicals ingested by pregnant mothers affect fetal development through the intrauterine environment (as with fetal alcohol syndrome), recent research suggests social experiences of pregnant mothers also shape fetal development… Through the intrauterine environment, maternal traumatic stress is correlated to changes in neuroendocrine, epigenetic, and neuroanatomical development (Lucero, 2018, p. 447).

Increased maternal corticosteroids were associated with gene methylation in offspring, which results in neuroendocrine changes in the subsequent generation (Lucero, 2018) and may result from indirect complex trauma exposure.

4.2.3.2 Somatic. In addition to biological changes, individuals who experienced complex trauma may report distressing bodily experiences without identifiable biological basis (Ford, 2017). These experiences were understood as somatic dysregulation (Fimiani et al., 2020; Ford, 2011, 2017; Herman, 1992a; Mahoney & Markel, 2016; Resick et al., 2012; van der Kolk, 2005; Van Nieuwenhove & Meganck, 2019; Zilberstein, 2014). Examples of somatic experiences following complex trauma included:

- Pain (Ford, 2017; Herman, 1992a; Resick et al., 2012), particularly chronic pain of the back, pelvis, or abdomen (Herman, 1992a);
- Headaches (Herman, 1992a; van der Kolk, 2005);
- Gastrointestinal disturbances (Herman, 1992a; van der Kolk, 2005);
- Tremors (Herman, 1992a);
- And vague bodily sensations, including choking or nausea (Herman, 1992a).

These somatic experiences tend to be "extremely durable and may, in fact, increase over time" (Herman, 1992a, p. 380).

Several explanations were suggested for these somatic experiences. Kliethermes et al. (2014) and van der Kolk (2005) suggested that while there is no direct medical cause for symptoms, these experiences may still be based on biology. van der Kolk (2005) stated that "physiological dysregulation… in response to fearful and helpless emotions" (p. 406) may be the source of somatization. Kliethermes et al. (2014) stated that "[t]he biological impact of trauma"

and “increased electrical irritability in limbic structures” (p. 346) may alter bodily awareness and manifest as somatic distress.

In contrast, Zilberstein (2014) and Williams (2006) suggested that somatic experiences were related to the psychological pain associated with complex trauma and the inability to reconcile the memory of traumatic experiences. (Zilberstein, 2014) stated that recognition of the traumatic experience may be unavailable for integration, “especially in linguistic forms” (p. 340). Williams (2006) explained, “[t]he unresolved and often unreachable memories are often found in body sensations that cue awareness of the emotion… from the traumatic moment” (p. 328). As a result, the memory of the traumatic exposure is stored in the body and experienced somatically.

4.2.3.3 Cognition. Described as functions of “perceiving, thinking and processing information” (Zilberstein, 2014, p. 343), cognition involves “intelligence, language, perceptual/visuospatial functions, memory as well as attention and executive functions (EF)” (Matte-Landry et al., 2023, p. 2744). Each of the domains of cognitive function were recognized as being impacted by complex trauma (Cook et al., 2005; D’Andrea et al., 2012; Dye, 2018; Fimiani et al., 2020; Ford, 2011, 2017; Herman, 1992a; Kliethermes et al., 2014; Lucero, 2018; Mahoney & Markel, 2016; Matte-Landry et al., 2023; van der Kolk, 2005; Williams, 2006; Zilberstein, 2014). Altered cognition may manifest as general impairment or be circumscribed to reminders of the traumatic experience (D’Andrea et al., 2012). Altered cognition, when faced with cues for memory of the trauma, may be experienced as confusion, dissociation, or disorientation (van der Kolk, 2005).

Altered attentional capacities were a commonly discussed manifestation of the cognitive consequences of complex trauma (D’Andrea et al., 2012; Dye, 2018; Fimiani et al., 2020; Ford,

2011, 2017; Herman, 1992a; Kliethermes et al., 2014; Matte-Landry et al., 2023; Resick et al., 2012; van der Kolk, 2005; Van Nieuwenhove & Meganck, 2019; Zilberstein, 2014). Impaired capacity for or control of attention was related to fear and hypervigilance of threat related to the traumatic experience (Herman, 1992a; Zilberstein, 2014).

Details of the traumatic experience may become trapped and override an individual's cognitive functioning as if they were still under threat (Dye, 2018). When recall of traumatic experiences takes on this quality, they were referred to as traumatic memories (Dye, 2018; Ford, 2017; Kliethermes et al., 2014; Mahoney & Markel, 2016; McCormack et al., 2022; Williams, 2006; Zilberstein, 2014). Williams (2006) described this trapped and timeless nature of traumatic memories as "rememory" (p. 322).

In a more extreme form, altered cognition following complex trauma may manifest as dissociation (Cloitre et al., 2009; Cook et al., 2005; D'Andrea et al., 2012; Dye, 2018; Fimiani et al., 2020; Ford, 2011, 2017; Herman, 1992a; Isobel et al., 2019; Kliethermes et al., 2014; Lucero, 2018; Mahoney & Markel, 2016; Resick et al., 2012; van der Kolk, 2005; Van Nieuwenhove & Meganck, 2019; Williams, 2006; Zilberstein, 2014). Outcomes of dissociative states included "memory loss, depersonalization, derealization, disengagement, and numbing" (Kliethermes et al., 2014, p. 345). For children and adolescents, dissociation may present as "inattention and impulsivity" (D'Andrea et al., 2012, p. 189). Kliethermes et al. (2014) described dissociation as an adaptive cognitive function for avoiding the painful experience of trauma that becomes problematic avoidance generalizes to everyday, nontraumatic experiences. As stated by Herman (1992a), "[t]hrough the practice of dissociation, voluntary thought suppression, minimization, and sometimes outright denial, they learn to alter an unbearable reality" (p. 381).

When individuals dissociate from their experiences, memory may be impaired (D'Andrea et al., 2012; Dye, 2018; Fimiani et al., 2020; Ford, 2011; Kliethermes et al., 2014; Matte-Landry et al., 2023; Resick et al., 2012; van der Kolk, 2005; Williams, 2006; Zilberstein, 2014). Impairment of memory due to dissociation results from a process called fragmentation (Fimiani et al., 2020; Ford, 2017; Herman, 1992a; Isobel et al., 2019; Mahoney & Markel, 2016; van der Kolk, 2005; Williams, 2006; Zilberstein, 2014). Dissociation from the traumatic experience prevents memories of the trauma from being integrated into a cohesive life narrative (Ford, 2017). Instead, they may be registered as "sensory fragments" (van der Kolk, 2005, p. 403). These fragments were closely related to the somatic symptoms experienced by those with complex trauma histories. As eloquently described by Williams (2006), these fragments represent "the wordless inner world that waits to be retold" (p. 326). These fragments may later prompt a more detailed retrieval of the traumatic experience (Williams, 2006).

Cognitive disruptions were believed to result from the disturbed relationships associated with complex trauma. Individuals must be able to make sense of their experiences in relation to their perception and understanding of the world (Zilberstein, 2014). Disorientation ensues when traumatic experiences disrupt this perception. Mahoney and Markel (2016) used the term selfobject to describe others as essential for mirroring and integrating experience. Because of the element of betrayal in complex trauma, selfobjects in complex traumatic contexts did not offer accurate reflections of the traumatic experience, with subsequent cognitive distortion for the individual. As stated by (Williams (2006), "[w]ithout relationship and mirroring, the self has no other option than to fragment, as it cannot find its original form. Dissociation and fragmentation are defences against a world that has been perceived as a place that offers little pleasure or integration" (p. 325).

Altered cognitive functioning was particularly pervasive for children undergoing development with altered selfobject relations with parents or guardians (Zilberstein, 2014). Because the traumatic context is inescapable, the relationship with the perpetrator must be maintained (Isobel et al., 2019). To cope, the mind fragments memory and understanding of the trauma as a means of self-preservation. Kliethermes et al. (2014) refered to this process as "betrayal blindness" (p. 347).

4.2.3.4 Schema. Impacts of betrayal are also incorporated into an individual's view and expectations of themself, others, and the world. Collectively, these were referred to as schema (D'Andrea et al., 2012; Fimiani et al., 2020; Ford, 2017; van der Kolk, 2005; Van Nieuwenhove & Meganck, 2019; Williams, 2006; Zilberstein, 2014). Schema is a cognitive framework or mental model for understanding, organizing, predicting, and responding to experiences (Fimiani et al., 2020). It is formed from incorporating "true, false, omitted and/or distorted information" (Zilberstein, 2014, p. 338) and functions as a map to guide individuals in navigating the world based on their perception of past experiences. Schemas formed by incorporating traumatic experiences may be adaptive in traumatic contexts yet prove dysfunctional when traumatic exposure is no longer a threat (Van Nieuwenhove & Meganck, 2019). Schema was subdivided into a "working model of the world," including beliefs and expectations of others, and a "working model of the self" (Williams, 2006, p. 234), which involved identity and self-concept.

World view becomes distorted in response to complex trauma exposure with the incorporation of an expectation of harm (D'Andrea et al., 2012; Dye, 2018; Ford, 2017; Herman, 1992a; Kliethermes et al., 2014; Mahoney & Markel, 2016; Resick et al., 2012; van der Kolk, 2005; Van Nieuwenhove & Meganck, 2019; Williams, 2006). With this perspective, others and the world are viewed as "dangerous", "malignant", and "unpredictable" (Van Nieuwenhove &

Meganck, 2019, p. 908). An expectation of harm incorporates the hurt and betrayal from past experiences (van der Kolk, 2005). These wary expectations can manifest as a jaded attitude, described by Herman (1992a) as "the bitterness of being forsaken by man and God" (p. 382). This jaded attitude represents a violation and deterioration of fundamental beliefs (Fimiani et al., 2020; Ford, 2017; Herman, 1992a; Isobel et al., 2019; Kliethermes et al., 2014; Mahoney & Markel, 2016; Resick et al., 2012; Van Nieuwenhove & Meganck, 2019; Zilberstein, 2014). Life lacks cohesion or purpose (Herman, 1992a), resulting in profound "spiritual alienation" (Mahoney & Markel, 2016, p. 3). Loss of perspective provokes feelings of hopelessness (Fimiani et al., 2020; Ford, 2017; Herman, 1992a; Van Nieuwenhove & Meganck, 2019) and emptiness (Ford, 2017; J. L. Herman, 1992a).

The interpersonal nature of complex trauma deforms the image of others (Herman, 1992a; Isobel et al., 2019; Kliethermes et al., 2014; Resick et al., 2012; van der Kolk, 2005; Van Nieuwenhove & Meganck, 2019; Williams, 2006). This is particularly true in childhood complex trauma perpetrated by a caregiver since a working model of caring relationships was not only disturbed, but never formed (Kliethermes et al., 2014). A trauma-diffused image of others cannot accommodate the ability to rely on others for safety or trust (Williams, 2006).

Like other areas of schema, self-concept may be impacted by complex trauma (Cook, et al., 2005; D'Andrea et al., 2012; Dye, 2018; Fimiani et al., 2020; Ford, 2017; Herman, 1992a; Isobel et al., 2019; Kliethermes et al., 2014; Lucero, 2018; Mahoney & Markel, 2016; Resick et al., 2012; van der Kolk, 2005; Van Nieuwenhove & Meganck, 2019; Williams, 2006; Zilberstein, 2014). A healthy self-concept includes believing that one is whole and worthwhile (Fimiani et al., 2020), allowing one to navigate the world with adequate confidence and self-esteem. The circumstances of complex trauma either prevent or destroy such beliefs (Isobel et

al., 2019), instead producing a “debased self-image” (Herman, 1992a, p. 382). Maltreatment experienced may serve as evidence of being “defective”, “deficient”, or “unlovable” (Cook et al., 2005, p. 395). The impossibility of escape from the traumatic context extends to create a sense of general powerlessness in life, while a failure to protect themself and/or others generates shame (Cook et al., 2005; D’Andrea et al., 2012; Fimiani et al., 2020; Ford, 2017; Isobel et al., 2019; McCormack et al., 2022; Resick et al., 2012; van der Kolk, 2005; Van Nieuwenhove & Meganck, 2019), guilt (D’Andrea et al., 2012; Fimiani et al., 2020; Herman, 1992a; Isobel et al., 2019; McCormack et al., 2022; Van Nieuwenhove & Meganck, 2019), and self-blame (D’Andrea et al., 2012; Fimiani et al., 2020; Ford, 2017; Isobel et al., 2019; Kliethermes et al., 2014; Resick et al., 2012; van der Kolk, 2005; Van Nieuwenhove & Meganck, 2019). As stated by Isobel et al. (2019), originally quoting Dorahy et al. (2013), “[c]hronically traumatized individuals feel shame not only for what has happened to them but for who they are” (p. 553).

Beyond these negative perceptions, individuals may struggle with continuous and coherent self-definition (van der Kolk, 2005), such as understanding who they truly are or boundaries between themself and others. This can be understood as a disruption of identity (D’Andrea et al., 2012; Fimiani et al., 2020; Ford, 2017; Herman, 1992a; Isobel et al., 2019; Mahoney & Markel, 2016; Resick et al., 2012). Herman (1992a) cited Niederland’s (1968) writings of his clinical work with concentration camp survivors: “While the majority of his patients complained: *I am now a different person*, the most severely harmed stated simply: *I am not a person*” (p. 379, emphasis added).

4.2.3.5 Relationships. Maladaptive schemas are made manifest in the relational consequences of complex trauma (D’Andrea et al., 2012; Fimiani et al., 2020; Ford, 2011, 2017; Herman, 1992a; Isobel et al., 2019; Kliethermes et al., 2014; Lucero, 2018; Mahoney & Markel,

2016; Matte-Landry et al., 2023; McCormack et al., 2022; Resick et al., 2012; van der Kolk, 2005; Van Nieuwenhove & Meganck, 2019; Williams, 2006; Zilberstein, 2014). Relational consequences refer to disrupted relationships with the self or with others. Most often, these consequences were discussed as interpersonal impairment (D'Andrea et al., 2012; Dye, 2018; Fimiani et al., 2020; Ford, 2011, 2017; Isobel et al., 2019; Kliethermes et al., 2014; Mahoney & Markel, 2016; Resick et al., 2012; Van Nieuwenhove & Meganck, 2019), the relational behaviours between two or more people. Examples of interpersonal impairment included:

- Reduced interpersonal effectiveness and social skills, such as appropriate perspective-taking for understanding interpersonal interactions and boundary setting (D'Andrea et al., 2012; Kliethermes et al., 2014)
- Interpersonal dysregulation, including mistrust (D'Andrea et al., 2012; Ford, 2017; Kliethermes et al., 2014), avoidance, inappropriate sexualization (Ford, 2017), or problems with intimacy (van der Kolk, 2005; Van Nieuwenhove & Meganck, 2019)
- And victimization, either as revictimization (Ford, 2017) or in victimizing others (Kliethermes et al., 2014).

Impaired trust, both of self and others, was most frequently cited (D'Andrea et al., 2012; Dye, 2018; Fimiani et al., 2020; Ford, 2017; Isobel et al., 2019; Kliethermes et al., 2014; Mahoney & Markel, 2016; Resick et al., 2012; van der Kolk, 2005; Van Nieuwenhove & Meganck, 2019; Williams, 2006).

When complex traumatic exposure occurs in childhood, these relational or interpersonal consequences were discussed as impaired attachment (Cook et al., 2005; D'Andrea et al., 2012; Dye, 2018; Fimiani et al., 2020; Ford, 2011; Herman, 1992a; Isobel et al., 2019; Kliethermes et al., 2014; Lucero, 2018; Mahoney & Markel, 2016; Matte-Landry et al., 2023; Resick et al.,

2012; van der Kolk, 2005; Williams, 2006; Zilberstein, 2014). Attachment is the formation of close and bonded relationships between individuals, particularly between children and their caregivers. According to Mahoney & Markel (2016), when the caregiver provides idealization and mirroring, children develop a healthy attachment which allows them to trust and rely on the caregiver. As individuals progress into adulthood, this attachment pattern is generalized to other bonded relationships, such as significant others (Mahoney & Markel, 2016; Van Nieuwenhove & Meganck, 2019). Complex trauma exposure disrupts this development of healthy attachment. Instead, disorganized attachment may consequently form (Mahoney & Markel, 2016; Zilberstein, 2014). Disorganized attachment is characterized by an oscillation between seeking closeness and distance from close others (Herman, 1992a; Van Nieuwenhove & Meganck, 2019; Zilberstein, 2014). Additionally, a lack of healthy attachment may result in individuals seeking any attachment, including to those who victimize them, thus contributing to the experience of revictimization, poly-trauma, and reluctance to leave traumatic contexts (Williams, 2006).

4.2.3.6 Affect. The experience of complex trauma naturally generates uncomfortable emotions to the extent that in the traumatic context, the individual does not have the means to diffuse through support from trusted others or employing appropriate coping strategies (Pfluger et al., 2022). These pent-up feelings and emotions have implications for an individual's overall affect (D'Andrea et al., 2012; Dye, 2018; Fimiani et al., 2020; Isobel et al., 2019; Kliethermes et al., 2014; Lucero, 2018; Mahoney & Markel, 2016; Matte-Landry et al., 2023; Resick et al., 2012; van der Kolk, 2005; Van Nieuwenhove & Meganck, 2019; Zilberstein, 2014). Though inclusive of feelings and emotions, affect tends to refer to mood more broadly, which is influenced by an individual's perspectives. As such, affect is influenced by schema. Affective

consequences involve not only the experience of uncomfortable affective states but also an impaired ability to regulate these states.

Emotions associated with the experience of complex trauma include anger for the trauma they endured (Cloitre et al., 2009; D'Andrea et al., 2012; Dye, 2018; Fimiani et al., 2020; Ford, 2017; Herman, 1992a; McCormack et al., 2022; Resick et al., 2012; van der Kolk, 2005; Van Nieuwenhove & Meganck, 2019) and fear of recurring harm (Dye, 2018; Fimiani et al., 2020; Herman, 1992a; Isobel et al., 2019; Lucero, 2018; van der Kolk, 2005; Zilberstein, 2014). When skills to cope with such emotions are not developed due to complex trauma exposure, emotion regulation is impaired (Cloitre et al., 2009; Cook et al., 2005; D'Andrea et al., 2012; Dye, 2018; Fimiani et al., 2020; Ford, 2011, 2017; Isobel et al., 2019; Kliethermes et al., 2014; Mahoney & Markel, 2016; Matte-Landry et al., 2023; Pfluger et al., 2022; Resick et al., 2012; van der Kolk, 2005; Van Nieuwenhove & Meganck, 2019; Williams, 2006; Zilberstein, 2014). According to Pfluger et al. (2022), "[e]motion regulation refers to the ability to recognize, monitor, express, and modify emotional reactions in a way that facilitates adaptive functioning" (p. 2). Emotion dysregulation may take the form of:

- Emotional reactivity or lability, including outbursts of anger or rage (D'Andrea et al., 2012; Ford, 2017; Kliethermes et al., 2014);
- Distorted intensity of emotions, including over/under/de-activation of feelings, including blunting or numbing of emotions (Cloitre et al., 2009; Cook et al., 2005; Ford, 2017);
- Lack of or difficulty experiencing positive emotions (Cook et al., 2005; D'Andrea et al., 2012); or

- Inappropriate or incongruent emotional responses (D'Andrea et al., 2012; Kliethermes et al., 2014).

Thus, emotional dysregulation describes an impaired capacity for self-regulation or self-soothing (Cook et al., 2005; Fimiani et al., 2020) in response to intense emotional states (Isobel et al., 2019).

Together with disrupted schemas, emotional dysregulation may influence individuals overall ability to manage affective states, referred to as affective self-regulation (Cloitre et al., 2009; Cook et al., 2005; D'Andrea et al., 2012; Fimiani et al., 2020; Ford, 2011, 2017; Isobel et al., 2019; Kliethermes et al., 2014; Mahoney & Markel, 2016; Matte-Landry et al., 2023; Resick et al., 2012; van der Kolk, 2005; Van Nieuwenhove & Meganck, 2019; Williams, 2006; Zilberstein, 2014). Sensitivity to emotional experiences and distorted views of self and the world may produce a persistent negative effect. Depressed and/or anxious affects were commonly cited (Cook et al., 2005; Cloitre et al., 2009; D'Andrea et al., 2012; Dye, 2018; Fimiani et al., 2020; Ford, 2011, 2017; Herman, 1992a; Kliethermes et al., 2014; McCormack et al., 2022; Pfluger et al., 2022; Resick et al., 2012; van der Kolk, 2005; Van Nieuwenhove & Meganck, 2019). Herman (1992a) described this interplay of schema and mood: "The debased self-image of chronic trauma fuels the guilty ruminations of depression. And the loss of faith suffered in chronic trauma merges with the hopelessness of depression" (p. 382).

There were differing opinions about the cause of the affective consequences of complex trauma. Dye (2018) stated that they are caused by the biological impacts of trauma and the deactivation of brain structures that modulate intense emotions. Ford (2017) suggested that affective consequences are produced "[w]hen stress reactivity takes precedence over self-reflective experiential awareness" (p. 226). Finally, Pfluger et al. (2022) took a developmental

perspective, stating that disrupted attachment prevents the attainment of developmentally appropriate strategies for regulating emotional and affective states. Regardless of the possible cause, affective difficulties along with relational problems are the most common reasons individuals with complex trauma histories seek help (Van Nieuwenhove & Meganck, 2019).

4.2.3.7 Behaviour. The amalgamation of effects from other consequences of complex trauma exposure is thought to also contribute to changes in behaviour (Cook et al., 2005; D'Andrea et al., 2012; Dye, 2018; Fimiani et al., 2020; Ford, 2011, 2017; Herman, 1992a; Kliethermes et al., 2014; Lucero, 2018; Mahoney & Markel, 2016; Matte-Landry et al., 2023; McCormack et al., 2022; van der Kolk, 2005; Van Nieuwenhove & Meganck, 2019; Williams, 2006; Zilberstein, 2014). These behaviours can be understood as outward manifestations of internal states, possibly related to schema, affect, and cognition. As explained by D'Andrea et al. (2012), an impaired ability to regulate distressing affective states may result in "affective overload" and cause individuals to resort to maladaptive behaviours to "dispel, reduce, or recover from negative affect states" (p. 189). Cook et al. (2005) explained that behaviours may be over/under-controlled. Under-controlled behaviours tend to be exhibited as compulsive reactions to reminders of the traumatic experience. Overcontrolled behaviours seek a sense of mastery or achievement to compensate for the lack of control felt in relation to their trauma and its associated consequences.

Attempts to modulate distressing internal states that result from complex trauma are associated with a variety of maladaptive coping mechanisms (Cook et al., 2005; Dye, 2018; Ford, 2017; Mahoney & Markel, 2016; Pfluger et al., 2022; van der Kolk, 2005). These coping behaviours provide relief from distress through avoidance (Dye, 2018; Ford, 2011, 2017; Kliethermes et al., 2014; Mahoney & Markel, 2016; McCormack et al., 2022; Resick et al., 2012;

van der Kolk, 2005; Van Nieuwenhove & Meganck, 2019; Zilberstein, 2014) or as a means to restore a sense of control (van der Kolk, 2005). Some examples of maladaptive coping included, but are not limited to:

- Substance misuse, including drugs, alcohol, and cigarettes (Cook et al., 2005; D'Andrea et al., 2012; Dye, 2018; Fimiani et al., 2020; Ford, 2011, 2017; Herman, 1992a; Resick et al., 2012; van der Kolk, 2005);
- Suicidality (Dye, 2018; Fimiani et al., 2020; Ford, 2011; Herman, 1992a; Lucero, 2018; van der Kolk, 2005);
- Self-harming and self-mutilation (D'Andrea et al., 2012; Dye, 2018; Fimiani et al., 2020; Ford, 2011, 2017; Herman, 1992a; Mahoney & Markel, 2016; Resick et al., 2012);
- And eating disorders (D'Andrea et al., 2012; Dye, 2018; Fimiani et al., 2020; Ford, 2011, 2017; van der Kolk, 2005), including restriction or binge/purge cycles (Fimiani et al., 2020) as well as overeating (Dye, 2018).

Though risky or dangerous, maladaptive coping strategies are reinforced when motivation/reward pathways are strengthened by tension reduction via avoidance of uncomfortable internal states (Fimiani et al., 2020; Ford, 2017; Mahoney & Markel, 2016). Evidently, engaging in such behaviours may result in negative consequences for physical health, such as obesity (Dye, 2018).

Consequences related to cognition may also manifest behaviourally due to changes in executive functioning (D'Andrea et al., 2012; Fimiani et al., 2020; Ford, 2011, 2017; Herman, 1992a; Kliethermes et al., 2014; Matte-Landry et al., 2023; van der Kolk, 2005; Zilberstein, 2014). Executive functions include the ability to plan and problem-solve (D'Andrea et al., 2012;

Fimiani et al., 2020), contributing to frustration tolerance (Fimiani et al., 2020). When individuals are not able to tolerate frustration, solve the problems encountered in their lives, or plan a meaningful course of action, their behaviours become compulsive due to a lack of self-regulation (Cloitre et al., 2009; Cook et al., 2005; Fimiani et al., 2020; Ford, 2011, 2017; Kliethermes et al., 2014; Lucero, 2018; Mahoney & Markel, 2016; Matte-Landry et al., 2023; Resick et al., 2012; van der Kolk, 2005; Van Nieuwenhove & Meganck, 2019; Williams, 2006; Zilberstein, 2014). Lack of behavioural self-regulation may manifest as aggression and impulsivity (Cloitre et al., 2009; Cook et al., 2005; D'Andrea et al., 2012; Dye, 2018; Fimiani et al., 2020; Ford, 2011, 2017; Kliethermes et al., 2014; Mahoney & Markel, 2016; Resick et al., 2012; van der Kolk, 2005; Zilberstein, 2014). As a result of these behaviours, individuals may encounter legal, vocational, or academic hardships (D'Andrea et al., 2012; Dye, 2018; Ford, 2011, 2017; Kliethermes et al., 2014; van der Kolk, 2005).

In sum, the behavioural consequences of complex trauma were described in the sample of articles as a loss of control and, most importantly, as attempts to regain it. Unless the underlying factors contributing to behavioural responses are understood and acknowledged, individuals with complex trauma histories are at risk of being labelled as "oppositional," "rebellious," "unmotivated," or "antisocial" (van der Kolk, 2005, p. 404).

4.2.3.8 Post-Traumatic Growth. While the previously discussed consequences of complex trauma have an ominous quality, adaptive outcomes following complex trauma exposure are also possible. In fact, it was suggested that what are considered negative outcomes following traumatic exposure may be adaptive (Lucero, 2018) and precipitate post-traumatic growth (McCormack et al., 2022). As stated by McCormack et al. (2022):

> …an illness ideology often clouds the overview of complex trauma and posttraumatic growth neglecting the biopsychosocial perspective that growth following adversity is a process of normal personality development that if nurtured, assists individuals build strength against future adversity and lead to more fulfilling functioning lives" (p. 247).

Post-traumatic growth epitomizes "the coexistence of suffering and happiness (McCormack et al., 2022, p. 245). McCormack et al. (2022) identified "empathy, altruism, forgiveness, humility, and gratitude" (p. 246) as domains of growth following complex trauma exposure. Williams (2006) discussed the ability to create a cohesive life narrative that incorporates the traumatic event as the necessary factor for achieving positive outcomes following traumatic exposure, which is referred to as meaning-making (McCormack et al., 2022; Williams, 2006).

4.3 Evolution

According to Rodgers (1993), concepts are viewed as "constantly changing, comprised of numerous interrelated and overlapping elements, and interpretable only in regard to a multitude of contextual factors" (p. 73). For this reason, her evolutionary method of concept analysis encourages examining how the concept has been shaped over time and how it is used within disciplines. Examination of a concept's temporal and disciplinary evolution provides insight into the contexts that have shaped the concepts and in which they are used. Evolutionary analysis for complex trauma, in this case, examines when the articles in the sample were published, by whom, and what trends are observed, if any.

4.3.1 Temporal Analysis

For context, the concept of complex trauma emerged in the late 1980s in response to the inclusion of PTSD in the DSM to account for the experiences of returned Vietnam veterans and a growing recognition prompted by the Women's Movement of the staggering prevalence of rape,

childhood maltreatment, and other forms of trauma encountered in everyday life. In the sample of articles included in this study, the oldest article was published in July 1992, and the most recent in April 2023. Over half of the articles (11, 55%) were published between 2010 and 2019. For temporal analysis, data extracted from each source for the concept characteristics is arranged in chronological order to analyze how complex trauma as a concept has evolved.

Table 6: Antecedents – Temporal Analysis

Catalogue code	**Publication date**	**Antecedents**		
		Inescapable	***Vulnerability of psyche***	***Perverse relationships***
1990 - 1999				
PSYCH01	1992	X		
2000 – 2009				
PSY01	2005			X
PSYCH02	2005	X	X	X
MHC01	2006			X
PSY02	2009			
2010 – 2019				
PSY03	2011			
PSY04	2012	X	X	
PSY05	2012			X
SW01	2014	X	X	X
PSY06	2014	X	X	X
SW02	2016		X	X
PSY07	2017	X	X	
SW03	2018		X	
SW04	2018		X	
NSG01	2019			X
PSY08	2019	X	X	X
2020 – 2023				
PSY09	2020	X	X	
PSY10	2022	X	X	
PSY11	2022			X
SW05	2023		X	

Table 7: Attributes – Temporal Analysis

Catalogue code	Publication date	Attributes			
		Interpersonal act	***Element of betrayal***	***Cumulative traumatic exposure***	***Psychologically distressing***
1990 - 1999					
PSYCH01	1992	X		X	
2000 - 2009					
PSY01	2005	X		X	
PSYCH02	2005	X	X	X	X
MHC01	2006	X	X	X	
PSY02	2009	X		X	
2010 - 2019					
PSY03	2011				X
PSY04	2012	X		X	X
PSY05	2012				
SW01	2014	X		X	
PSY06	2014	X	X	X	X
SW02	2016	X	X	X	
PSY07	2017	X	X	X	
SW03	2018				
SW04	2018	X		X	
NSG01	2019	X	X	X	
PSY08	2019	X	X	X	X
2020 - 2023					
PSY09	2020	X		X	
PSY10	2022	X	X	X	X
PSY11	2022	X		X	
SW05	2023	X	X	X	

Table 8: Consequences – Temporal Analysis

Catalogue code	Publication date	Consequences							
		Somatic	***Biology***	***Affect***	***Cognition***	***Schema***	***Relationships***	***Behaviour***	***Post-traumatic growth***
1990 - 1999									
PSYCH01	1992	X	X	X	X	X	X		
2000 - 2009									
PSY01	2005		X	X	X	X	X	X	
PSYCH02	2005	X	X	X	X	X	X	X	
MHC01	2006	X	X	X	X	X	X		
PSY02	2009			X	X				
2010 - 2019									
PSY03	2011	X	X	X	X		X	X	
PSY04	2012	X	X	X	X	X			
PSY05	2012		X	X	X	X	X	X	
SW01	2014	X	X	X	X	X		X	
PSY06	2014	X	X	X	X	X	X	X	
SW02	2016	X		X	X		X		
PSY07	2017	X	X	X	X	X	X	X	
SW03	2018		X	X		X			
SW04	2018		X	X	X	X	X	X	
NSG01	2019		X	X	X	X	X		
PSY08	2019	X		X	X	X	X	X	
2020 - 2023									
PSY09	2020	X	X	X	X	X	X	X	
PSY10	2022			X					X
PSY11	2022			X					
SW05	2023		X	X	X		X		

Temporal analysis revealed that the concept characteristics were mostly stable over time, particularly for the antecedents and attributes. For consequences, most recent studies appeared to

focus on more specific consequences of complex trauma instead, while earlier studies discussed them more broadly. For example, McCormack et al. (2022) and Pfluger et al. 2022) focused on affective consequences, and Matte-Landry et al. (2023) reviewed the interrelation of biology, affect, cognition, and relational consequences. An outlying result is the emergence of post-traumatic growth as a consequence of complex trauma. Post-traumatic growth was discussed in only one article (PSY10) published in 2022.

In reading each of the articles, qualitative differences were also noted in relation to time that are not evident in the tables presented. While traumatic events that occur in adulthood and adults as the victims of complex trauma (i.e. adults held captive) were discussed in some of the first articles published (i.e. PSYCH01), more recent articles tended to discuss complex trauma as something particular to developmental periods (i.e. childhood and adolescence).

4.3.2 Disciplinary Analysis

Articles published by five disciplines were included in the final sample: Mental health counselling, nursing, psychology, psychiatry, and social work. Figure 2 shows the distribution of articles published by each disciple. More than half the sample (11, 55%) was published by psychology, followed by social work (5, 25%), psychiatry (2, 10%), nursing (1, 5%), and mental health counselling (1, 5%).

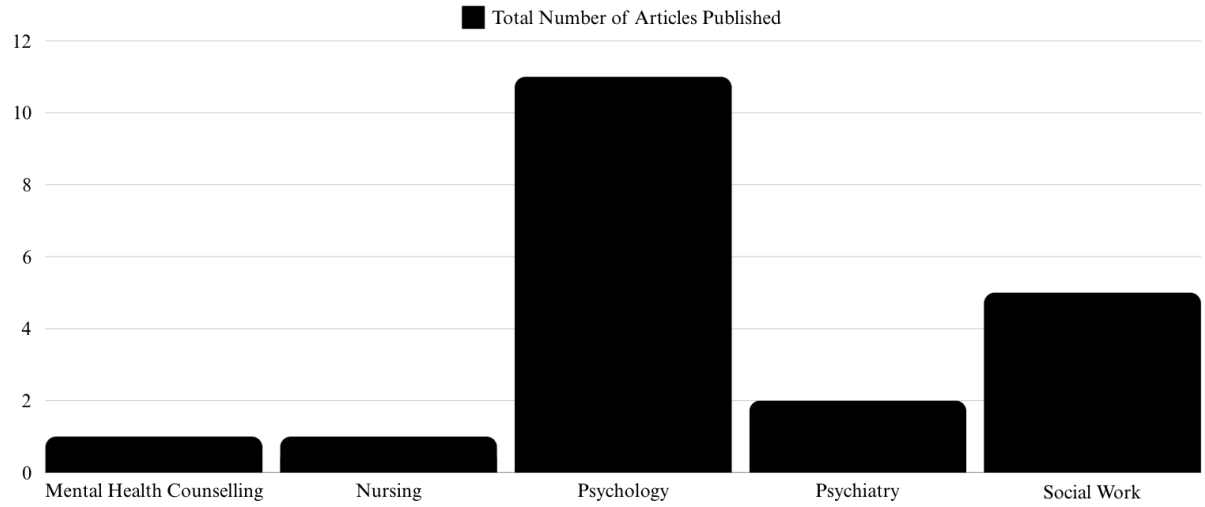

Figure 2: Articles published by discipline

As was done for the temporal analysis, disciplinary analysis was conducted by tabulating data extracted from each source related to the concept characteristics according to discipline. This allowed for analyzing potential similarities and differences in the disciplinary understanding of complex trauma.

Table 9: Antecedents – Disciplinary Analysis

Catalogue code	Publication date	Antecedents		
		Inescapable	***Vulnerability of psyche***	***Perverse relationship***
Mental Health Counselling				
MHC01	2006			X
Nursing				
NSG01	2019			X
Psychology				
PSY01	2005			X
PSY02	2009			
PSY03	2011			
PSY04	2012	X	X	
PSY05	2012			X
PSY06	2014	X	X	X
PSY07	2017	X	X	
PSY08	2019	X	X	X
PSY09	2020	X	X	
PSY10	2022	X	X	
PSY11	2022			X
Psychiatry				
PSYCH01	1992	X		
PSYCH02	2005	X	X	X
Social Work				
SW01	2014	X	X	X
SW02	2016		X	X
SW03	2018		X	
SW04	2018		X	
SW05	2023		X	

Table 10: Attributes – Disciplinary Analysis

Catalogue code	Publication date	Attributes			
		Interpersonal act	***Element of betrayal***	***Cumulative traumatic exposure***	***Psychologically distressing***
Mental Health Counselling					
MHC01	2006	X	X	X	
Nursing					
NSG01	2019	X	X	X	
Psychology					
PSY01	2005	X		X	
PSY02	2009	X		X	
PSY03	2011				X
PSY04	2012	X		X	X
PSY05	2012				
PSY06	2014	X	X	X	X
PSY07	2017	X	X	X	
PSY08	2019	X	X	X	X
PSY09	2020	X		X	
PSY10	2022	X	X	X	X
PSY11	2022	X		X	
Psychiatry					
PSYCH01	1992	X		X	
PSYCH02	2005	X	X	X	X
Social Work					
SW01	2014	X		X	
SW02	2016	X	X	X	
SW03	2018				
SW04	2018	X		X	
SW05	2023	X	X	X	

Table 11: Consequences – Disciplinary Analysis

Catalogue code	Publication date	Consequences							
		Somatic	***Biology***	***Affect***	***Cognition***	***Schema***	***Relationships***	***Behaviour***	***Post-traumatic growth***
Mental Health Counselling									
MHC01	2006	X	X	X	X	X	X		
Nursing									
NSG01	2019		X	X	X	X	X		
Psychology									
PSY01	2005		X	X	X	X	X	X	
PSY02	2009			X	X				
PSY03	2011	X	X	X	X		X	X	
PSY04	2012	X	X	X	X	X			
PSY05	2012		X	X	X	X	X	X	
PSY06	2014	X	X	X	X	X	X	X	
PSY07	2017	X	X	X	X	X	X	X	
PSY08	2019	X		X	X	X	X	X	
PSY09	2020	X	X	X	X	X	X	X	
PSY10	2022			X					X
PSY11	2022			X					
Psychiatry									
PSYCH01	1992	X	X	X	X	X	X		
PSYCH02	2005	X	X	X	X	X	X	X	
Social Work									
SW01	2014	X	X	X	X	X		X	
SW02	2016	X		X	X		X		
SW03	2018		X	X		X			
SW04	2018		X	X	X	X	X	X	
SW05	2023		X	X	X		X		

Analysis of disciplinary similarities and differences for the antecedents revealed little differentiation between disciplinary understandings. Notably, both nursing and mental health

counselling focused only on perverse relationships as antecedents, which may be due to a more general focus and prioritization of relationships within these disciplines. Similarly, there was also little differentiation in disciplinary understanding of the attributes of complex trauma. Interestingly, however, psychology and psychiatry discussed psychological distress as inherent to complex trauma, while mental health counselling, nursing, and social work did not. The consequences of complex trauma perhaps demonstrated the most coherence across disciplines. Because data is tabulated chronologically and according to discipline, it was evident that there is a similar narrowing of focus on a subset of the consequences of complex trauma within disciplines, as observed in the temporal analysis. Qualitatively, certain disciplines also tended to focus on age groups. Notably, social work and psychology tended to discuss complex trauma as experienced by children or adolescents.

4.4 Surrogate Terms

Surrogate terms in evolutionary concept analysis can be used synonymously to represent the concept. No surrogate terms were identified when analyzing the concept of complex trauma with the sample of articles selected for the study. While several terms were erroneously used synonymously with complex trauma, these terms represented distinctly different concepts. The following discussion of related concepts differentiates these concepts from complex trauma.

4.5 Related Concepts

Concepts similar to yet distinct from the concept of interest are referred to as related concepts in evolutionary concept analysis. This analysis clarified that it is the co-occurrence of several types of traumas that produce the phenomenon of complex trauma. Nevertheless, the occurrence of these traumas in isolation, such as cumulative trauma and interpersonal trauma, are

distinctly different concepts from complex trauma. Additionally, there are subtypes of complex trauma when it occurs at specific periods or between certain individuals with particular roles.

4.5.1 Cumulative Trauma

The concept of cumulative trauma is frequently discussed in relation to complex trauma (Cloitre et al., 2009; Dye, 2018; Fimiani et al., 2020; Ford, 2017; Isobel et al., 2019; McCormack et al., 2022; Pfluger et al., 2022; Van Nieuwenhove & Meganck, 2019; Williams, 2006). Cumulative trauma was described earlier in this analysis as an attribute of complex trauma and is defined as trauma that is prolonged, repeated, ongoing, or chronic in nature. Isobel et al. (2019) noted that cumulative trauma is identified as "a broad statistical marker term" (p. 554) that includes various types of trauma, including complex trauma. Additionally, McCormack et al. (2022) made the distinction between cumulative trauma and cumulative interpersonal trauma, which they described the latter as complex trauma.

4.5.2 Interpersonal Trauma

A traumatic experience that is interpersonal in nature was identified as an attribute of complex trauma (Cloitre et al., 2009; D'Andrea et al., 2012; Dye, 2018; Fimiani et al., 2020; Ford, 2017; Herman, 1992a; Isobel et al., 2019; Kliethermes et al., 2014; Matte-Landry et al., 2023; McCormack et al., 2022; Pfluger et al., 2022; Resick et al., 2012; van der Kolk, 2005; Van Nieuwenhove & Meganck, 2019). Ford (2017) clearly defined interpersonal trauma as acts of victimization committed against another human. Furthermore, interpersonal trauma may be directly experienced or witnessed (Ford, 2017). Interpersonal trauma makes the critical distinction between trauma that occurs in the context of human relationships and those that do not, such as environmental trauma (Isobel et al., 2019). Subtypes of interpersonal trauma exist. Particularly relevant to the discussion of complex trauma is relational trauma, a subset of

interpersonal trauma that occurs in the context of close attachment relationships (Isobel et al., 2019). Interpersonal trauma is differentiated from complex trauma in that interpersonal trauma does not have the same inherent chronicity or multiplicity of traumatic exposure. Complex trauma is a subset of interpersonal trauma that incorporates cumulative traumatic exposure and an element of betrayal.

4.5.3 Developmental Trauma

Just as complex trauma represents a particular subset of cumulative and interpersonal traumas, there are also subsets of complex trauma. Complex trauma that occurs during developmental periods was aptly referred to as developmental trauma (Isobel et al., 2019; van der Kolk, 2005). Complex trauma, more generally, may occur throughout the lifespan and not only during periods of development (Isobel et al., 2019). When complex trauma occurs in children and adolescents, it is referred to as developmental trauma (van der Kolk, 2005).

4.5.4 Intergenerational Trauma

The concept of intergenerational trauma is related not only to complex trauma but to interpersonal trauma more generally (Isobel et al., 2019; Lucero, 2018). Intergenerational trauma refers to the transmission of traumatic effects between generations. This transmission may result from historical or ongoing trauma. This transmission was identified as occuring biologically, socially, or both (Isobel et al., 2019; Lucero, 2018).

Biological transmission of the effects of trauma may be passed between several generations. When biological transmission of traumatic effects is passed between more than two generations, this is called transgenerational trauma. Transgenerational effects occur when the genetic material of germ cells is impacted (Lucero, 2018).

Intergenerational trauma was most discussed in terms of its social transmission. Isobel et al. (2019) explained that social transmission may be due to "a replication of a parent's trauma, a response to familial trauma, or a predisposition or susceptibility to further trauma but may manifest as a unique entity in the offspring" (p. 552). The intergenerational effects of trauma were first described following observations of traumatic effects in the offspring of holocaust survivors. More recently, the intergenerational effects of the trauma produced for Indigenous peoples resulting from the ongoing effects of colonization are recognized.

4.6 Model Case

A model case derived from the sample of literature used for analysis is presented. Fimiani et al. (2020) described the case of David, a 32-year-old male with a history of complex trauma (refer to Appendix 13 for the complete excerpt).

David's childhood was marred by a chronically troublesome relationship with his mother. She would frequently compare David to his older sister, whom she considered "more outgoing, brighter, and more enterprising" (Fimiani et al., 2020, p. 129). David tried to present himself according to his mother's ideals but failed to please her. Despite his efforts to communicate to his mother that her actions caused him distress, she seemed incapable of comprehending his pain and continued to berate him. Unacceptance from his mother produced pathogenic beliefs in David that he was insufficient. These beliefs persisted into his adulthood, resulting in severe depression and anxiety. David engaged in ritualistic behaviours to cope, believing that perfection could be obtained with a sense of control. When he sought treatment, he reported difficulty maintaining romantic relationships or employment.

David's relationship with his mother sufficiently characterizes the criteria for a complex traumatic experience (attributes) within a complex traumatic context (antecedents). Because the

traumatic interactions took place between two humans and spanned many years, the traumatic experience is considered both interpersonal and cumulative. David felt a sense of betrayal about his mother's inability to accept him or to change her hurtful behaviour, which resulted in psychological distress for him. The occurrence of the traumatic exposure during childhood rendered his psyche vulnerable, resulting in the generation of pathogenic beliefs. David's attempts to conform to his mother's vision of who he should be characterizes a perversion of the necessary idealization of a child by their parent. Due to the lack of agency possessed in childhood, David's situation was inescapable.

The problems described by David in his adulthood represent consequences in several domains. His pathogenic beliefs of being "inadequate and doomed to disappoint others" (Fimiani et al., 2020, p. 129) exemplify schematic consequences, particularly in his view of self. These beliefs fueled feelings of despair and helplessness, ultimately resulting in the affective consequences of depression and anxiety. His corrupted self-image also resulted in relational consequences, being unable to maintain loving relationships with women. Behaviour consequences are observed in David's difficulty maintaining employment and in his maladaptive coping to regain a sense of control through ritualistic behaviours.

Chapter 5: Discussion

The previous chapter discussed antecedents, attributes, consequences, surrogate terms, related concepts, and a model case in performing an evolutionary concept analysis for complex trauma. Antecedents of complex trauma include vulnerability of the psyche, inescapable context, and perverse relationships. Attributes describe the set of descriptors that characterize complex traumatic experiences, which may, in turn, result in complex trauma. Attributes of such traumatic experiences include cumulative traumatic exposure to acts that are interpersonal in nature, involving an element of betrayal that is psychologically distressing. Consequences of complex trauma include biological, somatic, cognitive, schematic, relational, affective, and behavioural effects, as well as post-traumatic growth. Concepts related to complex trauma included cumulative, interpersonal, developmental, and intergenerational trauma. Each of these was described for their relation to and differentiation from complex trauma. While many terms were used synonymously with complex trauma, no true surrogate terms were identified after reviewing the intricate interrelation of concepts and the concept characteristics of complex trauma.

This chapter discusses these results in relation to the context of the findings and their implications. Details of the studies in the sample – including a disciplinary, temporal, and discursive frame of reference – are reviewed, and implications for the findings of this study are discussed. The social construction of traumatic contexts, traumatic identities, and a critique of the conception of psychological trauma as a psychiatric illness are discussed in relation to the study findings. Implications in recognizing the concept of complex trauma beyond a diagnostic discursive frame are presented with opportunities for health policy and nursing education, practice, and research. Finally, the strengths and limitations of this study are identified.

5.1 State of the Science

To date, knowledge production related to complex trauma in the domain of health sciences has focused on framing the phenomenon in reference to symptomology, psychiatric illness, and corresponding treatments for those illnesses. However, this focus is complicated by significant debate and controversy related to how complex trauma is or should be accounted for in relation to diagnostic constructs. Researchers have dedicated significant focus to demonstrating how complex trauma either is or is not adequately represented in the existing diagnostic constructs in the available diagnostic manuals. Debate is ongoing without resolution to date.

Despite ongoing diagnostic controversy and debate, research has been undertaken to examine how trauma-focused treatments may be effective in treating trauma. This line of research has faced challenges without validated criteria for measuring the concept, instead relying on measuring the effectiveness of existing established criteria, such as for PTSD. In this way, treatment research struggles to identify effectiveness for complex trauma as opposed to effectiveness for various existing and validated diagnostic constructs.

This fundamental problem with existing research highlights issues arising from a lack of agreement on an understanding of complex trauma as a concept. This conceptual ambiguity is evident in the language used to discuss the concept. Several related though differentiable terms are used synonymously with complex trauma, resulting in conceptual ambiguity. Even within the frame of psychiatric diagnoses, there exists significant debate and controversy related to how complex trauma should be understood. Recognition of the mind-body connection, particularly in examining the neurobiological underpinnings of trauma, is a predominant area of focus.

It is widely accepted within the mental health field that interpersonal victimization, in its various forms, has detrimental consequences on the human psyche and has garnered significant attention from various disciplines. Unfortunately, a lack of collaboration between disciplines has resulted in a dispersion of research efforts (D'Andrea et al., 2012). As a result, understanding of psychological trauma and complex trauma as it is applicable to mental health care contexts, including nursing, is dominated by psy-science, a focus on consequences and diagnoses, and treatment for symptoms.

Largely absent from the research and discussion within the health sciences on the topic of complex trauma is an examination of the contexts in which trauma is produced. When traumatic contexts are recognized, it is done in passing as an explanation of consequences and at the microcontextual level of interpersonal interactions (e.g. child-caregiver relationship) to the exclusion of recognition of social forces representing the macrocontext of our society which can manifest as traumatic realities.

Such an example is evident in the model case presented in the analysis, where the source of the consequences of David's trauma are situated in his relationship with his mother. This case was selected for its depiction of everyday violence, which helps illustrate the nuances and subtlety of complex trauma. However, it is important to note that it also risks emphasizing problematic dialogues that allocate the perpetrator identity to certain members of society (e.g., individuals from lower socioeconomic status, racialized individuals, ethnic minorities) while shielding others. In the model case, the risk is of mother-blaming, which is pervasive in patriarchal mental health dialogues, where the existence of mental illness is attributed to the alleged failings of mothers. This overemphasis on traumatic acts by marginalized groups, while

ignoring or excusing those committed by privileged members of society, preserves violent social structures. As a result, this selective focus reifies and perpetuates oppressive structures.

The following discussion aims to further expand on this notion of oppressive and traumatic social structures by extrapolating the findings from this analysis of complex trauma to situate it in the social realm. Literature based in critical social theory from trauma studies is applied to broaden the understanding and illustration of the concept of complex trauma.

5.2 Contextualizing the Results

In understanding and discussing the results of this analysis, contextual elements of the articles included in the sample must be considered. Most importantly, the domination of the sample by the psychology discipline or by the co-opting, by other disciplines, of the psychological understanding of the concept. This is not only evidenced by psychology publishing 55% of articles in the sample but also how the concept of complex trauma was generally discussed in most of the sample.

Articles tended to focus on defining complex traumatic experiences and their consequences, with little attention paid to how the context in which these experiences occur impacts the overall experience of complex trauma. Defining complex traumatic experiences was usually done in relation to existing or proposed diagnostic constructs. Authors generally recognized that the definition of trauma as per the DSM is limited and does not account for many experiences related to complex trauma (Cook et al., 2005; D'Andrea et al., 2012; Ford, 2017; Herman, 1992a; van der Kolk, 2005). This problem was viewed as reconcilable via amendments to broaden the DSM's conception of trauma to capture these experiences (Resick et al., 2012). There was not, however, a discussion of alternative frames of reference beyond the psychiatric diagnostic manuals – such as the DSM or ICD – for conceptualizing trauma.

Similarly, consequences were mainly discussed either as symptoms of existing psychiatric illnesses (i.e. BPD, PTSD, ADHD) or as symptoms of proposed psychiatric diagnoses (i.e. DTD, DESNOS, EPCACE, cPTSD) (Cloitre et al., 2009; Cook et al., 2005; D'Andrea et al., 2012; Ford, 2017; Herman, 1992a; Resick et al., 2012; van der Kolk, 2005). An interesting caveat is that many of the articles that focused on consequences as symptoms were published prior to the most recent publication of the DSM-V-TR, which was published in 2022. Several authors of articles included in the sample engaged in lobbying for amendments to the trauma and stressor-related disorders chapter of the DSM-V-TR, including the addition of cPTSD and DTD to account for the consequences of complex trauma in children and adults, that, they argue, are not adequately captured in existing diagnoses in the DSM. Others were involved in reviewing the literature to determine if a decision to include the proposed diagnoses was supported by evidence. Ultimately, it was decided that the proposed diagnoses of cPTSD and DTD would not be included in the DSM-V-TR (Resick et al., 2012). This decision was controversial, particularly since cPTSD was recognized in the ICD-11, also published in 2022. So long as research and treatment of psychological trauma continue to be guided by a conception of trauma as a psychiatric illness, individuals with complex traumatic histories will continue to be invisible and their experiences neglected.

It must be noted that despite efforts to devise a search strategy that would draw literature at the intersection of health sciences and trauma studies, there were no articles from trauma studies literature included in the final sample. This is significant because it illustrates how even when there are purposeful efforts to compile diverse sources of information on trauma-related concepts in the context of health sciences, the results are dominated by psy-science. This

domination demonstrates the power/knowledge dynamic and how trauma discourse is pre-determined by psy-science to the exclusion of other relevant perspectives.

5.3 Discussion

This discussion draws upon critiques from trauma studies and discourse from the social sciences. Critiques from these perspectives are relevant to a discussion of the concept of complex trauma because of how trauma is contextualized in the social sciences. Trauma is "situated in a social and cultural frame rather than a medical one" with a recognition of "insidious and every day rather than the catastrophic" (Cvetkovich, 2007, p. 464). Critique is applied to the findings of this study to illuminate the pitfalls of dominant psy-science trauma discourse prevalent in clinical mental health settings.

5.3.1 The Social Construction of Traumatic Contexts

Inescapability, a vulnerability of the psyche, and perverse relationships are identified as antecedents to psychological trauma in this study. The results discussed these characteristics mainly in reference to micro-contexts created between individuals, such as children who are victimized by their parents by abusive or neglectful behaviours, as described in the model case. However, the results remain silent on the impact of social macro-contexts on the development of complex trauma. An acknowledgement that such contexts can also be produced by "social constraints" (Resick et al., 2012, p. 242) would open the discussion for how complex trauma can be socially embedded.

Burstow (2003) states that the relationship between systemic oppression and trauma is complex, with the creation of structures that alienate us from each other. She states "oppression robs everyone of humanity, both oppressor and oppressed" (Burstow, 2003, p. 1308). Trauma that is socially embedded can be understood as a form of systemic oppression and injustice,

where certain members of society are marginalized – based on race, religion, sexuality, sex, gender, age, etc. – not only by their victimization but also our response (or lack thereof) to their victimization (Bruckert & Law, 2018; Cvetkovich, 2003). Burstow (2003) describes this complex interplay of individual experience, identity, and social response to trauma:

> Trauma occurs in layers, with each layer affecting every other layer. Current trauma is one layer. Former traumas in one's life are more fundamental layers. Underlying one's own individual trauma history is one's group identity or identities and the historical trauma with which they are associated. Underpinning this are the structural oppressions and the institutions through which they operate (p. 1309).

An example of such traumatic systemic oppression and injustice includes the prevalence of gender-based violence – such as sexual assault and domestic abuse – and the low rates of conviction for these crimes (Bruckert & Law, 2018). Similarly, racial profiling and police brutality are examples of structurally embedded racism. In these cases, traumatic systemic injustice and oppression are overtly violent. However, it can also take more subtle forms through denial, silencing, or refusal of action and change. This more covert form of traumatic systemic injustice includes a lack of justice served for the abuse and ongoing systematic oppression of the Indigenous peoples of Canada. For example, the Canadian government has addressed only 13 of the Truth and Reconciliation Commission's 94 calls to action (Jewell & Mosby, n.d.; Truth and Reconciliation Commission of Canada, 2015). Zero calls to action were addressed in 2023 (Jewell & Mosby, n.d.). Cvetkovich (2007) states that scholarship discussing systemic injustices and social perpetrations of trauma "is less visible within trauma studies because it doesn't explicitly use the term trauma even as it seeks to record the affective aftermath of racism grounded in historical events such as slavery" (p. 465).

Injustice and oppression that are committed by institutions tasked with helping or protecting – such as healthcare, law enforcement, and education – compound the traumatic effect. Burstow (2003) states that psy-science is instrumental in this respect. Many mental health practices, though well-intentioned, are inherently coercive or blatantly abusive, including involuntary hospital admissions, forced treatment, and restraint. These 'treatments' are administered – including by nurses – with a disregard for the patient's or provider's humanity. Both the receiving individual's autonomy and the provider's ability to experientially connect on a human level with their patient are denied.

This social embedment in traumatic structures is important to consider in relation to the traumatic context (or antecedents) of complex trauma. When 'helping' institutions inflict harm, the traumatic context is rendered inescapable. The harmful nature of these institutions tasked with helping characterizes the perverse nature of relationships that generate traumatic contexts for complex trauma. Groups that are socially marginalized are forced to become critically aware of their oppression and the systemic forces which uphold it, creating vulnerability in these groups. Cvetkovich (2003) cites Stewart Hall speaking about his awareness of marginalization his by traumatic social structures as a diasporic subject:

> I could never understand why people thought these structural questions were not connected with the psychic—with emotions and identifications and feelings because, for me, those structures are things you live. I don't just mean they are personal, they are, but they are also institutional, they have real structural properties, they break you, destroy you (pp. 153-154).

In speaking about their experiences, members of marginalized communities give testimony to the existence and oppressive impacts of traumatic social structures by "providing a point of

mediation between systemic structures and the lived experience of them" (Cvetkovich, 2003, p. 123).

It is easy to become overwhelmed with the thought of confronting the issue of trauma when it is conceptualized as having such magnitude. Forter (2007) warns against assuming a fatalistic attitude of determinism when we are confronted with the magnitude of trauma as embedded in social structures, leaving us with:

> …liberalism's familiar hands-in-the-air gesture of appalled helplessness: these things have happened before; they will happen (and today are happening) again; they are part of nature or 'the human condition'; there is nothing we can do except remember, and memory always fails (p. 282).

Instead, he suggests that a willing recognition of "systems that traumatize" (Forter, 2007, p. 282) can be the impotence for confronting and dismantling them.

Similar sentiments are reflected in an interview by Cvetkovich (2003) with Kim Christensen where she discusses the gains fought and successfully won during the AIDS crisis, Vietnam War, and Civil Rights movement:

> "If you don't like something, change it." I think one of the reasons why people don't organize more now is because—I see in my students this sense of cynicism and hopelessness; like, ''Oh, we could never do anything about it.'' And I'm like—Yes, we didn't end the aids epidemic, but damn it, we changed the clinical trials process. . . . We changed the friggin' definition of AIDS. Right? Two demos at the CDC—whoops. Definition is changed. It's not that hard, if you just get your butts going. You can accomplish really amazing things. . . . And this harks back to the 1960s. We helped end the Vietnam War but we didn't end imperialism. Well, we helped end the Vietnam War,

> damn it. That's worth something. And legal segregation is over. It's not the end of oppression but it means something (p. 229).

Unfortunately, articles included in the sample for this study largely focused on how antecedents or traumatic contexts manifest in the private rather than the social sphere. However, the conceptualization of complex trauma put forth in this thesis provides an avenue for future examination of how traumatic structures manifest in the lives of patients experiencing complex trauma.

5.3.2 Challenging the Nature of Traumatic Experiences

Events precipitating psychological trauma have traditionally been considered rare (Burstow, 2005). However, epidemiological findings indicate that the prevalence of traumatic experiences is quite common, supporting an expanded definition of trauma (Fimiani et al., 2020). However, it should be noted that an expanded understanding and recognition of trauma does not necessarily mean an expansion of psychiatric recognition. The results of this study support an expansion by proposing an alternate understanding, finding that complex trauma can result from common and intimate or more public betrayals in everyday life, not just from singular atrocities. Rajiva (2023) describes this as a move "away from an exceptionalist or event-based approach to trauma" and a focus on "experiences that are 'normative, quotidian, and persistent'" (p. 1140). These "ordinary" traumas are partially representative of complex trauma and can broaden the understanding of psychological trauma as a whole (Rajiva, 2014).

This expansion should not, however, be taken as a move to broaden the definition of trauma to the point of losing meaning. Burstow (2003) warns that expansion "should not be used to equate what is blatantly unequal or to accommodate total subjectivism", stating that "we are not traumatized by an event or condition simply because it has distressed us all our lives or

because we ourselves apply the term *trauma*" (p. 1310). Instead, the findings of this study support the definition of trauma as socially constructed, context-dependent, and evolving. Broadening the understanding of trauma allows for recognition of the diversity of painful human experiences. Expanding understanding of psychological trauma to include recognition of complex traumatic experiences challenges totalizing and all-or-nothing narratives of trauma that privilege certain forms of suffering while ignoring the voices and experiences of marginalized others. This expansion provides an understanding of the nuances of traumatic experiences and an acknowledgment of the variation in what constitutes trauma across individuals, communities, and contexts. In doing so, the subjective experience of trauma is honoured to foster solidarity and empathy across the diversity of traumatic experiences, including complex trauma.

5.3.3 A Continuum of Consequences

It must be noted that the consequences identified in my results overwhelmingly describe areas of impairment. For this reason, it must be clarified that while these impairments are possible following the experience of complex trauma, not every individual will exhibit significant impairment in all – or even any – of these domains. The assertion made by McCormack et al. (2022) that trauma be viewed as a continuum is in accordance with a statement from Burstow (2003) that "… it would generally be preferable for practitioners to use a continuum conceptualization in work with traumatized clients" (p. 1310). Such a continuum creates the possibility of recognizing survivors other than those more obviously haunted by their traumatic experiences or who fit more perfectly in the categories of impairments contained within diagnostic manuals.

When impairment is localized, it may be less obvious to everyone except the individual experiencing it. Waldron (2013) uses the metaphor of 'black holes' to describe painful, localized impairment. She states:

> the character structures of many survivors show a surprising mosaic of areas of high-level psychological functioning coexisting with the potential for severe regression. It is as though we see 'black holes' in an otherwise throbbing, pulsating and alive galaxy (Waldron, 2013, p. 100).

Additionally, Leys (2000) references a case study by Hungarian psychoanalyst and colleague of Freud, Sándor Ferenczi (1932), exemplifying situated impairment following trauma:

> [W]hile her emotional life vanishes into unconsciousness and regresses to pure body-sensations, her intelligence, detached from all emotions, makes a colossal but ... completely unemotional progression, in the sense of an adaptation- performance by means of identification with the objects of terror... The trauma made her emotionally embryonic, but at the same time wise in intellectual terms, like a totally objective and unemotionally perceptive philosopher… (p. 133).

Localized impairment post-trauma is not a new occurrence. Yet, the archetypical trauma survivor discussed in the literature and recognized socially is one that demonstrates significant and pervasive impairment across several domains (e.g., the war veteran or the sexual assault survivor). This is not surprising considering that much of the trauma studies literature that is drawn upon for the provision of mental health care discusses trauma in relation to various diagnostic constructs and their corresponding diagnostic criteria. Individuals must meet a certain number of stipulated criteria to qualify for diagnosis. Therefore, individuals with localized impairment post-trauma are not good examples of the 'typical' trauma victims who receive

trauma-related psychiatric diagnoses. With PTSD not being the most common diagnosis post-trauma (Kliethermes et al., 2014), the individual with localized impairment is the true archetype of the trauma survivor, with those meeting criteria for trauma-related psychiatric diagnoses representing a subset of victims that fit the very stringent diagnostic schema of those performing assessments and applying diagnoses. Given that impairment can be localized, the possibility should be considered that the continuum of impairment related to the consequences of trauma may related to the intensity of impairment, not in how many domains the individual experiences impairment in.

Similarly, the positive consequence of post-traumatic growth was identified in the results as also sitting on the continuum of consequences. Yet, seemingly overlooked, post-traumatic growth was only mentioned in one article in the sample. While there is no denying the pain associated with trauma, trauma as the inciting force for an eternity of suffering is a flawed "trope of modernity" (Bourke, 2012, p. 25). When meaning is found in trauma, it can be the impetus for a metamorphosis, albeit painful. Post-traumatic growth is not a destination to be achieved once one is healed from trauma but rather exists in tandem with more painful consequences. In this way, individuals may experience impairment and growth concurrently on the continuum of consequences.

Caruth (2016) describes this continuum as "…the enigma of trauma as both destruction *and* survival…" (p. 72). In her book – *Unclaimed Experience: Trauma, Narrative, and History* – she references American writer John Hershey's book *Hiroshima*, which describes the overtaking of wildflowers following the bombing:

> Over everything—up through the wreckage of the city, in gutters, along the riverbanks, tangled among tiles and tin roofing, climbing on charred tree trunks—was a blanket of

> fresh, vivid, lush, optimistic green; the verdancy rose even from the foundations of ruined houses. Weeds already hid the ashes, and wildflowers were in bloom among the city's bones. The bomb had not only left the underground organs of plants intact; it had stimulated them. Everywhere were bluets and Spanish bayonets, goosefoot, morning glories and daylilies, the hairy-fruited bean, purslane and clotbur and sesame and panic grass and feverfew. Especially in a circle at the center, sickle senna grew in extraordinary regeneration, not only standing among the charred remnants of the same plant but pushing up in new places, among bricks and through cracks in the asphalt. It actually seemed as if a load of sickle-senna seed had been dropped along with the bomb (pp. 54 – 55).

From this passage, the flowers that bloomed following the bombing of Hiroshima can be taken as a metaphor for post-traumatic growth. The earth retains its wounds from the bombing yet blooms in rebellion, like the trauma victim who persists and grows from their traumatic experience to emerge anew. Cvetkovich (2003) further illustrates this point in her description of AIDS activism as a means of treatment, stating that "[a] different trauma culture emerges from the scene of aids activism—one that is not about spectacles of wounded helplessness but about trauma as the provocation to create alternative life worlds" (p. 237). In this way, trauma is viewed simultaneously as a painful experience and an opportunity to transform trauma into testimony to fight for a better world. With the literature sample being dominated by articles based on a perspective that views the consequences of trauma as symptomatic deficits, it is unsurprising that the post-traumatic growth was discounted in the results.

5.3.4 Traumatic Identities

Inherent to the discussion of interpersonal traumas, such as complex trauma, is the victim/perpetrator dichotomy. Victims are pitied, and perpetrators are demonized for their harmful acts. And with these identities comes a set of expected behaviours. Victims are expected to behave in a way that demonstrates their pain. Similarly, the behaviour of perpetrators is outlandish and unfathomable. But what then of the victims who perpetrate harm? Victims who heal? Perpetrators who behave in the ways we do? When does one's identity in the dichotomy switch? Although they are often presented as a pairing of binary oppositions, there can be a fluidity in the victim and perpetrator identities.

5.3.4.1 Victim/Perpetrator Fluidity. The epic poem *Gerusalemme Liberata* (Jerusalem Delivered) written by Torquanto Tasso (1581) is frequently referenced – including by Freud – as an illustration of the incoherence of the identities and behaviours of victims and perpetrators in interpersonal traumas (Caruth, 2016; Leys, 2000; Tasso, 1581). Caruth (2016) cites Freud's (1920 – 1922) overview of the tale:

> It's hero, Tancred, unwittingly kills his beloved Clorinda in a duel while she is disguised in the armour of an enemy knight. After her burial he makes his way into a strange magic forest which strikes the Crusaders' army with terror. He slashes with his sword at a tall tree; but blood streams from the cut and the voice of Clorinda, whose soul is imprisoned in the tree, is heard complaining that he has wounded his beloved once again (p. 2).

In this example, the simplified and obvious victim/perpetrator dichotomy is Clorinda/Tancred. However, Caruth argues that Tancred, too, is a victim of his own actions, being tormented by having inadvertently murdered his wife. Such an example is illustrative of the trauma, grief, and shame expressed by soldiers for the horrific acts they perpetrated during the war upon returning home.

Leys (2000), by contrast, is wary of this assertion, arguing that this perspective of the tale callously equates the trauma of victims with the alleged trauma of those who perpetrated acts against said victims:

> …if, according to [Caruth's] analysis, the murderer Tancred can become the victim of the trauma and the voice of Clorinda testimony to *his* wound, then Caruth's logic would turn other perpetrators into victims too-for example, it would turn the executioners of the Jews into victims and the "cries" of the Jews into testimony to the trauma suffered by the Nazis (p. 297).

This is a wise warning. Both Caruth's and Leys' perspectives should be considered in relation to complex trauma, which is interpersonal in nature, involving betrayal, and with the potential for continuous or ongoing disruption, such as in socially embedded traumatic contexts or intergenerational trauma.

Recognition of the possibility of blurred victim/perpetrator identities must come with a few caveats:

1. Not all perpetrators are victims.
2. Not all victims will go on to perpetrate harm.
3. Even perpetrators who have been victimized in their own rites should be held accountable for their actions.

Even with these stipulations, the blurring of victim and perpetrator identities comes with some uncomfortable implications. Namely, we punish victim/perpetrators whom we are more comfortable labelling solely as perpetrators. Similarly, those we have deemed perpetrators may be worthy of empathy, care, and honour of their traumatic experiences in addition to being held accountable for their actions. This is particularly important considering the significant rates of

trauma in forensic populations and carceral settings (Dye, 2018). Additionally, the consequences of complex trauma can produce a constellation of effects (i.e. relational and behavioural) that can manifest as various forms of violence or harm perpetrated against others.

5.3.4.2 (Im)perfect Victims. The idea of 'perfect' or 'ideal' victims is another important consideration when contemplating victim/perpetrator identities. The social construction of the perfect victim – as no such thing truly exists – is closely related to individual behaviours and identities (Bruckert & Law, 2018; Cvetkovich, 2003). Often the construction of the perfect victim is in relation to white, middle-class, heteronormative identities (Bruckert & Law, 2018). Relatedly, expected and acceptable behaviours are in response to experiences that are encountered by individuals with these identities and align with Puritan ideals. For example, the soldier returned from war experiencing flashbacks and nightmares, or the sexually inexperienced young woman who is ambushed by a stranger and raped. These are the experiences of and responses to trauma that are solidified in diagnostic criteria.

These behaviours and identities come under scrutiny when a claim is made to having experienced trauma. Such was the case of Holocaust survivors who were viewed as complicit in their persecution for being too passive and seemingly recovering too quickly and completely following their liberation. Similar suspicion is faced by victims of sexual assault, who are often questioned about how they may have invited the attack by consuming alcohol, dressing provocatively, or having any sort of relationship with the attacker. With their humanity undermined by stigmatization, 'imperfect' trauma victims may engage in "self-alteration (''passing''), self-erasure, or nullification of their apparent group identity to try to meet majoritarian norms" (Rentmeester, 2012, p. 368). These behaviours effectively create a reality where imperfect victims do not 'exist' through silencing and erasure because they do not report

their victimization, normalizing and perpetuating the perpetration of violence against marginalized community members. Similarly, when they are recognized, it is usually through likening their experience to that of a more perfect victim. Cvetkovich (2003) illustrates this appeal by AIDS victims:

> "In what form, then, does aids achieve its status as national trauma? While connected to the insidious and everyday forms of trauma generated by sexism, racism, and other forms of oppression, the spectacular body count of AIDS commands attention, and indeed comparisons with the body counts in wars are often used to underscore its devastating impact (p. 161).

In this case, the war veteran is used as the archetypical trauma survivor to compel sympathy for the 'imperfect' AIDS victims. The AIDS crisis is much less frequently cited as an exemplar of trauma, while it does reflect how trauma can be embedded in social structures.

5.3.4.3 Imperceptible Perpetrators. Finally, the perpetrators of trauma may not be individuals at all. When traumatic acts are committed by the state, seeking justice and holding the perpetrator accountable becomes complicated. Cvetkovich (2003) describes how individual testimony can illuminate perpetrations of harm that may have otherwise been imperceptible to those outside the experience. She speaks to this in relation to the structural-sourced harm that was perpetrated against AIDS victims:

> [T]estimony or being a witness is about understanding that your story is part of a larger story that is vital to pass on to other people, that you hold a piece of a puzzle that's part of a picture that other people need to see. What's vital here is that there was this larger picture of aids, that there was a criminally negligent response on the part of the government, the medical community, the pharmaceutical companies, and the educators of

> this country. And there was a social response in this country of fear and punishment and ostracizing people. That landscape is important, that we preserve that and we understand that, that we honor the idea that a very small group of people can change that terrain irrevocably" (Cvetkovich, 2003, pp. 194-195).

Her closing statement solidifies that while justice is hard sought, individual testimony of a collective experience can influence change in traumatic structures to prevent similar harms from being committed.

5.3.4.4 Othering. The designation of distinct victim and perpetrator identities serves as a means of 'othering' individuals with experiences of complex trauma and distancing ourselves from any implication in their experiences. Socially, we divert how we are complicit in the perpetuation of complex forms of trauma such as systemic injustice by othering victims and perpetrators as individuals either to be pitied and taken care of or admonished as being unlike us. This also has the unlikely effect of normalizing trauma since social implication is effectively erased. This can be characterized by the statement "the ordinary can turn on you can take you somewhere that you never intended to go and 'catch you up in something bad'" (Rajiva, 2023, p. 1147). The tendency of society to 'other' and pathologize victim/perpetrators of trauma serves to distance ourselves from any implication in committing the traumatic act. This distancing makes us complicit in the perpetuation of trauma through the denial or refusal to recognize the social embeddedness of trauma. Instead, we can either maintain a morbid fascination with the suffering of others under the guise of pity or maintain a willful ignorance. Ball (2000) cites Mark Seltzer (1997) in referencing wound culture as a "convening of the public around scenes of violence" wherein the public sphere is transformed into "pathological and voyeuristic psychosocial space" (p. 17). Conversely, conscious blindness to the trauma of others "constitutes the lived experience

of class and race divisions" (Cvetkovich, 2007, p. 460). Stories of trauma that are listened to must be perverse enough to be entertaining but not so grotesque that they create discomfort; otherwise, they are ignored or silenced (Cvetkovich, 2003). Effectively, denial and distancing render trauma simultaneously omnipresent and nowhere to be found. Trauma is transformed into a sort of spectre, sensational cases to be gawked at for voyeuristic consumption, entertainment, or even study, but nothing in terms of personal responsibility or concern. Cvetkovich (2003) cites Avery Gordon's concept of *haunting* to illustrate the spectre of trauma, stating that "the past remains simultaneously hidden and present in both material practices and the psyche, in both visible and invisible places" (p. 38).

5.3.5 Pathologizing Trauma

The focus on negative or problematic consequences of complex trauma in the results can be seen as a symptom of the dominant perspective of psychological trauma as pathological. Trauma as pathology is frequently cited in terms of the DSM. Critics have labelled the DSM as "contradictory, impractical, presumptuous, path, apologizing, arbitrary, evasive, confused, insensitive, and reductionistic" (Burstow, 2005, p. 442) for failing to recognize the complexity of the issue of trauma and instead equating and reducing it to illness. These critiques are particularly relevant to the case of complex trauma, which is poorly recognized in the DSM. Therefore, when pathology is the frame of reference for trauma discourse, complex trauma is effectively erased.

Burstow (2005) levels her critique of trauma as per the DSM as equating experiential hardship in response to adversity with medical disorders "in the absence of proof that anything medical is occurring" (p. 438). She states, "what essentially the diagnostic label does is define the cloak of invulnerability as normative and define the knowledge and knowledge-based

responses of the survivor as symptoms" (Burstow, 2005, p. 435). In this way, trauma-related diagnostic constructs serve to regulate what responses to traumatic experiences are acceptable and what are pathological (Burstow, 2003). For example, qualifiers related to symptom duration (i.e. more than six months) or meeting a certain number of specified symptom criteria suggest that a transformation occurs in the sixth month or in experiencing one additional symptom: normal suffering is transformed into trauma. Furthermore, given that these diagnostic constructs are subject to narrow criteria, identifying traumatization is overly simplified into box-ticking and a yes/no determination.

The deficit-based perception of diagnostic manuals, including the DSM, flattens the experience of traumatic consequences to mere symptoms instead of a nuanced spectrum, thereby ignoring positive outcomes and discounting adaptive responses as pathological. For example, negative schematic renderings of the world and others are indicated as diagnostic criteria for PTSD in the DSM-V-TR (APA, 2022a). This assertion attests that victims' perceptions are distorted and that the world is fundamentally safe. From this perspective, it is seen "as essential [that] survivors return to a more "normal" orientation in which they can once again trust in the goodness of others" (Burstow, 2003, p. 1297) despite the victims' real-life experience of unsafety. This is not a reasonable expectation.

Burstow (2005) gives a critique of PTSD in stating that the 'post' namesake of the diagnosis "creates the impression that the problem is gone, and that the problem is mistakenly reacting as if it were not" (Burstow, 2005, p. 436). This point is particularly relevant to cases of complex trauma, where cumulative exposure does not have a definitive before/after the traumatic experience: "the problem remains" (Burstow, 2005, p. 436). In this way, it is suggested that victims have an adaptive worldview that incorporates the possibility of harm which they have

experienced. Instead of having victims betray the memory of their painful experiences, Burstow (2003) proposes we honour individuals' realities and assist them in navigating "… a world in which terrible things really do happen, where a potential rapist really might be around the corner, where mosques really are desecrated, and where systemic oppression continues" (Burstow, 2003, p. 1311). Certainly, whether schemata are maladaptive is a matter of degree.

Others suggest that beyond viewing consequences as pathological instead of adaptive, the application of trauma-related diagnoses is inherently misguided and pathologizes the individual over the contexts which produced the harm. As stated by D'Andrea et al. (2012), diagnostic constructs may be "an approach to mental health that further pathologizes individuals living in toxic environments, rather than the environments themselves" (p. 189). Yet, they argue that a diagnostic frame offers a pragmatic solution to inadequate recognition of complex trauma (D'Andrea et al., 2012). However, biomedical and diagnostic frames of reference are not the only sources for pragmatic solutions. In fact, given that psychiatric diagnoses are already afforded far more importance than they should be credited with, continued expansion from this standpoint may do more harm than good.

Harm generated from viewing trauma as pathology relates to a displacement of power and responsibility. Diagnostic manuals such as the DSM are constructions of psychiatric disciplinary power. The contents and application of these manuals are subject to use only by disciplinary members. When diagnostic manuals are used more generally to understand traumatic experiences, we have a problematic displacement of power where "…[psy]-experts, not victims, name victims' experiences" (Burstow, 2003, p. 1299). Subjection to the opinion of experts to justify or deny the existence of an individual's trauma also places them at the mercy of these psy-experts for treatment. As stated by Burstow (2005):

> Insofar as they are theorized as symptoms of a disease, the stage is set for the practitioner to try to eradicate the symptoms, whether through drugs or other means… To phrase the problem differently, the stage is now set for practitioners to try to deprive traumatized people of necessary and vital coping skills in the name of help (pp. 433 – 434).

Furthermore, the description of trauma as an illness maintains a neutral standpoint in terms of cause by maintaining a focus instead of the consequences of the traumatic experience rather than the context (Bourke, 2012).

Cvetkovich (2003) further supports this critique, stating that psy-science places too much emphasis on describing PTSD symptoms. She argues that an emphasis on the supposed biomedical 'origins' of trauma is a full-circle return to the 19th-century iteration of railway spine and shell shock and the body as the locus where psychological trauma exerts its' influence and is to be cured (Cvetkovich, 2003). Indeed, this return to the body in understanding trauma is seen in the results of this study, with many articles focusing on the biological consequences of trauma, particularly of the brain and neuroendocrine system (Lucero, 2018; Matte-Landry et al., 2023; Zilberstein, 2014).

Pathologizing perspectives of trauma also have implications for treatment. Notably, the idea of traumatic memories as pathological and in need of reintegration into the life narrative may be problematic in cases of complex trauma. Because of the chronicity of complex trauma, recollection of the traumatic experience is complicated by the diffusion of the traumatic experience over time. Additionally, when it is socially embedded, recollection may not be possible because the traumatic experience is an ongoing process. For example, when trauma is a collective experience, individual recollection and intervention cannot address the magnitude of the trauma's impact. In these cases, Cvetkovich (2003) suggests that treatment and recovery are

"not a literal process" and that "there may be no ready cure for this trauma, especially since the recovery of its memory is a collective process" (p. 41). These complications may be related to why the many psy-treatment strategies for addressing trauma may not be effective in treating complex trauma.

In addition to pathologizing individuals and consequences of complex trauma, psy-science can also pathologize behaviours that may serve as a form of treatment. Cvetkovich (2003) examines *acting-out* alongside *working through*, where acting out is viewed as a pathological re-enactment of the traumatic experience and working through as a cathartic and contained transformative experience freeing the individual from the grips of the traumatic memory. She states that the "performative and expressive functions" of acting out may be "a crucial resource for responding to trauma" (Cvetkovich, 2003, p. 164). One such example of acting-out as a therapeutic and transformative process is through activism and advocacy, with the suggestion that "mourning and militancy are intertwined rather than opposed" and that "by looking at activism as a response to psychic needs, one that emerges from a desire to project the internal externally" (Cvetkovich, 2003, p. 165). In this way, acting out can indeed by a transformative experience, not only for individuals, but also as a means to give testimony to collective experiences of trauma.

5.3.6 Knowledge, Power, and Psychological Trauma

The concept of gaze is frequently referenced in post-structural discussions of disciplinary perspectives and practice. Parker & Wiltshire (1995) adapt Foucault's conception of the medical disciplinary gaze in their discussion of the various elements of nursing practice. According to Parker & Wiltshire (1995), the medical gaze is medical knowledge about the human body that is enacted in the practice of medicine to exert "coercive power" and authority over the "patient as

an object of study" (p. 156). Medical knowledge is taken to be objective, scientific, and de-contextualized. A modernist perspective would uphold this type of knowledge as superior to other contextualized forms of knowing. This perceived superiority affords medicine a great deal of power. The medical gaze is relevant to nursing because of how medical knowledge is employed in the practice of nursing.

In their study on the nursing handover and documentation, Parker & Wiltshire (1995) discuss nursing practice as being conceived of three interrelated elements all relating to vision and gaze: *reconnoitre* (the nursing scan), *savoir* (the nursing gaze), and *connaisance* (the nursing look). Reconnoitre is described as the surveillance of patients which nurses engage in for the administration of treatment and care. Savoir represents the body of knowledge nurses draw upon when enacting care, including the application of medical knowledge. Finally, connaisance – meaning literally to be acquainted with someone – references the intimate and contextualized ways of knowing and being with another beyond the application of facts or 'objective' knowledge, as is done with savoir.

In reviewing the types of knowledge conveyed in nursing documentation and handover, Parker & Wiltshire (1995) noted that nurses frequently defaulted their documentation to terms of savoir or their knowledge of the patient and their condition. Conversely, during the nursing handover, they discussed the intimate details of their being with their patients.

Nurses, having an awareness of medical knowledge and an ability to apply it in their practice, are granted prestige for this proxy to medicine. This privileging of medical knowledge is also seen in mental health practice, including in the provision of care to patients with complex trauma histories. Nurses focus on maintaining their knowledge of pharmacological agents,

trauma-informed therapeutic interventions, and the various diagnostic constructs used to communicate their patients' emotional/relational/behavioural difficulties or 'condition'.

However, there is evidence to suggest that the application of medical knowledge or 'savoir' is not the most effective intervention for patients with mental health challenges, including trauma. Shiner et al. (2018) found that >20% of patients receiving pharmacological treatment for PTSD had significant enough improvement to no longer qualify for a PTSD diagnosis. Additionally, there were no significant differences in effectiveness between the five medications included in the study (i.e. fluoxetine, paroxetine, sertraline, topiramate, and venlafaxine). A study by Benish et al. (2008) found that there were no significant in effectiveness between bona fide treatments for PTSD. Relatedly, a study by Saxon et al. (2017) found that the effectiveness of the therapist had the most significant effect on patient retention, while therapeutic modality had little effect. Furthermore, MacLeod et al. (2023) suggest that the view of trauma from the biomedical model poses a barrier to the administration of trauma-informed care in the Canadian context.

This critique is a testament to the need for a variety of perspectives, voices, and discourses for a well-rounded understanding of psychological trauma. This need is particularly evident when considering the expansiveness of the implications of recognizing complex trauma. Psy-science alone is not amenable to explaining the concept of complex trauma, and therefore, we should not defer our understanding to that of one perspective. Instead, I heeded the advice from Burstow (2003) "that we not cede the trauma territory to psychiatry, but continue to build our own discourse while carefully monitoring this usage to ensure that it is serving us" (p. 1302). It is my hope that in conducting this concept analysis of complex trauma, we can begin to have

more constructive, productive, and cooperative interdisciplinary conversations on how to understand and address the concept of psychological trauma at large.

5.4 Implications for Nursing

Conceptualization of complex trauma that diverges from the dominant discourse brings exciting opportunities for nursing research, practice, education, and policy. Implications for each of these domains are discussed below.

5.4.1 Research

This conceptualization of complex trauma allows for additional research of concept in relation to dominant trauma discourses and how this manifests in the provision of mental health care. Through examination of the discourses of psychological trauma, to what extent the concept of complex trauma is recognized can be determined along with what voices and perspectives are privileged, marginalized, or absent. Investigating the use of language across disciplines in conveying the concept of complex trauma can elucidate the construction of meaning for the concept between disciplines. Interdisciplinary research can reduce siloed efforts related to complex trauma and promote a more robust understanding of the concept between disciplines. Furthermore, qualitative research can situate how individuals with complex trauma histories experience the provision of mental health care and if trauma-informed care measures are applicable and sensitive to their experiences of complex trauma.

5.4.2 Practice

While it is certainly necessary for nurses to have a knowledge of the biomedical model of mental health care and trauma given that it is pervasive in our health care system, it is also true that this should not be the entirety of nursing knowledge and practice. Given the dubious nature of existing evidence supporting interventions from the biomedical perspective for complex

trauma, it would be prudent to examine the potential for interventions and practices based on the strengths of nursing theory and practice. The relational nature of complex trauma and existing evidence of the therapeutic benefit of the caregiver-patient relationship suggests that enactment of nursing connaisance may be a powerful and overlooked nursing practice intervention for the provision of trauma-informed care for patients with complex trauma histories. This concept analysis highlights the contextual factors that may be present for individuals and diversifies the understanding of the consequences to enhance nurses' understanding of the overall experience of complex trauma by their patients. This way, nurses can begin to engage with complex trauma in their nursing practice beyond how it is understood in the biomedical model.

5.4.3 Education

Expanding nursing education related to psychological trauma beyond the dominant discourse of trauma as illness can help nurses engage with the concept of complex trauma more effectively. Recognition of and teaching on the dispersion of social power and how this has manifested historically to produce complex trauma in individuals and communities can promote awareness and sensitivity in nurses when engaging with individuals with various intersecting identities, including the continuum of victim and perpetrator identities. This teaching should be conducted alongside education on countertransference to enhance the processing of difficult emotions that can interfere with the therapeutic nurse-patient relationship. Additionally, teaching about the power and privilege held by nurses as agents that enact psychiatric power and control can help nurses situate themselves within the matrix of social power in relation to the perpetration of and response to complex trauma.

5.4.4 Health Policy

While the recognition of complex trauma by nurses in clinical practice is certainly important, addressing complex trauma only in healthcare recognizes the problem too late. Broader systemic and social issues that contribute to the production of complex trauma cannot be addressed in the clinical setting. However, health policy can bridge the gap by supporting a concerted effort to address systemic forces that produce or exacerbate complex trauma. Promoting appropriate trauma-informed support for communities and individuals experiencing complex trauma can reduce paternalistic and coercive methods of control, such as removing children from their homes for placement in foster care. Recognition and teaching of how complex trauma is often recreated or produced by powerful social structures (i.e. law, corrections, education, health care) can be helpful in reducing stigma, promoting empowerment, and cultivating empathy for individuals and communities that have been and continue to be victimized by these social forces. Nurses can be instrumental in these efforts by engaging in health advocacy at various levels, including individually for their patients and socially in the form of political action and lobbying for change.

5.5 Strengths & Limitations

5.5.1 Strengths

This study possesses theoretical, methodological, and practical strengths. Being grounded in post-modern and post-structural perspectives allowed for analysis of historical evolution and the influence of power structures on the production of the concept of complex trauma. Such a perspective allows results to be contextually situated and understood. Methodologically, evolutionary concept analysis allowed a contextualized understanding of the concept of complex trauma that can continue to evolve over time. By putting forth a conceptualization of complex trauma not defined by psychiatric illness, this study offers a means to bridge relevant knowledge

from various disciplines for application to nursing practice. Furthermore, this conceptualization of complex trauma expands our understanding of psychological trauma as a whole.

5.5.2 Limitations

Contextual considerations taken in this study also helped identify its limitations. With most studies published in North America, results and discussion may have limited relevance for other geographic, cultural, and political contexts. Further research in non-North American contexts can help illuminate situated and nuanced understanding of the concept. Additionally, because articles were selected for analyzing complex trauma broadly, articles that examined particular populations (i.e. refugees) or traumatic experiences (i.e. childhood molestation) were excluded. Further research is advised to determine how the concept of complex trauma may be applicable to understanding the experiences of these populations. Finally, while measures were taken in the study design to try to capture perspectives from diverse disciplines, the sample was ultimately dominated by psy-science language and conceptualization. For this reason, other terms may be used to refer to the concept of complex trauma that did not appear in the sample for this analysis.

Conclusion

In conclusion, this evolutionary concept analysis clarifies the intricate nuances and interplay of various factors in creating the phenomenon of complex trauma and demonstrates its relevance for nursing. A historical overview of the construction of psychological trauma reviewed the forces that shaped the understanding of the concept and how complex trauma is insufficiently accounted for within dominant discursive frames of psy-science, highlighting the need for conceptual clarity of complex trauma for the administration of trauma-informed care. By examining the intricate interplay of factors constituting the antecedents, attributes, and

consequences of complex trauma, the ways trauma is influenced by systemic oppression, traumatic social structures, and victim/perpetrator identities are clarified, with implications for understanding how complex trauma is produced, recognized, and treated. This understanding not only demonstrates the personal/private experiences of complex trauma but also how it manifests in public acts and collective experiences. Ultimately, this concept analysis proposes an alternative frame of reference for nurses to engage with to identify, understand, and further examine the concept of complex trauma without resorting to pathologizing perspectives. With this alternative stance and conceptual clarity, my hope is that nurses can better engage with complex trauma, psychological trauma, and related concepts in a way that aligns with respect for patient's autonomy and their experiences to provide trauma-informed care.

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Appendices

Table 1

Posttraumatic stress disorder trauma exposure criteria in DSM-III through DSM-5

	DSM-III (1980)	DSM-III-R (1987)	DSM-IV (1994) / DSM-IV-TR (2000)*	DSM-5 (2013)
Trauma definition	A. Recognizable stressor that would evoke significant symptoms of distress in almost everyone	A. Event that is outside the range of usual human experience and that would be markedly distressing to almost anyone, involving serious threat to life or physical integrity (Text): Usually experienced with intense fear, terror, and helplessness	A1. Traumatic event involving actual or threatened death or serious injury or a threat to physical integrity A2. Intense fear, helplessness, or horror (in children, may be expressed by disorganized or agitated behavior)	Traumatic event involving actual or threatened death, serious injury, or sexual violence (Text): Emotional reactions to the traumatic event (e.g., fear, helplessness, horror) no longer in Criterion A
Trauma examples (text)	Natural disaster (flood, earthquake), accidental incident (car accident with serious physical injury, airplane crash, large fire), and deliberate incident (bombing, torture, death camp, rape, assault, military combat) NOT simple bereavement, chronic illness, business loss, or marital conflict	Natural disaster (flood, earthquake), accidental incident (car accident with serious physical injury, airplane crash, large fire, collapse of physical structure), and deliberate incident (bombing, torture, death camp, rape, assault, military combat) NOT simple bereavement, chronic illness, business loss, or marital conflict	(Experienced directly): Military combat, violent personal assault, (sexual assault, physical attack, robbery, mugging), being kidnapped, being taken hostage, terrorist attack, torture, incarceration as prisoner of war or in concentration camp, natural or man-made disaster, severe automobile accident; also being diagnosed with life-threatening illness (DSM-IV only) (Witnessed): Violent assault, accident, war, or disaster, or unexpectedly witnessing a dead body or body parts (Via close relative/friend): Violent personal assault, serious accident, serious injury; sudden, unexpected death; life-threatening disease of one's child	(Experienced directly): Military combat, violent personal assault, (sexual assault, physical attack, robbery, mugging), being kidnapped, being taken hostage, terrorist attack, torture, incarceration as prisoner of war or in a concentration camp, natural or man-made disaster, severe automobile accident, sudden and catastrophic medical incident (e.g., waking during surgery, anaphylactic shock) (Witnessed): Threatened or serious injury, unnatural death, physical or sexual abuse of another person, medical catastrophe (e.g., life-threatening hemorrhage) (Via close relative/friend): Incidents that are violent or accidental: assault, suicide, serious accident or

				injury, unnatural death (Repeated/extreme trauma): First responder collecting human remains; police officer repeatedly exposed to details of child abuse
Exposure criteria		• Direct exposure: Serious threat to one's life or integrity • Witnessed: Seeing another person who has recently been, or is being, seriously injured or killed as the result of an accident or physical violence • Indirect exposure through others: Learning of exposure of one's children, spouse, or other close relatives and friends • Property destruction: Sudden destruction of one's home or community	Experienced, witnessed, or was confronted with trauma to self or others. (Text): • Direct exposure: Direct personal experience • Witnessed: Trauma to another person • Indirect exposure through others: Learning of exposure to family member or other close associate/close friend	• Direct exposure: To self • Witnessed: Eyewitness of trauma to others • Indirect exposure through others: Learning of exposure to close family member or close friend • Repeated or extreme exposure to aversive details of trauma (exposure through electronic media, television, movies, or pictures, applies only if work-related)

* Because posttraumatic stress disorder (PTSD) criteria are identical in DSM-IV and DSM-IV-TR, the DSM-IV/-TR column in the tables refer to both editions. There are, however, some differences in the text between DSM-IV and DSM-IV-TR, most notably including mention of potential for auditory hallucinations or paranoid ideation in severe or chronic cases; addition of bipolar and generalized anxiety disorder to the list of disorders associated with PTSD; revision of lifetime PTSD prevalence in community-based studies from 1% to 14% to 8%, and a new statement that the highest rates of PTSD are found in survivors of rape, military combat and captivity, and ethnically or politically motivated internment and genocide, in one-third to more than one-half of victims; and inclusion of new information about familial patterns of PTSD transmission.

Note: This table is extracted from North et al. (2016)

Table 3

Screening Pilot

Covidence Article #	Primary Researcher	Thesis Supervisor	Agreement
1164	Yes	Yes	Agree
494	Yes	Yes	Agree
537	Yes	No	*Conflict*
743	Yes	Yes	Agree
550	Yes	Yes	Agree
720	Yes	Yes	Agree
505	No	No	Agree
1350	No	No	Agree
514	Yes	Yes	Agree
508	No	No	Agree
1068	No	No	Agree
1255	No	Yes	*Conflict*
738	No	No	Agree
744	No	No	Agree
582	No	No	Agree
583	Yes	No	*Conflict*
600	No	No	Agree
674	Yes	Yes	Agree
677	No	No	Agree
698	Yes	Yes	Agree
625	Yes	No	*Conflict*
949	No	No	Agree
957	No	No	Agree
968	Yes	Yes	Agree
975	Yes	Yes	Agree
			84% agreement

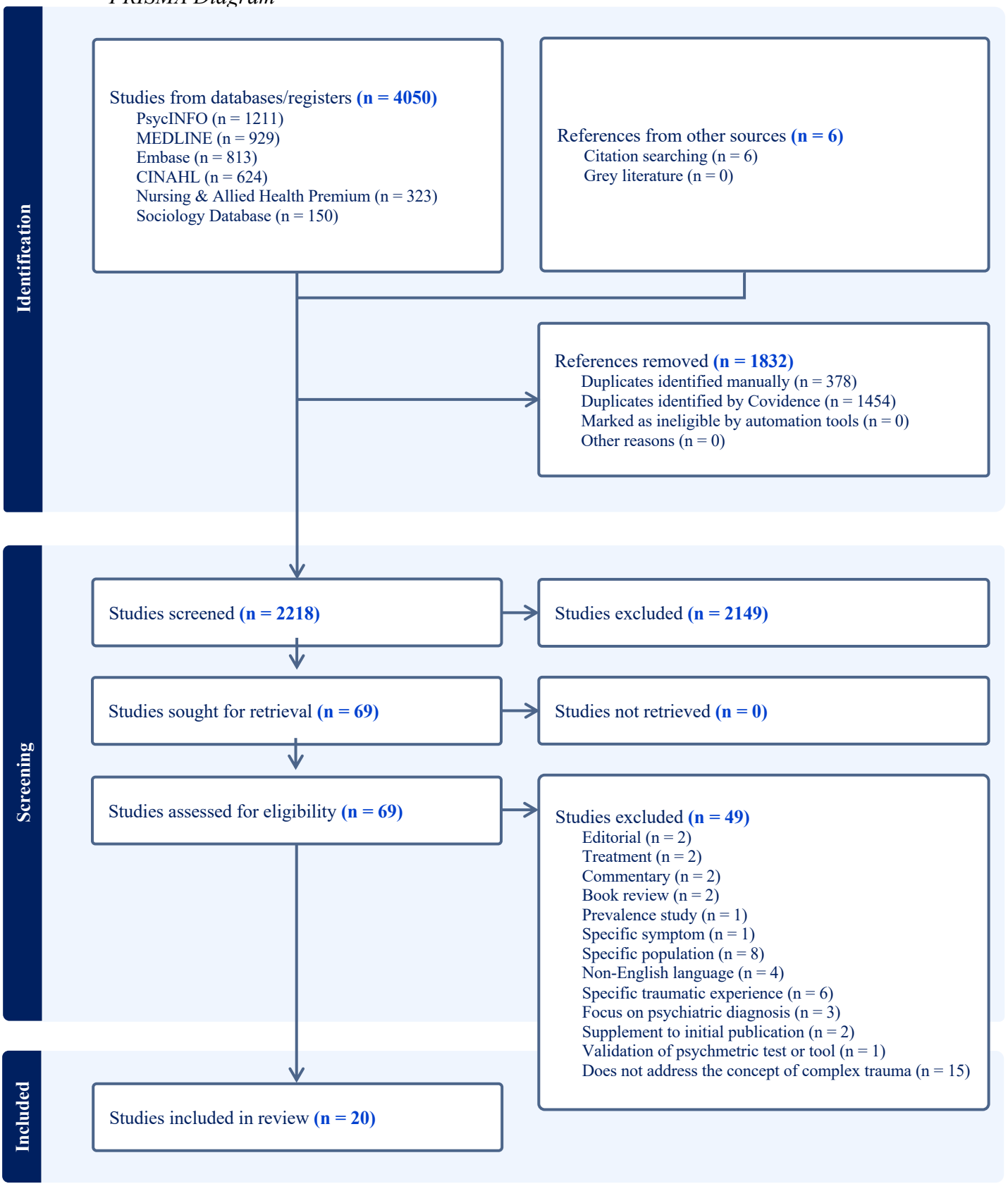
Table 4

Inter-Rater Reliability: Title and Abstract Screening

Reviewer A	Reviewer B	A Yes, B Yes	A Yes, B No	A No, B Yes	A No, B No	Proportionate Agreement	Yes Probability	No Probability	Random Agreement Probability	Cohen's Kappa
Jean-Laurent Domingue (JLD)	Jennifer Neves (JN)	41	65	159	1952	0.89896	0.00431	0.86629	0.8706	0.21917

Table 5

PRISMA Diagram



Appendix 1

Database Descriptions

APA PsychInfo (OVID)

Includes journal articles, books, book chapters, dissertations and government reports in psychology and related disciplines.

Cumulative Index of Nursing and Allied Health Literature (CINAHL) (EBSCO)

CINAHL is the authoritative resource for nursing and allied health professionals, students, educators and researchers. This database provides indexing for 2,928 journals from the fields of nursing and allied health. The database contains more than 1,000,000 records dating back to 1981.

EMBASE

The Excerpta Medica database (EMBASE) is a major biomedical and pharmaceutical database indexing over 3,500 international journals.

Medline (OVID)

Ovid MEDLINE covers the international literature on biomedicine, including the allied health fields and the biological and physical sciences, humanities, and information science as they relate to medicine and health care. Information is indexed from approximately 3,900 journals published world-wide.

Nursing and Allied Health Premium

Provides full text journals, scholarly literature, clinical training videos, reference materials, and evidence-based resources to support the study of the many aspects of nursing or the allied health professions, including physical therapy, rehabilitation radiography, dietetics, dental hygiene, and the clinical laboratory sciences. The clinical skills videos cover important topics such as health care safety, mental health, emergency planning, checking vital signs, and more.

Sociology Database

This database covers the international literature of sociology and social work, including culture and social structure, history and theory of sociology, social psychology, substance abuse and addiction and more. This collection provides full-text coverage of many core titles included in Sociological Abstracts and Social Services Abstracts.

Appendix 2

APA PsychInfo Search Strategy

Database: APA PsycInfo <1806 to September Week 1 2023> Search Strategy:

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1 exp complex trauma/ (361)
2 complex ptsd/ (655)
3 (complex* adj1 trauma*).ab,id. (1299)
4 (complex and trauma*).ti. (752)
5 (complex posttraumatic or complex post-traumatic or complex ptsd or cptsd).ti,id. (695)
6 (complex posttraumatic or complex post-traumatic or complex ptsd or cptsd).ab. /freq=3 (430)
7 or/1-6 (2172)
8 limit 7 to (english language and yr="1980 -Current") (1951)
9 limit 8 to all journals (1211)

Appendix 3

Embase Search Strategy

Database: Embase Classic+Embase <1947 to 2023 September 18> Search Strategy:

---

1 (complex adj1 trauma*).tw. (1106)
2 (blunt or abdominal or surg* or fracture* or penetrating or extremit* or wound or reconstruction or transplant* or CRPS or fixation).tw. (5344397)
3 1 not 2 (629)
4 (complex posttraumatic or complex post-traumatic or complex ptsd or cptsd or c-ptsd).ti. (413)
5 (complex posttraumatic or complex post-traumatic or complex ptsd or cptsd or c-ptsd).ab. /freq=3 (365)
6 3 or 4 or 5 (1087)
7 limit 6 to yr="1980 -Current" (1075)
8 limit 7 to english language (992)
9 limit 8 to (conference abstract or conference paper or "conference review") (179)
10 8 not 9 (813)

Appendix 4

Ovid MEDLINE Search Strategy

Database: Ovid MEDLINE(R) ALL <1946 to September 18, 2023> Search Strategy:

---

1 (complex adj1 trauma*).tw,kf. (904)
2 (blunt or abdominal or surg* or fracture* or penetrating or extremit* or wound or reconstruction or transplant* or CRPS or fixation).tw,kf. (3841636)
3 1 not 2 (501)
4 (complex posttraumatic or complex post-traumatic or complex ptsd or cptsd or c-ptsd).ti,kf. (520)
5 (complex posttraumatic or complex post-traumatic or complex ptsd or cptsd or c-ptsd).ab. /freq=3 (378)
6 3 or 4 or 5 (1005)
7 limit 6 to (english language and yr="1980 -Current") (928)

Appendix 5

CINAHL Search Strategy

CINAHL

#	Query	Results
S8	**S3 OR S4 OR S5 Narrow by Language: - english**	**624**
S7	S3 OR S4 OR S5 **Narrow by Date: (1980-present)**	674
S6	S3 OR S4 OR S5	674
S5	AB ("complex posttraumatic" or "complex post-traumatic" or "complex ptsd" or cptsd or c-ptsd)	270
S4	TI ("complex posttraumatic" or "complex post-traumatic" or "complex ptsd" or cptsd or c-ptsd)	175
S3	TI S1 NOT S2	443
S2	TI ((blunt or abdominal or surg* or fracture* or penetrating or extremit* or wound or reconstruction or transplant* or CRPS or fixation)) OR AB ((blunt or abdominal or surg* or fracture* or penetrating or extremit* or wound or reconstruction or transplant* or CRPS or fixation))	958,272
S1	TI (complex N1 trauma*) OR AB (complex N1 trauma*)	680

Appendix 6

Sociology Database Search Strategy

Set#	Searched for	Results
S1	subject("complex trauma")	25
S2	abstract((complex NEAR/1 trauma*)) OR title((complex NEAR/1 trauma*))	102
S3	abstract(("complex posttraumatic" or "complex post-traumatic" or "complex ptsd" or cptsd or c-ptsd)) OR title(("complex posttraumatic" or "complex post-traumatic" or "complex ptsd" or cptsd or c-ptsd))	67
S4	subject(("complex ptsd" or "complex post-traumatic" or "complex posttraumatic"))	22
S5	[S1] OR [S2] OR [S3] OR [S4]	157
S6	([S1] OR [S2] OR [S3] OR [S4]) AND stype.exact("Scholarly Journals")	151
S7	([S1] OR [S2] OR [S3] OR [S4]) AND (stype.exact("Scholarly Journals") AND la.exact("ENG"))	150
S8	([S1] OR [S2] OR [S3] OR [S4]) AND (stype.exact("Scholarly Journals") AND la.exact("ENG") AND pd(19800101-20231231))	150

Appendix 7

Nursing & Allied Health Premium Search Strategy

Set#	Searched for	Results
S1	subject("complex trauma")	35
S2	abstract((complex NEAR/1 trauma*)) OR title((complex NEAR/1 trauma*))	288
S3	abstract((blunt or abdominal or surg* or fracture* or penetrating or extremit* or wound or reconstruction or transplant* or CRPS or fixation)) OR title((blunt or abdominal or surg* or fracture* or penetrating or extremit* or wound or reconstruction or transplant* or CRPS or fixation))	471111
S4	[S2] NOT [S3]	203
S5	subject(("complex posttraumatic" or "complex post-traumatic" or "complex ptsd" or cptsd or c-ptsd))	30
S6	title(("complex posttraumatic" OR "complex post-traumatic" OR "complex ptsd" OR cptsd OR c-ptsd)) OR abstract(("complex posttraumatic" or "complex post-traumatic" or "complex ptsd" or cptsd or c-ptsd))	154
S7	[S1] OR [S4] OR [S5] OR [S6]	335
S8	([S1] OR [S4] OR [S5] OR [S6]) AND stype.exact("Scholarly Journals")	325
S9	([S1] OR [S4] OR [S5] OR [S6]) AND (stype.exact("Scholarly Journals") AND pd(19800101-20231231))	325
S10	([S1] OR [S4] OR [S5] OR [S6]) AND (stype.exact("Scholarly Journals") AND la.exact("ENG") AND pd(19800101-20231231))	323

Appendix 8

Article Catalogue

Catalogue Code	Publication Date	Discipline	Author	Title	Covidence #
PSYCH01	1992	Psychiatry	Herman	Complex PTSD: A syndrome in survivors of prolonged and repeated trauma	474
PSY01	2005	Psychology	Cook et al.	Complex Trauma in Children and Adolescents	206
PSYCH02	2005	Psychiatry	van der Kolk	Developmental Trauma Disorder: Toward a rational diagnosis for children with complex trauma histories	4028
MHC01	2006	Mental Health Counselling	Williams	Complex Trauma: Approaches to Theory and Treatment	1181
PSY02	2009	Psychology	Cloitre et al.	A developmental approach to complex PTSD: Childhood and adult cumulative trauma as predictors of symptom complexity	188
PSY03	2011	Psychology	Ford	Assessing Child and Adolescent Complex Traumatic Stress Reactions	3131
PSY04	2012	Psychology	Resick et al.	A critical evaluation of the complex PTSD literature: Implications for DSM-5	915
PSY05	2012	Psychology	D'Andrea et al.	Understanding interpersonal	4050

				trauma in children: why we need a developmentally appropriate trauma diagnosis.	
SW01	2014	Social Work	Zilberstein	Neurocognitive considerations in the treatment of attachment and complex trauma in children	1209
PSY06	2014	Psychology	Kliethermes et al.	Complex Trauma	1616
SW02	2016	Social Work	Mahoney & Markel	An integrative approach to conceptualizing and treating complex trauma	725
PSY07	2017	Psychology	Ford	Complex trauma and developmental trauma disorder in adolescence	1437
SW03	2018	Social Work	Lucero	Written in the body?: Healing the epigenetic molecular wounds of complex trauma through empathy and kindness	703
SW04	2018	Social Work	Dye	The impact and long-term effects of childhood trauma	3106
NSG01	2019	Nursing	Isobel et al.	Psychological trauma in the context of familial relationships: A concept analysis	520
PSY08	2019	Psychology	Van Nieuwenhove	Interpersonal features in complex trauma etiology, consequences, and treatment: A literature review	1126
PSY09	2020	Psychology	Fimiani et al.	Traumas and Their Consequences According to	1431

				Control-Mastery Theory	
PSY10	2022	Psychology	McCormack et al.	Complex trauma and posttraumatic growth: A bibliometric analysis of research output over time	747
PSY11	2022	Psychology	Pfluger et al.	Internalizing Mental Health Disorders and Emotion Regulation: A Comparative and Mediational Study of Older Adults with and Without a History of Complex Trauma Exposure	2713
SW05	2023	Social Work	Matte-Landry et al.	Cognitive Outcomes of Children with Complex Trauma: A Systematic Review and Meta-Analyses of Longitudinal Studies	1720

Note: Catalogue codes consist of an abbreviation referencing the article's disciplinary association and a number indicating the order in which it was published within the disciplinary collection. The following abbreviations denote the corresponding discipline.

MHC – Mental health counselling

NSG – Nursing

PSY – Psychology

PSYCH – Psychiatry

SW – Social work

Appendix 9

Article demographics

Catalogue code	Country	Article type	Setting	Population / Sample
PSYCH01	USA	Literature review	N/A	Children and adults
PSY01	USA	Conceptual article	N/A	Children
PSYCH02	USA	Literature review	N/A	Children and adolescents
MHC01	USA	Conceptual article	N/A	Children
PSY02	USA	Survey study	Inpatient; Outpatient; Community	Adult women with childhood or adult cumulative trauma
PSY03	USA	Literature review	N/A	Children and adolescents
PSY04	USA	Literature review	N/A	Extant literature of CPTSD studies with adult samples
PSY05	USA	Review and conceptual article	N/A	Children
SW01	USA	Conceptual	N/A	Children and adolescents
PSY06	USA	Conceptual	N/A	Children
SW02	USA	Qualitative study	Inpatient; Outpatient; Community	Clinicians
PSY07	USA	Literature review	N/A	Adolescents
SW03	USA	Literature review	N/A	Children
SW04	USA	Literature review	N/A	Children
NSG01	Australia	Conceptual	N/A	Families

PSY08	Belgium	Literature review	N/A	Literature examining interpersonal features of complex trauma
PSY09	Italy	Theoretical	N/A	Children
PSY10	Australia	Descriptive repeat cross-sectional study	N/A	Peer-reviewed publications related to complex trauma and posttraumatic growth
PSY11	Switzerland	Comparative and mediational study	Community	Older adults with and without a history of complex trauma exposure
SW05	Canada	Systematic review and meta-analyses	N/A	Children

Appendix 10

Antecedents – Quotations

Catalogue code	Publication date	Author	Title	Antecedents		
				Inescapable	***Vulnerability of psyche***	***Perverse relationship***
PSYCH01	1992	Herman	Complex PTSD: A syndrome in survivors of prolonged and repeated trauma	"In contrast to the circumscribed traumatic event, prolonged, repeated trauma can occur only where the victim is in a state of captivity, unable to flee, and under the control of the perpetrator" (p. 377).		
PSY01	2005	Cook et al.	Complex Trauma in Children and Adolescents			"The response of the child's social support system, and particularly the child's mother, is perhaps the most important factor in determining the child outcomes and is more important than objective elements of the victimization itself. Caregiver support is a critical mediating factor in determining how children adapt to victimization" (p. 395).
PSYCH02	2005	van der Kolk	Developmental Trauma Disorder: Toward a rational diagnosis for children with complex trauma histories	"Unlike adults, children do not have the option to report, move away or otherwise protect themselves; they depend on their caregivers for their very survival" (p. 404).	"Because early experiences occur in the context of a developing brain, neural development and social interaction are inextricably intertwined. As Don Tucker has said: "For the human brain, the most important information for successful development is conveyed by the social rather than the physical environment" (p. 402).	"Under most conditions, parents are able to help their distressed children restore a sense of safety and control. The security of the attachment bond mitigates against trauma-induced terror. When trauma occurs in the presence of a supportive, if helpless, caregiver, the child's response is likely to mimic that of the parent — the more disorganized the parent, the more disorganized the child" (p. 403). "If children are exposed to unmanageable stress and if the caregiver does not take over the function of modulating the child's arousal, as occurs when children are exposed to family dysfunction or violence, the child will be unable to organize and categorize experiences in a coherent fashion" (p. 404).

MHC01	2006	Williams	Complex Trauma: Approaches to Theory and Treatment			"To lose a symbol of attachment is to lose a part of oneself. The irony lies in the need to attach, even if the attachment figure is perpetrating an atmosphere of violence and abuse" (p. 323).
PSY02	2009	Cloitre et al.	A developmental approach to complex PTSD: Childhood and adult cumulative trauma as predictors of symptom complexity			
PSY03	2011	Ford	Assessing Child and Adolescent Complex Traumatic Stress Reactions			
PSY04	2012	Resick et al.	A critical evaluation of the complex PTSD literature: Implications for DSM-5	"Complex trauma refers to a sub-set of traumatic stressors that undermine the person's capacity for biopsychosocial self-regulation as a result of developmentally adverse intentional acts by other human beings (interpersonal) that are inescapable and lead	"The unique trademark of complex trauma, however, has also been described as a compromise in the individual's selfdevelopment, which occurs during a critical window of development in childhood, when self-definition and self-regulation are being formed (Courtois &Ford, 2009)" (p. 242)	
PSY05	2012	D'Andrea et al.	Understanding interpersonal trauma in children: why we need a developmentally appropriate trauma diagnosis.			"Given the central role that attachment appears to play in developing socioemotional skills, it stands to reason that children who have experienced direct assaults to their caregiving system (e.g., directly in the form of maltreatment or indirectly as witnesses to domestic violence) would experience further disruptions in social development" (p. 190).
SW01	2014	Zilberstein	Neurocognitive considerations in the treatment of attachment and complex trauma in children	"Those children are currently considered to suffer from complex trauma, which signifies that early and prolonged maltreatment within a caregiving relationship generates developmental sequelae affecting multiple domains. Through the repetitive and inescapable nature of the traumatic experiences, the interruption of developmental growth, and the caregiver's failure to provide adequate safety and protection, the child risks becoming conditioned and developmentally compromised in various ways that include biology, attachment and relationships, affective and behavioral regulation, cognition, attention and dissociation, learning, self-concept and systems of meaning" (pp. 336-337).	"Traumatic experiences refer to occurrences that are so overwhelming that the individual cannot integrate cognitive and emotional aspects of that experience. In complex trauma, this problem is amplified and generates developmental consequences" (p. 340).	"In order to make sense of and cope with overwhelming traumatic experiences, children must rely on attachment figures (if they are available) and their own limited cognitive understandings of the event (Perry & Pollard, 1998; Streeck-Fischer & van der Kolk, 2000). Since the child who experiences complex trauma often lacks needed attachment relationships and cognitive abilities, these children often face the most overwhelming experiences with the least internal and external resources for coping with them. Attachment, trauma and cognition thus act as overlapping and related processes that influence each other in multifaceted ways" (p. 337).

PSY06	2014	Kliethermes et al.	Complex Trauma		"It is theorized that complex trauma outcomes are influenced by the developmental period during which trauma exposure occurs, but that they also disrupt subsequent development. Therefore, complex trauma outcomes consist of common traumatic stress reactions (eg, PTSD, depression, insecure attachment, dissociation) and developmental disruptions caused by contextual factors related to complex trauma exposure (eg, impaired caregiving, multiple placements) and traumatic stress reactions (eg, chronic hyperarousal disrupting development of emotion regulation)" (p. 341).	"Children with complex trauma histories often do not experience safety within their relationships and are not able to use their primary caregiving relationships as a secure base on which to develop internal working models of themselves and others" (p. 345). "By definition, complex trauma is thought to occur in caregiving or relational contexts, and attachment has been implicated in the expression of complex trauma outcomes" (p. 343).

SW02	2016	Mahoney & Markel	An integrative approach to conceptualizing and treating complex trauma		"...occur at developmentally vulnerable times in the victim's life, such as early childhood…" (p. 3).	"If the parents or caregivers fail to meet the early needs for mirroring or idealization, damage to the self-structure often results (Kohut, 1977) and persists into adulthood. The self-psychological perspective of trauma centers on the notion that "psychic trauma results from inadequate selfobject experiences" and faulty selfobject empathy (Wolf, 1988, p. 209). In addition, trauma is formulated in terms of affect dysregulation and proneness to fragmentation. Trauma constitutes not only an objective threat to physical survival, but also a threat to the development and survival of the self (Wolf, 1988). Symptoms of trauma result from the conflict to maintain needed relationships and pursuing self-differentiation (Connors, 1994). Self psychologists define the essence of human experience in terms of the individual's need to organize his or her psychological experience into a cohesive configuration. Selfobjects, a term used by Kohut, are objects whose functions are experienced as part of the self and in the service of maintaining and restoring the self (Tolpin & Kohut, 1980). Selfobjects, or persons who provide empathic responsiveness to sustain self-cohesion, are often parents or parental figures (Silverstein, 2007)" (p. 6).

PSY07	2017	Ford	Complex trauma and developmental trauma disorder in adolescence	"Complex trauma refers to a sub-set of traumatic stressors that undermine the person's capacity for biopsychosocial self-regulation as a result of developmentally adverse intentional acts by other human beings (interpersonal) that are inescapable and lead to persistent insecurity" (p. 221).	"'"Adolescents who are exposed to developmentally adverse interpersonal traumatic stressors (e.g., maltreatment, prolonged family or community violence, torture, exploitation, genocide) especially in formative developmental windows and transitions (i.e., both early childhood and adolescence) are at risk for developing symptoms and functional impairment that extend well beyond Posttraumatic Stress Disorder (PTSD) and encompass a wide range of psychiatric disorders and behavioral, relational, legal, and educational problems (D'Andrea, Ford, Stolbach, Spinazzola, & van der Kolk, 2012; Ford, Grasso, Greene, et al., 2013; D. J. Grasso, Dierkhising, Branson, Ford, & Lee, 2015)" (p. 220).	
SW03	2018	Lucero	Written in the body?: Healing the epigenetic molecular wounds of complex trauma through empathy and kindness		"The timing, duration, and frequency of early positive and traumatic experiences are important given the sequential and activity dependent nature of brain development (Gaskill and Perry 2017; Teicher and Samson 2016). Early experiences sculpt brain development such that, '[m]altreatment is a chisel that shapes a brain to contend with strife, but at the cost of deep, enduring wounds'" (p. 443).	
SW04	2018	Dye	The impact and long-term effects of childhood trauma		"According to DeBellis, Hooper, and Sapia (2005), early childhood trauma is more detrimental than trauma experienced later in life due to the developmental processes that are occurring, neurologically and psychologically" (p. 384).	
NSG01	2019	Isobel et al.	Psychological trauma in the context of familial relationships: A concept analysis			"Traumatic acts and dynamics occurring in the intersubjective space of attachment relationships can crucially affect trust and safety but also affect the construction of self" (p. 554).
PSY08	2019	Van Nieuwenhove	Interpersonal features in complex trauma etiology, consequences, and treatment: A literature review	"When the dimension of an impossibility to escape is included as a core-defining element of complex trauma (Herman, 1992), it is clear that other contexts could also be considered as complex traumatic situations. These contexts are also characterized by interpersonal situations in which others cannot be trusted and include being a victim of domestic violence, sex trafficking or slave trade, being a child soldier, and being a refugee or civilian war victim who has experienced torture, genocide, campaigns, or other forms of organized violence" (p. 906).	"When complex trauma occurs during attachment development, abuse-related schemata are formed, which develop into deeply engrained interpersonal patterns that cause difficulties on multiple levels of interpersonal functioning (intimacy, trust, communication, et cetera)" (p. 913).	"Frequently, involvement of the caregiving system or the disruption of primary attachment bonds seems to be a prerequisite" (p. 906).

PSY09	2020	Fimiani et al.	Traumas and Their Consequences According to Control-Mastery Theory	"The concept of complex trauma, originally proposed by Judith Herman (1992), refers to the experience of long-lasting conditions of an emotionally overwhelming threat from which one cannot escape" (p. 119).	"Such interpersonal traumas may produce serious consequences, especially if they occur during the developmental period, when selfdefinition and self-regulation are being formed and consolidated" (p. 119). "And it is easy to understand how the immaturity of psychic functioning during the developmental period makes it easier for children than for adults to develop irrational pathogenic beliefs when confronted with adverse experiences" (p. 124).	
PSY10	2022	McCormack et al.	Complex trauma and posttraumatic growth: A bibliometric analysis of research output over time	"Herman (1992) and Lawson (2017) also provided the “what is” specification to complex trauma as a situation in which it is impossible for the individual to escape the trauma" (p. 246).	"Courtois et al. (2009) provided one decisive definition that states that complex trauma is an interpersonal conflict specifically caused by harm from a responsible adult at critical periods in the individual’s life (i.e., childhood or adolescence), leading to psychological and behavioral changes, and vulnerability to potentially traumatic events throughout adulthood" (p. 246).	
PSY11	2022	Pfluger et al.	Internalizing Mental Health Disorders and Emotion Regulation: A Comparative and Mediational Study of Older Adults With and Without a History of Complex Trauma Exposure			"However, in a family environment of child maltreatment, children are exposed to caregivers who cannot satisfy this educational task appropriately" (p. 2).
SW05	2023	Matte-Landry et al.	Cognitive Outcomes of Children With Complex Trauma: A Systematic Review and Meta-Analyses of Longitudinal Studies		"Given the existence of sensitive periods of enhanced vulnerability to toxic stress, the timing oftrauma, that is the onset and recency of trauma, has been recurrently hypothesized to differentially impact functioning across a variety of domains, including cognitive functioning" (p. 2744). "it is regularly argued that impaired HPA axis functioning and brain alterations act as putative stressmediating mechanisms through which trauma occurring during sensitive developmental periods exerts a detrimental influence on cognitive functioning later in life" (p. 2744).	

Appendix 11

Attributes – Quotations

Catalogue code	Publication date	Author	Title	Attributes			
				Interpersonal act	***Element of betrayal***	***Prolonged, repeated or chronic exposure***	***Psychologically distressing***
PSYCH01	1992	Herman	Complex PTSD: A syndrome in survivors of prolonged and repeated trauma	"The methods which enable one human being to control another are remarkably consistent. These methods were first systematically detailed in reports of so-called "brainwashing" in Amencan prisoners of war (Biderman, 1957; Farber et aL, 1957). Subsequently, Amnesty International (1973) published a systematic review of methods of coercion, drawing upon the testimony of political prisoners from widely differing cultures. The accounts of coercive methods given by battered women (Dobash and Dobash, 1979; NiCarthy, 1982, Walker, 1979), abused children (Rhodes, 1990), and coerced prostitutes (Lovelace and McGrady, 1980) bear an uncanny resemblance to those hostages, political prisoners, and survivors of concentration camps" (p. 383).		"In contrast to the circumscribed traumatic event, prolonged, repeated trauma can occur only where the victim is in a state of captivity, unable to flee, and under the control of the perpetrator. Examples of such conditions include prisons, concentration camps, and slave labor camps. Such conditions also exist in some religious cults, in brothels and other institutions of organized sexual exploitation, and in some families" (pp. 377-378).	
PSY01	2005	Cook et al.	Complex Trauma in Children and Adolescents	"The immediate and long-term consequences of children's exposure to maltreatment and other traumatic experi-ences are multifaceted. Emotional abuse and neglect, sexual abuse, and physical abuse, as well as witnessing domestic violence, ethnic cleansing, or war, can interfere with the development of a secure attachment within the caregiving system" (p. 390).		"Chronic trauma exposure may lead to an increasing overreliance on dissociation as a coping mechanism that, in turn, can exacerbate difficulties with behavioral management, affect regulation, and self-concept" (p. 394).	

PSYCH02	2005	van der Kolk	Developmental Trauma Disorder: Toward a rational diagnosis for children with complex trauma histories	"The traumatic stress field has adopted the term "complex trauma" to describe the experience of multiple, chronic and prolonged, developmentally adverse traumatic events, most often of an interpersonal nature (eg, sexual or physical abuse, war, community violence) and early-life onset. These exposures often occur within the child's caregiving system and include physical, emotional, and educational neglect and child maltreatment beginning in early childhood" (p. 402).	"…children with complex trauma develop a view of the world that incorporates their betrayal and hurt" (p. 407).	"The traumatic stress field has adopted the term "complex trauma" to describe the experience of multiple, chronic and prolonged, developmentally adverse traumatic events, most often of an interpersonal nature (eg, sexual or physical abuse, war, community violence) and early-life onset" (p. 402).	"At the core of traumatic stress is a breakdown in the capacity to regulate internal states. If the distress does not ease, the relevant sensations, affects, and cognitions cannot be associated — they are dissociated into sensory fragments14 — and, as a result, these children cannot comprehend what is happening or devise and execute appropriate plans of action" (p. 403).
MHC01	2006	Williams	Complex Trauma: Approaches to Theory and Treatment	"The focus of this article is on the experience of complex trauma that is caused by multiple factors: Family violence, including emotional and physical abuse; witnessing and neglect; disease; and the experience of war share common threads" (p. 322).	"To survive, children must not lose their attachment to their caregiver. To do so would threaten their life, physically and mentally. Freyd (1994) suggests that in order for these conditions to continue, a child must create a betrayal amnesia based on the social need to continue with the attachment. Betrayal amnesia produces conflict between social dependence and an external reality. Loyalty to the betrayer or caregiver requires the child to selectively admit information into consciousness, creating an unconscious selective memory of the event" (pp. 324-325).	"When exposure to a catastrophic or violent event does not allow a person to resume living an undisrupted life, or if the type of trauma is both repetitive and cumulative, the result will be persistent complex manifestations that affect psychological, social, and biological systems" (pp. 321-322).	
PSY02	2009	Cloitre et al.	A developmental approach to complex PTSD: Childhood and adult cumulative trauma as predictors of symptom complexity	"The principles of treatment intervention for Complex PTSD and Developmental Trauma Disorder are driven by the interpersonal nature of most of the traumas associated with these proposed disorders. Childhood traumas associated with Developmental Trauma Disorder most often occur at the hands of attachment figures (Briere et al., 2008; Roth, Newman, Pelcovitz, van der Kolk, & Mandel, 1997) and traumas associated with Complex PTSD often emerge from a history of sustained relational or interpersonal traumas beginning with early life attachment" (p. 406).		"Exposure to sustained, repeated or multiple traumas, particularly in the childhood years, has been proposed to result in a complex symptom presentation" (p. 399).	
PSY03	2011	Ford	Assessing Child and Adolescent Complex Traumatic Stress Reactions				"Features of PTSD (e.g., psychological and physiological distress in reaction to reminders of traumatic events, avoidance of such reminders and the associated distress, emotional numbing, hyperarousal) are evident in children's complex traumatic stress reactions" (p. 225).

PSY04	2012	Resick et al.	A critical evaluation of the complex PTSD literature: Implications for DSM-5	“CPTSD was originally conceptualized as the sequela of complex trauma, or trauma that is prolonged in duration and of early life onset (Herman, 1992b). The most common exemplar is prolonged trauma of an interpersonal nature, particularly childhood sexual abuse (CSA; Choi, Klein, Shin, & Lee, 2009; Jackson, Nissenson, & Cloitre, 2010; Roth et al., 1997), or childhood trauma and neglect more broadly (Classen et al., 2006; Dorahy et al., 2009)” (p. 242).		"Most recently, however, in a report on an expert clinician survey of best treatment for CPTSD, complex trauma was described as “circumstances such as childhood abuse or genocide campaigns under which they are exposed for a sustained period to repeated instances or multiple forms oftrauma,” typically of an interpersonal nature, and occurring under circumstances where escape is not possible due to physical, psychological, maturational, environmental, or social constraints" (p. 242).	"Research examining aspects of CPTSD, from etiology to symptomatology, have also helped elucidate many mechanisms contributing to the very complex and dynamic processes underlying all forms of posttraumatic adaptation, from resilience and recovery to severe and chronic psychological distress" (p. 247).
PSY05	2012	D'Andrea et al.	Understanding interpersonal trauma in children: why we need a developmentally appropriate trauma diagnosis.	"Numerous studies have shown that exposure to interpersonal trauma can chronically and pervasively alter social, psychological, cognitive, and biological development (Burns et al., 1998; Cook et al., 2005; Spinazzola et al., 2005). Children experience many forms of traumatic interpersonal adversity in addition to physical and sexual abuse" (p. 187).	"…other factors such as the chronicity, physical violation, and betrayal of trust involved in victimization play an important role in determining the risk and severity of posttraumatic symptoms and impairment experienced by children and adolescents…" (p. 188).	"Studies on the sequelae of serial or repeated childhood maltreatment, neglect, and interpersonal violence demonstrate that these types of victimization place children and adolescents at risk of chronic and severe coexisting problems with emotion regulation, impulse control, attention and cognition, dissociation, interpersonal relationships, and attributions" (p. 188).	"Childhood exposure to victimization is prevalent and has been shown to contribute to significant immediate and long-term psychological distress and functional impairment" (p. 187).
SW01	2014	Zilberstein	Neurocognitive considerations in the treatment of attachment and complex trauma in children	"Maltreatment experiences may include chronic or severe neglect, physical or sexual abuse, exposure to domestic violence, intensive, painful medical conditions, war or refugee experiences or even a single catastrophic traumatic event. Often the child suffering from complex trauma faces a combination of those experiences (Ford & Courtois, 2009)" (p. 337).		"Those children are currently considered to suffer from complex trauma, which signifies that early and prolonged maltreatment within a caregiving relationship generates developmental sequelae affecting multiple domains. Through the repetitive and inescapable nature of the traumatic experiences, the interruption of developmental growth, and the caregiver’s failure to provide adequate safety and protection, the child risks becoming conditioned and developmentally compromised in various ways that include biology, attachment and relationships, affective and behavioral regulation, cognition, attention and dissociation, learning, self-concept and systems of meaning" (pp. 336-337).	

PSY06	2014	Kliethermes et al.	Complex Trauma	"...these findings suggest that outcomes conceptualized as complex trauma are common following exposure to chronic, interpersonal trauma" (p. 341).		"The definition of complex traumatic experiences has evolved into one that refers to severe events that tend to be chronic" (p. 340).	
SW02	2016	Mahoney & Markel	An integrative approach to conceptualizing and treating complex trauma	Type II trauma, or complex trauma, refers to repeated exposure to threats of violence, including social and political through war or torture, domestic violence (victim or witness), and childhood abuse (Paivio & Pascual-Leone, 2010). As Courtois and Ford (2009) further note, these conditions are often physically violating and terrifying or horrifying, typically chronic rather than one-time or limited, and they compromise the individual's personality development and basic trust in primary relationships" (p. 3).	"Betrayal trauma theory offers another framework for understanding the impact of caregiver-perpetrated or family-perpetrated trauma on children and adolescents. According to this theory, the violation of trust that occurs when children are victimized by caregivers or others in positions of trust constitutes a threat to their survival.82 Because a child's awareness of caregiver-inflicted trauma might cause withdrawal from that caregiver, thereby disrupting the attachment relationship that affords safety and protection to the child, it may be psychologically necessary for the child to remain unaware of the betrayal. This so-called betrayal blindness, although enabling the child to preserve a sense of security, may be associated with significant difficulties related to dissociation (the mechanism by which betrayal blindness occurs), cognition, mental health symptoms, and interpersonal functioning" (p. 347).	"Type II trauma, or complex trauma, refers to repeated exposure to threats of violence…" (p. 3).	
PSY07	2017	Ford	Complex trauma and developmental trauma disorder in adolescence	"Adolescents who are exposed to developmentally adverse interpersonal traumatic stressors (e.g., maltreatment, prolonged family or community violence, torture, exploitation, genocide)" especially in formative developmental windows and transitions (i.e., both early childhood and adolescence) are at risk for developing symptoms and functional impairment that extend well beyond Posttraumatic Stress Disorder (PTSD) and encompass a wide range of psychiatric disorders and behavioral, relational, legal, and educational problems" (p. 220).	"...unlike DESNOS, EPCACE was not linked primarily to CT in childhood, but instead to prolonged exposure at any age to catastrophic loss of primary resources (Hobfoll, 2012), institutional betrayal (Smith & Freyd, 2014), or extreme forms of inhumanity (e.g., concentration camps, terrorism, captivity with imminent threat of death, torture)" (p. 223).	"Adverse childhood experiences (Felitti et al., 1998), poly-victimization (Finkelhor, Ormrod, & Turner, 2007), cumulative trauma (D. Grasso, Greene, & Ford, 2013; Karam et al., 2014; Martin, Cromer, DePrince, & Freyd, 2013; Ogle, Rubin, & Siegler, 2013), and re-traumatization (Duckworth & Follette, 2012) are descriptions of sub-types of CT that have been shown to be associated with severe psychosocial problems in childhood and adolescence (Bethell, Newacheck, Hawes, & Halfon, 2014; Clarkson Freeman, 2014; D'Andrea et al., 2012; Ford, Connor, & Hawke, 2009; Ford, Elhai, Connor, & Frueh, 2010; Ford, Wasser, & Connor, 2011) and adulthood (Briere, Kaltman, & Green, 2008; Cloitre et al., 2009; Karam et al., 2014)" (p. 221).	

SW03	2018	Lucero	Written in the body?: Healing the epigenetic molecular wounds of complex trauma through empathy and kindness				
SW04	2018	Dye	The impact and long-term effects of childhood trauma	"Complex trauma refers to the exposure of multiple or chronic and prolonged, developmentally adverse traumatic events, most often of interpersonal nature and early-life onset. These exposures occur within the child's caregiving system and include physical, emotional and educational neglect and child maltreatment beginning in early childhood" (p. 382).		"Complex trauma refers to the exposure of multiple or chronic and prolonged, developmentally adverse traumatic events, most often of interpersonal nature and early-life onset" (p. 382).	
NSG01	2019	Isobel et al.	Psychological trauma in the context of familial relationships: A concept analysis	"Many of the various forms of psychological traumas are known to develop interpersonally within important human relationships, with a significant difference in effect demonstrated between psychological traumas that occur as a result of environments or events, compared to those that occur over time and across the life span within relationships between people (Forbes et al., 2012; Herman, 1992; Schore, 2002; Van der Kolk, 2014). Trauma that occurs within familial relationships of attachment is known to have particularly profound and complex effects (Siegel, 2001; Steele, 2003)" (p. 549).	"In adulthood, the outcome of relational traumas, betrayal traumas, attachment traumas, or interpersonal traumas may be recognizable as complex trauma rather than developmental" (p. 555).	"Complex trauma refers to the effect that results from cumulative co-occurrence of different types of trauma typically beginning in childhood (Cohen et al., 2008); usually repeated or chronic" (p. 552).	
PSY08	2019	Van Nieuwenhove	Interpersonal features in complex trauma etiology, consequences, and treatment: A literature review	"Accordingly, complex trauma has been defined as the experience of prolonged and repeated atrocious events that typically occur in the interpersonal sphere" (p. 903).	"Frequently, involvement of the caregiving system or the disruption of primary attachment bonds seems to be a prerequisite. The perpetrator, who is supposed to be a source of safety and stability, abuses and thereby betrays the child" (p. 906).	"Minimally, complex trauma involves prolonged and repeated harmful, dangerous, extreme events" (p. 905).	"In sum, research has focused extensively on providing support for the idea that being exposed to prolonged and repeated interpersonal traumatic events is associated with harmful and diverse patterns of psychological disturbances" (p. 906).
PSY09	2020	Fimiani et al.	Traumas and Their Consequences According to Control-Mastery Theory	"Such chronic and prolonged experiences are typically of an interpersonal nature and include physical, sexual, and psychological abuse and/or physical and emotional neglect " (p. 119).		"Such chronic and prolonged experiences are typically of an interpersonal nature and include physical, sexual, and psychological abuse and/or physical and emotional neglect" (p. 119).	
PSY10	2022	McCormack et al.	Complex trauma and posttraumatic growth: A bibliometric analysis of research output over time	"The term, complex trauma, is generally recognized as referring to an individual's exposure to multiple or prolonged severe stressors, which are interpersonal in nature" (p. 246).	"For the purpose of this study, we define complex trauma as describing events that have the potential to: (a) impact an individual with severe psychological or emotional distress; (b) be cumulative (i.e., multiple and/or ongoing), interpersonal, or both; and (c) involve a betrayal of trust" (p. 246).	"The term, complex trauma, is generally recognized as referring to an individual's exposure to multiple or prolonged severe stressors, which are interpersonal in nature" (p. 246).	"Although experiencing a potentially traumatic event does not cause ongoing psychological difficulties for the vast majority of people, for a minority it can be debilitating with an increase in the levels of distress correlated with an increase in the number and types of potentially traumatic events" (p. 246).

PSY11	2022	Pfluger et al.	Internalizing Mental Health Disorders and Emotion Regulation: A Comparative and Mediational Study of Older Adults With and Without a History of Complex Trauma Exposure	"CTE was operationalized as the presence of at least two interpersonal traumatic/adverse experiences in childhood and/or adolescence" (p. 4).		"...many affected minors do not experience only a single type of maltreatment (e.g., physical abuse, emotional neglect), but are exposed to multiple types of abuse and neglect (Scher et al., 2004; Green et al., 2010). This accumulation of maltreatment experiences within the caregiving system has been referred to as complex trauma exposure..." (p. 2).	
SW05	2023	Matte-Landry et al.	Cognitive Outcomes of Children With Complex Trauma: A Systematic Review and Meta-Analyses of Longitudinal Studies	"The National Child Traumatic Stress Network (NCTSN; Cook et al., 2003) proposed the term "complex trauma" to encompass both children's exposure to multiple, interpersonal traumatic events and the wide-ranging, long-term effects ofthis exposure" (p. 2743).	"Experiences of severe deprivation in institutions follow the early loss of a parent (e.g., death or abandonment) and are characterized by social and emotional deprivation and cognitive understimulation (Bick & Nelson, 2016; Carr et al., 2020; Sonuga-Barke et al., 2017). Institutional deprivation is also characterized by malnutrition, limited access to physical resources and facilities, poor hygiene, and overcrowding, conditions that may have incremental effects on child development (Carr et al., 2020; Sonuga-Barke et al., 2017). These notable differences notwithstanding, maltreatment and institutional deprivation both have multiple and similar effects on child development (e.g., dysregulation in attachment and relationships, affect dysregulation, poor cognitive functioning; Bick & Nelson, 2016; Carr et al., 2020; Milot et al., 2018). Thus, both experiences share common key features pertaining to complex trauma…" (pp. 2743-2744).	"It was further deemed appropriate given the definition of complex trauma, that is, exposure to repeated and multiple traumatic events during sensitive developmental periods—not a unique traumatic event at a specific point in time" (p. 2748).	

Appendix 12: Consequences – Quotations

Cat. code	Pub. date	Auth.	Title	Consequences							
				Somatic	***Biology***	***Affect***	***Cognition***	***Schema***	***Relational***	***Behaviour***	***P.T.G.***
PSYCH01	1992	Herman	Complex PTSD: A syndrome in survivors of prolonged and repeated trauma	"Some survivors may conceptualize the damage of their prolonged captivity primarily in somatic terms. Nonspecific somatic symptoms appear to be extremely durable and may in fact increase over time… The clinical literature also suggests an association between somatiza-tion disorders and childhood trauma... Over time, they begin to complain, not only of insomnia, startle reactions and agitation, but also of numerous other somatic symptoms. Tension headaches, gastrointestinal disturbances, and abdominal, back, or pelvic pain are extremely common. Survivors also frequently complain of tremors, choking sensations, or nausea" (p. 380).	"Repetitive trauma appears to amplify and generalize the physiologic symptoms of PTSD. Chronically traumatized people are hypervigilant, anxious and agitated, without any recognizable baseline state of calm or comfort" (p. 380).	"There are people with very strong and secure belief systems, who can endure the ordeals of prolonged abuse and emerge with their faith intact. But these are the extraordinary few. The majority experience the bitterness of being forsaken by man and God (Wiesel, 1960). These staggering psychological losses most commonly result in a tenacious state of depression" (p. 381).	"Disturbances in time sense, memory, and concentration are almost universally reported… The virtuosic feats of dissociation seen, for example, in multiple personality disorder, are almost always associated with a childhood history of massive and prolonged abuse..." (p. 381).	"Subjection to a relationship of coercive control produces profound alterations in the victim's identity. All the structures of the self-the image of the body, the internalized images of others, and the values and ideals that lend a sense of coherence and purpose-are invaded and systematically broken down" (p. 382).	"Even after escape, it is not possible simply to reconstitute relation-ships of the sort that existed prior to captivity. All relationships are now viewed through the lens of extremity. Just as there is no range of moderate engagement or risk for initiative, there is no range of moderate engagement or risk for relationship. The survivor approaches all relationships as though questions of life and death are at stake, oscillating between intense attachment and terrified withdrawal. In survivors of childhood abuse, these disturbances in relationship are further amplified. Oscillations in attachment, with formation of intense, unstable relationships, are frequently observed" (p. 385).		

PSY01	2005	Cook et al.	Complex Trauma in Children and Adolescents		"Dissociation is associated with biological alterations in the brain (eg, decreased left hippocampal volume in women)14 and in cerebrospinal fluid levels of neurotransmitters and their metabolites15 that are consistent with the biological mechanisms described above as likely substrates of complex trauma" (p. 393).	"Affect regulation begins with the accurate identification of internal emotional experiences, which requires the ability to differentiate among states of arousal, interpret these states, and apply appropriate labels (eg, “happy,” “frightened”). Deficits in the ability of maltreated children to discriminate among and label affective states in both self and others have been demonstrated as early as age 30 months. Following the identification of an emotional state, a child must be able to express emotions safely and to modulate or regulate internal experience. Complexly traumatized children show impairment in both of these skills. Children with complex trauma histories evidence both behavioral and emotional expressions of pathology due to impaired capacity to self-regulate and self-soothe" (p. 393).	"Maltreated children make three fundamental dissociative adaptations in their awareness of self and experience: automatization of behavior (ie, deficits in judgment, planning, and organized goal-directed behavior), compartmentalization of painful memories and feelings, and detachment from awareness of emotions and self" (p. 394). "The sensory and emotional deprivation associated with neglect appears to be particularly detrimental to cognitive development, with neglected infants and toddlers demonstrating delays in expressive and receptive language development, as well as deficits in overall IQ" (p. 395).	"Early caregiving relationships provide the relational context in which children develop the earliest psychological representations of self, other, and self in relation to others" (p. 392).	"When the child-caregiver relationship is the source of trauma, the attachment relationship is severely compromised; 80% of maltreated children develop insecure attachment patterns" (p. 392).	“Complex childhood trauma is associated with both undercontrolled and overcontrolled behavior patterns… Overcontrolled or undercontrolled behavior may be due to the re-enactment of specific aspects of traumatic experiences (eg, aggression, self-injurious behaviors, sexualized behaviors, controlling relationship dynamics)” (p. 394).	

PSYCH02	2005	van der Kolk	Developmental Trauma Disorder: Toward a rational diagnosis for children with complex trauma histories	"...physiological dysregulation may lead to multiple somatic problems, such as headaches and stomachaches, in response to fearful and helpless emotions" (p. 406).	"Chronic trauma interferes with neurobiological development (Ford, see page 410) and the capacity to integrate sensory, emotional and cognitive information into a cohesive whole" (p. 402).	"At the core of traumatic stress is a breakdown in the capacity to regulate internal states… Being left to their own devices leaves chronically traumatized children with deficits in emotional self-regulation" (pp. 403-404).	“Chronically traumatized children tend to suffer from distinct alterations in states of consciousness, including amnesia, hypermnesia, dissociation, depersonalization and derealization, flashbacks and nightmares of specific events, school problems, difficulties in attention regulation, disorientation in time and space, and sensorimotor developmental disorders” (p. 404-405).	“In addition to the conditioned physiological and emotional responses to reminders characteristic of PTSD, children with complex trauma develop a view of the world that incorporates their betrayal and hurt” (p. 406-407).	"they organize their relationships around the expectation or prevention of abandonment or victimization. This is expressed as excessive clinging, compliance, oppositional defiance, and distrustful behavior" (p. 407).	"When trauma emanates from within the family, children experience a crisis of loyalty and organize their behavior to survive within their families. Being prevented from articulating what they observe and experience, traumatized children will organize their behavior around keeping the secret, deal with their helplessness with compliance or defiance, and acclimate in any way they can to entrapment in abusive or neglectful situations" (p. 404). "These children tend to reenact their traumas behaviorally, either as perpetrators (eg, aggressive or sexual acting out against other children) or in frozen avoidance reactions" (p. 406).	

MHC01	2006	Williams	Complex Trauma: Approaches to Theory and Treatment	"The unresolved and often unreachable memories are often found in body sensations that cue awareness of the emotion (Damasio, cited in Rothschild, 2000). The lack of recovery from the traumatic moment may be related to the body's frozen response to the original event" (p. 328).	"The bodies and brains of traumatized people contain blueprints of the attempted gesture to survive in the face of threat and injury" (p. 322).	"The insecure pattern of attachment learned by a victim of trauma also shows problems in affect regulation" (p. 324).	"When faced with danger, the body and mind will temporarily react to alarm by freezing, numbing, detaching, and forgetting. When the defense mechanisms have been overwhelmed, and there is a failure to restore homeostasis, the memory Complex Trauma 323 of that event also becomes encoded in a way that impairs cognitive consolidation. When an organized adaptation response is not possible, mental recall also becomes persistently both intrusive and disjointed" (p. 322).	"Children internalize interactions with caregivers that inform the nature of their future relationships. Representations of the self, known as the 'working model of the self' and the 'working model of the world' (Bowlby, 1973; Muller, Sicoli, & Lemieux, 2000, p. 322), act as a map for interpreting the behavior of others. The working model of the world refers to one's view of the other person and the ability to trust that the attachment figure can be relied on; the working model of the self reflects one's ability to see oneself as a loveable figure to the attachment figure" (p. 324).	"A child's emotional security and safety are impacted by the parent's level of distress (Papp, Cummings, & Schermerhorn, 2004). The result is severe fragmentation of self, an inability to trust, and an altered sense of autonomy… Children internalize interactions with caregivers that inform the nature of their future relationships" (p. 324).		

PSY02	2009	Cloitre et al.	A developmental approach to complex PTSD: Childhood and adult cumulative trauma as predictors of symptom complexity			"...understanding of complex PTSD has been influenced by developmental research, which has demonstrated that childhood abuse as well as other childhood adversities (neglect, emotional abuse, absent or psychiatrically disturbed parents) result in impairment in developmental processes related to the growth of emotion regulation... Disturbances in self-regulation account for both overactivation and deactivation/avoidance in emotions and interpersonal behaviors as seen in dysphoria and anger..." (p. 400).	"Exposure to sustained, repeated or multiple traumas, particularly in the childhood years, has been proposed to result in a complex symptom presentation that includes… dissociative symptoms…" (pp. 399-400).				

PSY03	2011	Ford	Assessing Child and Adolescent Complex Traumatic Stress Reactions	"The focus of the present article is on recent scientific and clinical assessment studies of complex traumatic stress reactions in childhood and adolescence that involve impaired self-regulation. This includes affect dysregulation, dissociation, somatization…" (pp. 217-218).	"Complex traumatic stress reactions extend beyond the primary symptoms of anxiety and dysphoria that characterize posttraumatic stress disorder (PTSD) and include alterations in ... biological self-regulation..." (p. 217).	"Maughan and Cicchetti's (2002) study of children with and without histories of maltreatment found that the maltreated children were twice as likely (80% vs. 37%) to exhibit dysregulated emotion patterns (i.e., undercontrolled/ambivalent and overcontrolled/unresponsive types); in addition, emotional dysregulation was associated with problems with depression and anxiety, and it mediated the relation between maltreatment and depression/anxiety" (p. 220).	"Dissociation is a sequela of cognitive dysregulation that has been found among children and adolescents to be associated with a history of exposure to complex traumatic stressors" (p. 223).		"…children who lose (or never acquire) stable attachment relationships as a result of abuse or impaired parenting are at risk for long-lasting (at least into early adulthood) problems with… disorganized attachment working models…" (p. 226).	"Several lines of evidence suggest that complex traumatic stress reactions can be understood as instances of a breakdown or failure of self-regulation. First, self-dysregulation has been found to be related to a variety of psychological problems in childhood and adolescence, including... eating disorders (Czaja, Rief, & Hilbert, 2009), substance use disorders (Dorard, Berthoz, Phan, Corcos, & Bungener, 2008), aggression (Ayduk, Rodriguez, Mischel, Shoda, & Wright, 2007; Bates, Goodnight, Fite, & Staples, 2009; Lewis et al., 2006), antisocial behavior (Dishion & Connell, 2006), risk-taking (Ben-Zur & Zeidner, 2009), self-harm (Buckner et al., 2009; Crockett et al., 2006; Dishion & Connell, 2006; Messer & Fremouw, 2008), and suicidality (Crowell, Beauchaine, & Linehan, 2005; Liu, Sun, & Yang, 2008)" (pp. 219-220).	

PSY04	2012	Resick et al.	A critical evaluation of the complex PTSD literature: Implications for DSM-5	"Symptoms of CPTSD include several defining criteria of PTSD (reexperiencing, avoidance, numbing, and hyperarousal), as well as disturbances in self-regulatory capacities that have been grouped into five categories: ... somatic distress or somatization " (p. 243).	"For instance, Ford (2009) provided a sophisticated review of neurobiological processes that are impacted by repeated-trauma exposure early in life. This review elegantly illustrates how brain systems underlying emotion regulation, information processing, healthy attachment, and the development of interpersonal relationships are affected by early and repeated exposure to trauma" (p. 247).	"Symptoms of CPTSD include several defining criteria of PTSD (reexperiencing, avoidance, numbing, and hyperarousal), as well as disturbances in self-regulatory capacities that have been grouped into five categories: emotion regulation difficulties..." (p. 243).	"Further, dissociation, memory disturbance (Ford, 1999; Herman, 1992b; Pelcovitz et al., 1997), and disturbance in attention regulation or concentration (Herman, 1992b; Courtois, 2004; Margolin & Vickerman, 2007) have all been discussed as manifestations ofalterations in consciousness in CPTSD" (p. 243).	"Particularly with CSA and other childhood traumas, it may be less the case that trauma changes previously held beliefs or personality characteristics, andmore that trauma impacts the formation ofpatterns of behavior and beliefs about the self, world, and others" (p. 246).			
PSY05	2012	D'Andrea et al.	Understanding interpersonal trauma in children: why we need a developmentally appropriate trauma diagnosis.		"With respect to biological data, childhood interpersonal trauma has documented associations with structural and functional abnormalities in CNS areas and neurohormonal systems..." (p. 194).	"Such affective symptoms commonly found in children exposed to interpersonal violence include lability, anhedonia, flat or numbed affect, explosive or sudden anger, and incongruous or inappropriate affect" (p. 189).	"Disturbances of attention and consciousness following expo- sure to interpersonal trauma may manifest as dissociation, depersonalization, memory disturbance, inability to concentrate (regardless of whether the task evokes trauma reminders), and disrupted executive functioning (e.g., ability to plan, problem solve)" (p. 189).	"Children exposed to interpersonal trauma often have distorted attributions about themselves and the world that may set the stage for globalized shame and guilt, a negative cognitive style, distorted locus of control, and poor self-efficacy" (p. 190).	"Interpersonal difficulties in children following abuse or neglect may include disrupted attachment styles, difficulties with trust, low interpersonal effectiveness, diminished social skills, inability to understand social interactions, poor perspective-taking abilities, expectations of harm from others, and poor boundaries" (p. 190).	"Behavioral expressions of affect regulation may include withdrawal, self-injury, aggression, oppositional behavior, substance use, or other compulsive behavior. Behavioral dysregulation may represent affective overload as well as attempts to dispel, reduce, or recover from negative affect states" (p. 189).	

SW01	2014	Zilberstein	Neurocognitive considerations in the treatment of attachment and complex trauma in children	"...compromise and overwhelm the child's nascent ability to cope and derive meaning out of what happened, thus leading to dysregulation on biological, emotional and behavioral levels. This includes high levels of unsoothable emotional arousal, difficulties sustaining attention, aggression, intense negative emotions, somatic complaints..." (p. 340).	" considerable research indicates that trauma exposure can result in structural and functional changes in brain development.28 The areas of the brain most affected by trauma exposure are the structures that make up the stress response system. For example, neurobiological findings following trauma exposure include neuroendocrine dysregulation; reduction in hippocampal, amygdala, and prefrontal cortex volume; and decrease in corpus callosum size" (p. 342).	"Without proper scaffolding in the attachment network, … emotional regulation can be compromised" (p. 339).	"Studies suggest that maltreated children's difficulties include lowered IQ, rigid problem solving styles, and deficits in attention, verbal and general memory, language, visual–spatial skills, abstract reasoning and executive functioning" (p. 340).	"Children form schemas from sensorimotor and emotional experiences of danger that help them behave in ways that can keep themselves safe from future threats (Crittenden, 1999). Those models develop from true, false, omitted and/or distorted information, which lead to various types of adaptations and attachment patterns (Bowlby, 1982; Crittenden, 1999). Those patterns then function, themselves, as internalized expectations that influence how later information is understood" (p. 338).		"Dysregulation and behavioral disorganization are intensified in complex trauma because the attachment figure is either the source of fear or cannot help the child restore safety, soothe the hyperarousal or integrate the experience" (p. 341).	

PSY06	2014	Kliethermes et al.	Complex Trauma	"The biological impact of trauma can decrease children's overall awareness of their bodies. Further, trauma may manifest as somatic symptoms…" (p. 346).	"Domains of impairment associated with complex trauma exposure may include… biological changes that may affect physical health..." (p. 340).	"Severe, ongoing trauma has the potential to affect children by overloading their ability to cope with emotions, altering their ability to access and identify emotions, impairing their ability to tolerate emotional expression; and impairing their ability to regulate their impulses. These youth subsequently tend to present with rapidly vacillating moods with extreme responses seemingly triggered by minor stressors or by nothing" (p. 344).	"Disturbances of attention and consciousness may present in a variety of ways: dissociation, inattention, a lack of sustained curiosity, difficulty planning and anticipating, and so forth… In addition to inattention, dissociative symptoms may present as memory loss, depersonalization, derealization, disengagement, and numbing" (pp. 344-345).	"Disruptions in attachment and the ability to regulate emotions and impulses is often linked to the evolution of distortions related to sense of self and expectations of others and the world. Complex trauma often occurs within the context of formative caregiving relationships that shape children's beliefs about themselves and the world around them" (p. 345).	"Complex trauma has the potential to cause a variety of interpersonal difficulties, in large part through its influence on a child's attachment and internal representation of themselves in relation to others. This condition may manifest as difficulties with trust, low interpersonal effectiveness, revictimization, victimizing others, and poor boundaries" (p. 345).	"Disorganized attachment is associated with a variety of negative outcomes including externalizing disorders, aggression, and oppositional defiant disorder.50 It is thought that youth with a disorganized attachment style lack an organized strategy for coping with stress and instead show behavioral disorganization or disorientation when confronted by stress" (p. 343).	
SW02	2016	Mahoney & Markel	An integrative approach to conceptualizing and treating complex trauma	"The sequelae of the exposure is also complex and consists of states, features, conditions, and phenomenology including severe problems with emotional regulation, dissociation, somatic distress, identity and relational disturbances, and spiritual alienation" (p. 3).		"Affective regulation skills were identified as skill deficits for the individual suffering from CT. Often these individuals have an inability to modulate undesired affective states" (p. 12).	"The sequelae of the exposure is also complex and consists of states, features, conditions, and phenomenology including severe problems with emotional regulation, dissociation, somatic distress, identity and relational disturbances, and spiritual alienation" (p. 3).		"...elational patterns are heavily ingrained in the individual's character (Masterson, 1981) due to relational patterns that occurred earlier in life" (p. 15).		

PSY07	2017	Ford	Complex trauma and developmental trauma disorder in adolescence	"...empirical evidence that CT in childhood is associated with dysregulation in three fundamental domains (D'Andrea et al., 2012; Ford, 2005, 2009): among children and adolescents (1) emotion and somatic functioning…" (p. 226).	"Thus, what begins as survival-adaptive neural and behavioral responses to CT may become "stabilized" in the form of chronic biological… hyperarousal..." (p. 225). "“Specifically, neuroimaging studies document an association of CT with under-development of neural capacities and pathways required for inhibitory executive function (Teicher & Samson, 2016) and reflective self-awareness (Lewis, 2005)" (p. 224).	"When stress reactivity takes precedence over self-reflective experiential awareness, the tragic but predictable result may be a youth who seems to adults and peers (and believes her/himself to be) trapped in self-perpetuating extreme states of emotional emptiness or distress (emotion dysregulation)" (p. 226).	“Herman's (1992) conceptualization of complex PTSD in adulthood was operationalized as a proposed psychiatric diagnosis, Disorders of Extreme Stress Not Otherwise Specified (DESNOS), with an accompanying Structured Interview for Disorders of Extreme Stress (SIDES) (Pelcovitz et al., 1997; B. A. van der Kolk et al., 2005). DESNOS was described as… dysregulation of consciousness (i.e., dissociation)…" (pp. 222-223).	"Thus, what begins as survival-adaptive neural and behavioral responses to CT may become "stabilized" in the form of chronic biological, emotional, and mental hyperarousal and "entrenched" beliefs that survival is in jeopardy, on which the youth increasingly relies to main a fragile physical, emotional, and interpersonal equilibrium" (p. 225).	"Herman's (1992) conceptualization of complex PTSD in adulthood was operationalized as a proposed psychiatric diagnosis, Disorders of Extreme Stress Not Otherwise Specified (DESNOS)… DESNOS was described as: … interpersonal dysregulation (i.e., pervasive distrust, avoidance, or sexualization of relationships)…" (pp. 222-223).	"Exposure to CT earlier in childhood and con-temporaneously in adolescence is an important potential environmental/experiential amplifier of the driving forces for affective and behavioral problems in adolescence: "responsiveness to [immediate] incentives," "immature … impulse control," and "predisposition toward risk taking" (Casey et al., 2008)" (p. 224).	

SW03	2018	Lucero	Written in the body?: Healing the epigenetic molecular wounds of complex trauma through empathy and kindness		"Cortisol often regulates sncRNA, such that bodies with over-active stress response systems and excess cortisol will likely have impacted sncRNA functioning, resulting in impacted gene expression (Bowers and Yehuda 2016). Environmental shaping of methylation patterns and sncRNA behavior signal an evolutionary drive to express genes in the most adaptive manner given information available about what sort of environment the body will need to survive in (Cao-Lei et al. 2014). This environmental cueing can occur throughout the developmental cycle through germ cells (preconception), the intrauterine environment (prenatal), and the early life environment (postnatal)" (p. 445).	The term, “complex trauma” is used to describe the developmental ripple effects of chronic child maltreatment including “complex self regulatory and relational impairments” across domains of “...affect...” (p. 444).		"The term, “complex trauma” is used to describe the developmental ripple effects of chronic child maltreatment including… self concept” (p. 444).			

SW04	2018	Dye	The impact and long-term effects of childhood trauma		"Perry (2006) reports that trauma disrupts normal brain development in several key areas: the brainstem where stress-regulation, survival, and metabolism are regulated; the midbrain and diencephalon, which plays a role in sensory motor activity, sleep, and appetite; the limbic system, which regulates emotions, attachment, affiliation, mood, and pleasure; and the cortex, which is associated with cognition, language, and reasoning. Due to early childhood trauma, normal development and disruption in the brain creates incongruence between biological age and developmental age" (p. 383).	"...due to trauma, the brain structures responsible for regulating intense emotions are deactivated. So, re-experiencing stressors elevate emotional reaction and suppress emotional control..." (p. 383).	"Putnam (2009) reports that early childhood abuse and neglect causes neurological and psychological development processes to be altered. Exposure to trauma has been shown to alter changes in the interrelated brain circuits and hormonal systems that regulate stress (Nemeroff, 2004). These changes to the brain can affect memory and impair information processing (Briere & Scott, 2006) and alter the hypothalamic-pituitary-adrenal (HPA) axis, which affects trauma survivors' ability to modulate behavioral and cognitive responses to subsequent stress (Nemeroff, 2004)" (p. 383).	"Early childhood traumas, such as abuse, neglect, and other emotionally harmful events, have a negative effect on early attachment relationships, especially if the abuser is the caregiver. When children experience relationships as rejecting or unsafe, these experiences can alter a child's perception of self, trust in others, and perception of the world" (p. 383).	"Briere and Jordan (2009) report that trauma survivors suffer from depression anxiety, anger, sensitivity to rejection, abandonment issues, unstable relationships, and difficulty with trust issues" (p. 384).	"As research has shown, child abuse often initiates a pattern of self-destructive behaviors" (p. 385).	

NSG01	2019	Isobel et al.	Psychological trauma in the context of familial relationships: A concept analysis		"Psychological symptoms of trauma have been linked to biological correlates and abnormalities (D'Andrea et al., 2012), suggesting the embedded nature of such difficulties within the person's experience of self" (p. 553). "Neurobiological alterations associated with childhood trauma are wide and varied but include significant alterations in the developing right brain, the hippocampus, the amygdala, the prefrontal cortex, the hypothalamic–pituitary axis, the concentrations of corticotrophin releasing hormone, and the noradrenergic system" (p. 554).	"Complex trauma is distinguished by lifelong disturbances of self-organization (Lawson & Quinn, 2013), particularly in relation to responding to, displaying, and regulating strong emotions" (p. 553).	"The violation of basic assumptions of safety in these relationships and the conflicting dependency of the trauma recipient can be marked by dissociation and fragmentation (Birrell & Freyd, 2006), as primitive regulatory defenses against insoluble fear associated with activation of conflicting systems of attachment and defense (Amos et al., 2011; Martin et al., 2013; Schore, 2002)" (p. 553).	"Inherent to the violation of trusting, dependent or caregiving relationships are feelings ofbetrayal, shame, and guilt (Cohen, Hien, & Batchelder, 2008) with secondary maladaptive cognitions including self-blame (Alisic et al., 2014) and persistent beliefs about oneself as diminished, defeated, or worthless (Cloitre, Garvert, Brewin, Bryant, & Maercker, 2013). These beliefs can be conscious or more inherently embedded into the construction of self (Schore, 2002, 2009)" (p. 553).	"consequences refer to broad and specific disruptions to critical attachment processes including the implications of a confounding drive to attach to someone also perpetrating harm" (p. 553).		

PSY08	2019	Van Nieuwenhove	Interpersonal features in complex trauma etiology, consequences, and treatment: A literature review	"Experiencing such events can lead to a wide array of difficulties in multiple domains, going from somatic complaints to fundamental personality disturbances" (p. 904).		"...detrimental symptomatology associated with complex trauma, surpassing the avoidance, hyperarousal, and numbing symptoms associated with PTSD, with the inclusion of affect regulation difficulties…" (904).	"describe the detrimental symptomatology associated with complex trauma, surpassing the avoidance, hyperarousal, and numbing symptoms associated with PTSD, with the inclusion of affect regulation difficulties, alterations in attention and consciousness, and interpersonal difficulties" (p. 904).	"Notwithstanding the idea of one overarching internal working model, the contradictory views of self, world, and others may not sufficiently be integrated into a coherent representational scheme. This can result in dissociative states and behavior... it seems that dysfunctional interpersonal schemata, whether they are observed in children or adults, are critical in understanding complex trauma-related suffering. " (pp. 909- 910).	"…when a child's expression of certain emotions or needs is answered by parental disdain (either by passive rejection or active physical or emotional abusive responses), the expectation of these responses will lead to the inclination to not turn to caregivers in times of distress, which over time will generalize to all others (Gleiser, Ford, & Fosha, 2008)… The tendency to oscillate between wanting to be close to others and to favor distance, which is also a familiar pattern in adults who suffered complex trauma (Allen et al., 1998; Cloitre et al., 2009; Cook et al., 2004; Ford et al., 2005), are thus two sides of the same coin. They need to be understood as stemming from the same internal working model, rather than being two different dynamics between subject and others. In the same vein, the need for control and anger, hostility, and aggressive behavior in adult relationships (Cloitre et al., 2009; Frueh, Turner, Beidel, & Cahill, 2001) can be understood (Howell, 2002; Liotti, 2013)" (p. 909).	"In reviewing the literature, we noticed that these complex interpersonal schemata are regularly associated with interpersonal behavioral difficulties… when a child's expression of certain emotions or needs is answered by parental disdain (either by passive rejection or active physical or emotional abusive responses), the expectation of these responses will lead to the inclination to not turn to caregivers in times of distress, which over time will generalize to all others (Gleiser, Ford, & Fosha, 2008). On the other hand, the need for soothing and support remains, which can result in dependent or even clinging behavior. As a consequence of the paradoxical situation in which the caregiver is both the source of threat and the source of comfort, the child may display contrary behavior of alienation and isolation… In the same vein, the need for control and anger, hostility, and aggressive behavior in adult relationships (Cloitre et al., 2009; Frueh, Turner, Beidel, & Cahill, 2001) can be understood (Howell, 2002; Liotti, 2013)" (pp. 908-909).	

PSY09	2020	Fimiani et al.	Traumas and Their Consequences According to Control-Mastery Theory	"...the victims of this type of trauma may present multiple symptoms affecting different domains, such as somatic..." (p. 120).	"Individuals with histories of traumatic development (Liotti & Farina, 2011) early in life often exhibit... impairment of biological functioning, with chronic hyperactivation of the sympathetic nervous system and of the hypothalamic–pituitary–adrenal (HPA) axis..." (p. 120).	"These consequences are complex because they negatively affect the development of several basic psychic functions, leaving the child unable to effectively self-regulate (i.e., to deliberately control his or her feelings, cognitions, beliefs, intentions, and actions…" (p. 119).	"Individuals with histories of traumatic development (Liotti & Farina, 2011) early in life often exhibit… cognitive alterations, such as difficulties in modulating attention/ concentration, as well as in executive functions like problem-solving, frustration tolerance, sustained attention, abstract reasoning, and memory…" (p. 120).	"Many children traumatized by such problematic interactions develop a disorganized or cannot classify attachment style that obstructs the development of a coherent set of beliefs about themselves and others, and of a coherent strategy for preserving their own ties with attachment objects while at the same time pursuing other vital developmental goals. The belief of being bad, undeserving, and inadequate, and feelings of shame, guilt, powerlessness, and hopelessness, together with the use of dissociation, are often part of this picture" (p. 125).	"Finally, CMT scholars (Gazzillo, Dazzi, De Luca, Rodomonti, & Silberschatz, 2019; Pickles, 2007) recently deepened the understanding of the consequences of parent–child relationships characterized by multiple traumas, systematic communication errors, or systematically misattuned interactions, showing how these kinds of relationships may give rise to a multiplicity of reciprocally contradictory pathogenic beliefs. Many children traumatized by such problematic interactions develop a disorganized or cannot classify attachment style that obstructs the development of a coherent set of beliefs about themselves and others, and of a coherent strategy for preserving their own ties with attachment objects while at the same time pursuing other vital developmental goals" (p. 125).	"Individuals with histories of traumatic development (Liotti & Farina, 2011) early in life often exhibit… tension-reduction activities, such as compulsive sexual behavior, substance abuse, binge and purge eating, impulsive aggression, suicidality, and self-mutilation..." (p. 120).	

PSY10	2022	McCormack et al.	Complex trauma and posttraumatic growth: A bibliometric analysis of research output over time			"From a nonpathologizing perspective, emotions associated with the experience of trauma are feeling depressed, anxious, shamed, guilty, angry, and irritable…" (p. 246).					"...the cognitive struggle associated with psychological distress as a result of exposure to potentially traumatic events can precipitate purposeful ruminative activity, resulting in positive change or posttraumatic growth" (p. 245).

PSY11	2022	Pfluger et al.	Internalizing Mental Health Disorders and Emotion Regulation: A Comparative and Mediational Study of Older Adults With and Without a History of Complex Trauma Exposure			"One potential process underpinning the lasting mental health effects of CTE may be the dysregulation of emotions. Emotion regulation refers to the ability to recognize, monitor, express, and modify emotional reactions in a way that facilitates adaptive functioning (Gratz and Roemer, 2004). Applying a developmental perspective, several studies indicate that emotion regulation strategies develop in the early stages of life and primarily within the context ofan emotional relationship, such as the caregiving context (e.g., via observation; parenting practice, such as the validation of emotions; or the emotional atmosphere at home; Morris et al., 2007; Ehring and Quack, 2010). However, in a family environment of child maltreatment, children are exposed to caregivers who cannot satisfy this educational task appropriately. Child maltreatment, and CTE in particular, may therefore lead to emotion regulation difficulties by hampering the development of adaptive strategies (e.g., distraction, reappraisal, acceptance), while fostering the development of maladaptive strategies (e.g., self-devaluation,					

						suppression, withdrawal" (p. 2).					

SW05	2023	Matte-Landry et al.	Cognitive Outcomes of Children With Complex Trauma: A Systematic Review and Meta-Analyses of Longitudinal Studies		"It has been theorized that complex trauma may induce a toxic stress response because of the intense, repeated, or prolonged activation of the neurophysiological stress response systems (e.g., hypothalamic–pituitary–adrenocortical [HPA] axis) during sensitive developmental periods, when a caregiver's protection is absent (Shonkoff, 2010). In the long run, such stress responses may damage the regulatory capacity of the HPA axis, causing a persistent tendency toward higher or lower cortisol secretion in stressful contexts (Bernard et al., 2017; Holochwost et al., 2020; Khoury et al., 2019). This may induce structural and functional brain alterations in various brain regions, including the prefrontal cortex, the amygdala and the hippocampus, which are responsible for a host of cognitive functions" (p. 2744).	"...multiple putative effects on child development, including ... affect dysregulation" (p. 2743).	"Cognitive functioning comprises numerous interrelated cognitive functions, including intelligence, language, perceptual/visuospatial functions, memory as well as attention and executive functions (EF) (Lezak et al., 2004; Strauss et al., 2006). On the one hand, trauma may have a stronger or weaker impact on certain cognitive functions that are more or less vulnerable to toxic stress because they rely on brain regions with varying periods of vulnerability to toxic stress. On the other hand, given that toxic stress is expected to detrimentally impact numerous brain regions that are collectively responsible for many cognitive functions, trauma may have a pervasive impact on several aspects of cognitive functioning (Bick & Nelson, 2016; Lupien et al., 2009; Nemeroff, 2016; Teicher et al., 2016)" (p. 2744).		"...multiple putative effects on child development, including dysregulation in attachment and relationships…" (p. 2743).		

Note: The following abbreviations are used in the table headers.

Cat. Code – Catalogue code *Auth. - Author*

Pub. Date – Publication date *PTG – Post-traumatic growth*

Appendix 13: Model Case – David

An excerpt from Fimiani et al. (2020), pp. 129 – 130:

"…David is a 32-year-old man with a complex clinical picture that caused him intense suffering and severe constrictions in several domains of his life. He had met the criteria for narcissistic personality disorder, major depression (recurrent), generalized anxiety disorder, obsessive-compulsive disorder (with checking rituals), and paraphilia. He had lost several jobs and had difficulties in finding new jobs, and he had severe difficulties in establishing long-lasting romantic relationships with women. Virtually all his symptoms could be understood as consequences of the pathogenic belief of being inadequate and doomed to disappoint others.

The trauma that led to the development of this pathogenic belief was a recurrent pattern of his childhood relationship with his mother. The mother used to compare David with his older sister and tell him that he should have been more outgoing, brighter, and more enterprising than he was. In other words, he should have been more similar to his sister, who worked hard to satisfy the ideals of the mother. David was very hurt by these messages. He felt helpless because his mother seemed incapable of understanding how much he suffered because of them, and she seemed incapable of refraining from making him feel inadequate. David thought that, given that the problem was his nature, he could not have solved it in any way. His narcissistic personality disorder was a consequence of his embracing the ideals of the mother: people, for him, were either bright, rich, and outgoing or they were losers. He oscillated between trying to be or presenting himself as the mother wanted him to be and making other people feel inferior and inadequate, or feeling himself to be inferior and inadequate and imagining other people as perfect. David's depression was a consequence of his self-hate—he became depressed when he had to do something new that he believed himself to be incapable of doing. His anxiety was a consequence of the fact that he believed that his efforts to do what he should do in order to be appreciated were doomed to failure, and that he would have unavoidably disappointed other people. His obsessional rituals were a consequence of the fact that, in order not to fail and not to disappoint others, he believed that he should control everything to ensure perfection; he believed, in fact, that any imperfection would lead to people abandoning him (the boss at work would have fired

him, the girlfriend of the moment would have left him, etc.). Finally, his paraphilia was a sexualized enactment, controlled by him, of the core elements of his traumatic relational pattern with the mother: he was excited by being insulted by prostitutes while he was on his knees sucking their plastic penis.

During his CMT psychotherapy, David tried to master his trauma and disconfirm his pathogenic belief in two different ways. In some sessions, he tested his pathogenic belief by turning passive-into-active while complying with it: during his very first interview, for example, David spent more than half of the session investigating the therapist's credentials and comparing him with a former therapist whom he represented as more experienced, rich, and elegant. And he appeared relieved by the fact that the therapist was able to remain calm and said to him: "It seems to me that in this room there are two people. One is comparing the second one with another person he knows, and the second one is found to be inadequate and inferior. Today I am this second person, and you are acting as the first one. But I suppose that it also happens that you are the person who is judged as inadequate and inferior. Is this true?" David's reply was: "This is the story of my life" and started to talk about his relationship with his mother.

During the progressively longer periods of therapy when he was feeling better, David tried to master his trauma using mainly a transference test by compliance strategy: in other words, he tried as hard as he could not to be a "good" patient in order to see if the therapist accepted him in any case. He could arrive early or late to his sessions, could not say a word for a whole session, and could ask the therapist for a glass of water, a socket to charge his mobile phone, or to use the bathroom of the office to change his clothes before going out. He did not pay his therapy bill for months. He could skip several sessions and then call the therapist on his mobile phone or send him text messages. And, as he later explained, he was helped by the "laissez-faire" attitude of the therapist, by the fact that, unlike his previous therapists, he thought that the therapist viewed him as "a human being on par with him." Apart from the therapist's consistent attitude (referred to by Sampson [2005] as "treatment by attitude"), the only two kinds of interventions that David found useful were confrontations when he acted toward others as his mother had with him, and empathic validations of his suffering and communications, which helped him connect this suffering with his mother's messages".