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SURVIVORS OF COMPLEX TRAUMA AS ADULT ONLINE LEARNERS: A CASE STUDY

BY

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Approval of Thesis

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Dedication

"If I have seen further it is by standing on the shoulders of Giants." – Isaac Newton

For three women on whose shoulders I stand: Linde Zingaro, Loralie Euverman, and Cynthia Blodgett-Griffin. I will never be able to thank you enough…for opening doors, for showing me the path, for shining a light in the proverbial darkness.

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Abstract

This qualitative instrumental collective case study explores how adults with a history of complex trauma experience online learning and their unique needs in the adult/postsecondary online learning environment. Three participants described a distinct experience of online learning, including struggles with executive functioning, challenges regulating emotion and dealing with a heightened perception of threat, re-experiencing trauma, negative beliefs about the self, and difficulties navigating relationships. These trauma impacts affected not only participants' learning and course experience, but also their ability to interact with the institution and navigate the complex processes of applying, registering, and accessing financial aid. Nonetheless, these participants are highly skilled in managing impacts of their trauma, and they are driven to learn, placing the highest intrinsic value on education. Participants identified establishing safety; trust and transparency; and empowerment, voice, and choice as top priorities for implementation of trauma-informed educational practices in the adult/postsecondary online learning context.

Keywords: Adult online learners, postsecondary online learners, complex trauma, adverse childhood experiences (ACEs), trauma-informed educational practices

Preface

The focus of this thesis is the distinct experience and needs of adult/postsecondary online learners who are survivors of complex trauma. It is sometimes difficult for laypersons to grasp the wide-ranging impact of complex trauma, perhaps in part because most people do not wish to think about or acknowledge the precipitants of complex trauma: that every day children are raped, burned, beaten, tortured, and murdered—not by strangers, but by their parents and others who are supposed to care for them. Complex trauma is the result not only of this experience of violence, but of the experience of being dependent for survival on the source of one's terror, of having no way to escape and no one to whom to turn for comfort and support (Herman, 1997).[1]

As van der Kolk (2014) describes, these children grow up and become adults who struggle with the legacy of trauma, "filling our jails, our welfare rolls, and our medical clinics" (p. 151) as a result. They also fill our colleges and universities—and perhaps in particular our online colleges and universities. With the same determination that enabled them to survive, they strive to create a better life for themselves (and sometimes for their children) by pursuing higher education.

This study is a first step toward generating an understanding of the experience and needs of adult/postsecondary online learners who have survived complex trauma. Trauma-informed care—the realization and recognition of the impacts of trauma, coupled with the integration of knowledge about trauma into policies and procedures—has become commonplace in the social service and healthcare systems and has been increasingly implemented in primary and secondary (i.e., K to 12) education. The time has come for postsecondary institutions to implement trauma-

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[1] Although most cases of complex trauma begin in childhood or adolescence (International Society for the Study of Trauma and Dissociation, n.d.), complex trauma also occurs in adulthood. Human trafficking and severe and ongoing domestic violence are two examples.

informed educational practices. In doing so, however, institutions must ensure they take a

trauma-informed approach to implementation: collaborating with and empowering survivors,

creating safety and transparency and trust, and ensuring their voices are heard.

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Chapter 1. Introduction

Overview

The purpose of this study was to explore the experience of adult online learners who are survivors of complex trauma. Numerous studies have demonstrated the relationship between complex trauma and an array of negative neurobiological and psychosocial outcomes across the lifespan, including detrimental educational impacts (for a brief review, see Herzog & Schmahl, 2018). However, despite increasing interest in trauma-informed educational practices over the past decade, researchers have largely ignored the perspectives of traumatized learners—which, ironically, contradicts the key principles of a trauma-informed approach (Becker-Blease, 2017; Fallot & Harris, 2009; Substance Abuse and Mental Health Service Administration [SAMHSA], 2014). This study sought to redress one element of this gap by exploring the experience of adult online learners who are survivors of complex trauma.

Introduction

Traumatic life experiences are relatively common amongst postsecondary and other adult learners. In a recent study, 70% of first-year undergraduate students reported exposure to at least one traumatic life event (Cusack et al., 2019), a figure in line with both community estimates and historical studies (Centers for Disease Control [CDC], 2022; Elhai et al., 2012; Read et al., 2011; Smyth et al., 2008). One quarter of first-year undergraduate students have probable posttraumatic stress disorder (PTSD), according to the same recent study (Cusack et al., 2019). This figure has risen sharply over the past 15 years: historically, about 9% of incoming American undergraduate students had PTSD, and an additional 11% experienced subclinical symptoms (Read et al., 2011; Smyth et al., 2008).

While the PTSD diagnosis encompasses the most common symptoms of traumatization,

it does not adequately capture the experience of all traumatized persons (van der Kolk, 2000).

When traumatic events are chronic, repeated, and prolonged, individuals may experience more

complex, severe, and extensive impacts than those typically seen in PTSD, particularly in three

key areas: affect regulation, identity, and relationships (Cloitre, 2020). The International

Classification of Diseases (ICD) describes this as complex PTSD (World Health Organization

[WHO], 2022). Complex PTSD is most commonly the result of exposure to prolonged and

repetitive events of an "extremely threatening or horrific nature . . . from which escape is

difficult or impossible (e.g. torture, slavery, genocide campaigns, prolonged domestic violence,

repeated childhood sexual or physical abuse)" (WHO, 2022).

In the educational domain, the lingering impact of complex childhood trauma continues

While psychological harms that result from trauma may be severe and extensive, trauma

also inflicts suffering on the survivor's body. Widespread and malignant physiological effects of

exposure to complex trauma during childhood have been repeatedly demonstrated through large

epidemiological studies (e.g., Anda et al., 2006; Felitti et al., 1998). Traumatic stress disrupts

neurodevelopment, which results in diminished health outcomes across the lifespan, including

increased rates of ischemic heart disease, cancer, chronic lung disease, skeletal fractures, liver

disease, and many other health issues and concerns (Felitti et al., 1998). Additionally, researchers

have demonstrated a dose-response relationship between adverse childhood experiences (ACEs)

and these negative outcomes, reflecting the cumulative impact of stress on a child's developing

brain (Anda et al., 2006).[2]

In the educational domain, the lingering impact of complex childhood trauma continues

to exert effects across the lifespan. As adults, those who have experienced four or more ACEs

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[2] Trauma experienced in adulthood also impacts the body: for example, women with severe PTSD symptoms as a result of traumatic experiences across the lifespan have approximately double the risk of ovarian cancer as those with no trauma exposure, even when risk is adjusted for health behavior such as smoking (Roberts et al., 2019).

are more than twice as likely to have no educational qualifications (i.e., a certificate or diploma

of completion of secondary, postsecondary, or graduate-level education) than those with zero

ACEs (Hardcastle et al., 2018). Educational qualifications impact future quality of life, with a

lack of qualifications greatly increasing the risk of unemployment—although those with four or

more ACEs are also more likely than others to be unemployed, regardless of qualifications

obtained (Hardcastle et al., 2018). ACEs can thus lock survivors into poverty (Hardcastle et al.,

2018). Within the more specific domain of postsecondary education, Otero (2021) found that

each additional ACE decreases the odds of timely undergraduate degree completion by 17%;

those with four or more ACEs are 56% less likely than those with zero ACEs to complete an

undergraduate degree within six years.

Despite this relatively robust research in the area of educational attainment and trauma in

general, little is known about outcomes for adult/postsecondary learners who are survivors of

complex trauma and who choose to learn online: an extensive literature search did not uncover

any published research in this area. No articles were identified that explored the proportion of

these learners with PTSD, complex PTSD, or histories of trauma or complex trauma exposure;

moreover, no research was found that explored these learners' perceptions, experiences, or needs

as they learn online.

In addition, the literature search did not identify any studies examining trauma-informed

practices for online adult/postsecondary education. In fact, while the need for such practices is

well established within K–12 education, uptake at the postsecondary level in general has been

scant (Howick, 2019; McIntyre et al., 2019; Olesen-Tracey, 2020; Robertson, 2021). Given that

online postsecondary education is often positioned within the literature as widening access for

underserved or marginalized learners, as well as women—and given that this population is more

likely to have been exposed to trauma—this is a curious gap (Davidson, 2017; Giano et al., 2020; Koseoglu et al., 2020).

Statement of the Problem

How do adult/postsecondary learners with a history of complex trauma experience online learning? Given the devastating impact of trauma on cognitive function, academic performance, school connectedness, absenteeism, and many more dimensions closely connected to education, what needs might this population of learners have that are currently going unmet (Bethell et al., 2014; McIntyre et al., 2019; Perfect at al., 2016; Porche et al., 2016; Wolpow et al., 2009)? What policies, procedures, instructional design elements, instructor behaviors, and more may harm this population of learners by reactivating old trauma, inducing new trauma, or creating conditions impossible for success (Carello & Butler, 2015; Harper & Neubauer, 2021; Petrone & Stanton, 2021; SAMHSA, 2014)? When colleges and universities—and, in particular, online colleges and universities—are not trauma-informed, what is the human cost?

Ethically speaking, it is problematic to recruit vulnerable college and university students in the absence of adequate supports for success (Kelly & Mills, 2007; Simpson, 2012). Colleges and universities have a duty to ensure they do not "recruit for failure" (Kelly & Mills, 2007, p. 150), not least to avoid leaving already vulnerable persons burdened with student loan debt and without a credential that would increase their earning potential and enable them to pay it off (Lockwood & Webber, 2023). Could systemic implementation of trauma-informed practices potentially alleviate some of online learning's notoriously high attrition rate and promote success for this population of marginalized and vulnerable learners (Shaikh & Asif, 2022)? What do these learners have to tell us?

Purpose of the Study

The purpose of the study was to explore the way in which adult/postsecondary learners with a history of complex trauma experience online learning (including online learning within courses, as well as all associated interactions with an educational institution, such as applying, registering, using academic and other support services, etc.).

Research Question

How do adult/postsecondary learners with a history of complex trauma experience online learning, and what are their unique needs in this environment?

Sub-Question 1

What do adult/postsecondary online learners with a history of complex trauma find most and least helpful to their learning?

Sub-Question 2

What element or elements of established trauma-informed educational practice are most important to adult/postsecondary online learners with a history of complex trauma? How would they like to see these implemented?

Significance of Research

This research is perhaps the first to explore the experiences and perceptions of traumatized adult/postsecondary online learners and to examine their needs through their own eyes. Charlton (2000) argued in his classic text on disability rights that there should be "nothing about us without us"—that is, disabled persons know what is best for themselves and their input should be sought regarding all policies, procedures, and practices that affect them. While traumatized persons may or may not perceive themselves as disabled, arguably a similar principle should hold true. As Becker-Blease (2017) states:

We can do better for trauma survivors now by taking more seriously the input of trauma

victims and survivors. This too is a core principle of trauma-informed care, but clearly

some additional work is needed to know how best to ensure that the voices of

victims/survivors are truly included. (p. 136)

Building on Becker-Blease's argument, Petrone and Stanton (2021) argue that those who have

experienced trauma are frequently both objectified and positioned as problematic by researchers

in the field of trauma-informed educational practice. They advocate for a research approach that

repositions survivors as experts, particularly in navigating the impacts of historical and complex

trauma.

Thus, this research arguably has intrinsic value in terms of elevating survivors' voices.

However, it also has the potential to contribute to societal equity, if the understanding gleaned

from the study helps online postsecondary institutions implement practices to reduce the

possibility that they are recruiting for failure or otherwise harming or (re)traumatizing learners.

Benefits would accrue not only to learners, but also to colleges and universities, who could

potentially reduce attrition. Society at large would benefit as well, through the unlocking of

human potential (Lecy & Osteen, 2022).

Limitations

This study has several limitations, as do all studies. Limitations are weaknesses that may

influence research outcomes and conclusions and are inherent to the research design; they are

often considered to be outside the researcher's control (Bui, 2020; Ross & Bibler Zaidi, 2019;

Theofanidis & Fountouki, 2019). Ross and Bibler Zaidi's (2019) model of reporting research

limitations includes describing limitations in four areas: study design, data collection, data

analysis, and study results. These are explored below.

Study Design

This study uses an instrumental multiple (collective) case study design (Stake, 1995). While results of multiple or collective case studies are more likely to be generalizable than those of single case studies, case studies are a form of qualitative research and thus their results are not generalizable in the same manner as those of a quantitative study (Creswell & Poth, 2018; Johnson & Christensen, 2017; Stake, 1995).

In addition, the study is primarily retrospective. Retrospective research involves the risk that participants' accounts of the past may not be accurate (Johnson & Christensen, 2017). It also involves a higher risk of researcher bias and confounds than prospective research (StatsDirect, 2022).

Another potential limitation relates to the use of a retrospective survey for screening or initial qualification of participants. Due to the potential for inaccurate recollection, as described above, unqualified participants may have been screened in, qualified participants may have been screened out, or both.

Data Collection

Data collection involved screening participants with the Adverse Childhood Experiences International Questionnaire, or ACE-IQ (WHO, 2020a). Participants with an ACE-IQ score of 4 or higher who agreed to be interviewed or to complete a detailed questionnaire were eligible to participate in the case study portion of the study. A significant limitation is that some members of the target population—in particular, those experiencing the most severe effects of complex trauma—may not have had the capacity (in the sense of time or emotional energy) to complete the screening survey or participate in the interview/detailed questionnaire (and, indeed, several potential participants either did not respond to email communication inviting them to participate in an interview or did not attend scheduled interviews). In addition, participants' answers could

be inaccurate due to difficulties with recall or social desirability bias (Johnson & Christensen,

2017; Ross & Bibler Zaidi, 2019). Participants may not have disclosed their struggles accurately

or in their entirety due to issues of power and trust (Becker-Blease, 2017; Cloitre, 2020; Gorski,

2020). Finally, as all participants were volunteers, self-selection bias is an important limitation to

consider (Kaźmierczak et al., 2023; Ross & Bibler Zaidi, 2019).

Data collection also involved requesting participants to provide artefacts (such as emails,

screenshots, or journal entries). Another limitation was the willingness or capacity (once again,

in the sense of time or emotional energy) of participants to identify and share such items.

Data Analysis

Basic statistical analysis (i.e., calculation of mean plus standard deviation, median, and

mode) was performed on the results of the screening survey for qualified participants (for further

details, see Methodology chapter, Participants section). As probability sampling was not used for

this study, limited inferences can be made from these results (Johnson & Christensen, 2017; Ross

& Bibler Zaidi, 2019).

An inherent limitation within qualitative data analysis is the potential for researcher bias

(Johnson & Christensen, 2017). This was addressed in this study through reflexivity, or

continual, careful, and critical self-reflection (Johnson & Christensen, 2017; Olmos-Vega et al.,

2023) through my research journal and analytic memos.

The volume of data generated by any qualitative research study is significant (Anderson,

2010; Stake, 1995). For case studies in particular, Stake observes that many more data are

collected than it is feasible to analyze; consequently, he recommends that researchers focus their

inevitably limited analytic time on the best data. Selection of the best data in case study research

may be influenced by researcher bias, although I made every effort to address this through

reflexivity.

Study Results

As noted above, results of qualitative research are not generalizable in the same manner as those of a quantitative study (Creswell & Poth, 2018; Johnson & Christensen, 2017; Stake, 1995). In particular, this case study had a limited number of participants. Caution should be used when generalizing from these results.

Delimitations

In contrast to limitations, which are inherent to a research design, delimitations are set deliberately by researchers in order to ensure a study is feasible (Theofanidis and Fountouki, 2019). This study contains several delimitations, which are reviewed below.

Complex Trauma: Type and Age

The aim of the study is to examine the experience of adult/postsecondary online learners with a history of complex trauma. While complex trauma encompasses torture, slavery, genocide campaigns, prolonged domestic violence, repeated childhood sexual or physical abuse, and more, the study focused on adults with an ACE-IQ score of 4 or higher, the score generally considered high or indicative of complex trauma (Baldwin & Danese, 2021; Maunder & Hunter, 2021). This excludes several types of complex trauma (for example, torture and slavery) that are not captured by the ACE-IQ. It also excludes complex trauma experienced exclusively in adulthood, as the ACE-IQ only asks questions about experiences prior to the age of 18.

Including participants with a lived experience of a broader spectrum of complex trauma, including trauma experienced in adulthood, would have been ideal but was beyond the scope of the study, primarily due to limited availability of screening tools. As mentioned above, the ACE-IQ is well-researched and validated instrument but focuses on experiences prior to the age of 18

(Pace et al., 2022; WHO, 2020a). Similarly, the Complex Trauma Questionnaire (Vergano et al., 2015) explores only childhood and adolescent experience. While exposure to traumatic experiences in adulthood can be assessed with the Life Events Checklist (LEC) (Weathers et al., 2013), the ability of the LEC or similar instruments to indicate exposure to complex trauma in particular is less clear (Facer-Irwin et al., 2021).

One solution would have been to use the International Trauma Questionnaire (ITQ), an age-inclusive instrument that screens for complex PTSD (Cloitre et al., 2018). However, the fact that this instrument is intended to identify a possible diagnosis did not align with the underlying philosophy of this study, which relies on the transformative framework, uses a trauma-informed approach, and seeks to resist pathologizing trauma survivors. The problem of trauma, as Becker-Blease (2017) argues, is properly located in the perpetrator or in enabling structures in society, not in the survivor. Hence this aim of the study is to explore the online learning experiences of persons who have experienced complex trauma (as indicated by the ACE-IQ), rather than those with a specific individual diagnosis such as complex PTSD, which could indicate a pathologizing stance.

Online Learning Institution

Participants were limited to those who attend a single online university, Canada's Athabasca University. This decision excluded learners enrolled in community-based or non-postsecondary online learning, as well as online learners who attend other postsecondary institutions in Canada or around the world. Thus, the scope of participants was relatively narrow: while students from 81 countries currently attend Athabasca University, the vast majority (97%) live in Canada, with 88% of these living in urban centres (Athabasca University, 2022a). Athabasca University's student population is at relatively high risk of exposure to complex

trauma, however: 66% of the university's undergraduate students and 77% of graduate students are female, and women have higher ACE scores (Athabasca University, 2022a; Giano et al., 2020). Athabasca students are also older than traditional-age college students, with an average age of 28 for undergraduate students and 34 for graduate students (Athabasca University, 2022a). Older students are at higher risk of trauma exposure, as are the 4.1% of Athabasca University students who identify as Indigenous (Davidson, 2017; Toombs et al., 2022).

Number of Participants and Depth of Questioning

Case study participants were limited to three, following the expert guidance of Schoch (2020), who states that the maximum number of cases a researcher can realistically handle in a collective case study design is three to four. The trauma-informed approach also restricted the depth of examination for each participant; ensuring psychological safety both for myself and for participants was a key focus of the semi-structured interview and questionnaire, which was carefully designed to avoid potential triggers and minimize the potential for flashbacks or harm to participants.

Availability of Screening Survey

The screening survey was available in the Athabasca University student portal from April 5 to May 23 (approximately 7 weeks). Students who did not log in to the portal during that time would not have seen the survey and therefore would not have had an opportunity to participate. In addition, the portal contains a great deal of information in a busy, text-heavy format; while the recruitment notice appeared in the Message Centre (see Figure 1 below), it may have been easily overlooked, particularly by survivors grappling with issues involving executive function (Cruz et al., 2022).

Figure 1

Athabasca University Student Portal

Definitions of Terms

Term	Definition
Adult/postsecondary education	Formal education targeted to persons aged 18 or older. Encompasses both postsecondary education and non-postsecondary adult education (for example, English as an additional language programs for immigrant and refugee learners).
Adverse childhood experience (ACE)	In the original formulation, included abuse (physical, sexual, emotional) and exposure to household drug abuse, mental illness, incarceration, or spousal violence (Felitti et al., 1998). Later formulations were broadened to include, for example, neglect and separation from caregivers, as well as collective violence (Anda et al., 2006; Bethell et al., 2014; WHO, 2020a).
Complex post-traumatic stress disorder (C-PTSD or complex PTSD)	Also known as disorders of extreme stress not otherwise specified (DESNOS). Includes diagnostic criteria for **PTSD** (see below), plus the experience of **complex trauma** (see below) and three additional criteria: "Severe and persistent 1) problems in affect regulation; 2) beliefs about oneself as diminished, defeated or worthless, accompanied by feelings of shame, guilt or failure related to the traumatic event; and 3) difficulties in sustaining relationships and in feeling close to others. These symptoms cause significant impairment in personal, family, social, educational, occupational or other important areas of

Term	Definition
	functioning" (WHO, 2022).
Complex trauma	Psychological trauma that results from prolonged and repetitive events of an "extremely threatening or horrific nature . . . from which escape is difficult or impossible (e.g. torture, slavery, genocide campaigns, prolonged domestic violence, repeated childhood sexual or physical abuse)" (WHO, 2022). See also **developmental trauma** and **trauma** below.
Developmental trauma	A form of **complex trauma** (see above). Severe and chronic childhood exposure to interpersonal violence and impaired primary caregivers, resulting in distress and impacts to neurobiological development (van der Kolk, 2014; van der Kolk et al., 2019).
Developmental trauma disorder (DTD)	Proposed diagnosis for those who have experienced developmental trauma and are significantly impaired in functioning as a result (van der Kolk, 2014; van der Kolk et al., 2019).
Online learning	Learning that is conducted online (via the Internet), with learners and instructional staff separated in time and/or space. Includes both synchronous and asynchronous online learning, as well as courses with mixed elements. For the purposes of this study, includes all activities and interactions with an online educational institution (such as interacting with a library service, a writing service, a student services office, etc.).
Posttraumatic stress disorder (PTSD)	Psychiatric diagnosis traditionally given to persons who develop a specific set of symptoms in response to a shocking or dangerous event. May not sufficiently encapsulate distress experienced by those subjected to prolonged or chronic trauma, such as domestic violence, torture, or severe and ongoing childhood abuse (Cloitre, 2020; National Institute of Mental Health [NIMH], 2019; van der Kolk et al., 2019). See **complex trauma** and **complex post-traumatic stress disorder** above.
Trauma	Psychological trauma. May refer to a traumatic event (a shocking or dangerous experience) or to the response to the event, including adverse effects to the individual's functioning and wellbeing (NIMH, 2020; SAMHSA, 2020).
Trauma-informed	**Trauma-informed practice** (see below) in an educational

Term	Definition
educational practice	institution or other educational environment.
Trauma-informed practice	Broader than **trauma-specific interventions** (see below), trauma-informed practice or a trauma-informed approach is a framework that incorporates trauma principles into the organizational culture. Various formulations of the principles exist, but all include some variation on the values of safety, trustworthiness, collaboration, empowerment and choice (Davidson, 2017; Fallot & Harris, 2009; SAMHSA, 2014; Wolpow, 2009). Sometimes referred to as trauma-informed care.
Trauma-specific interventions	Differ from trauma-informed practice in their focus on treating or responding to individuals who have experienced trauma, rather than incorporating trauma principles into the broader organizational culture (SAMHSA, 2014). May risk pathologizing or otherwise harming trauma survivors (Becker-Blease, 2017). Note that some experts do not distinguish between trauma-informed practice and trauma-specific interventions (Becker-Blease, 2017).
Trigger	Words, objects, or situations that are reminders of the traumatic event or experiences, resulting in flashbacks/reliving the event or other trauma responses such as nightmares, distressing thoughts, physiological symptoms, etc. (NIMH, 2019).

Chapter 2. Review of the Literature

Introduction

A literature search was conducted over the course of several months in 2021 and 2022 and continued into 2023. Databases searched included Academic Search Complete, ERIC, PsycINFO, PubMed, Science Direct, ProQuest Theses and Dissertations, and Google Scholar. In addition, references from particularly illuminating articles were reviewed, as well as foundational references cited many times across the literature (e.g., Anda et al., 2006; Felitti et al., 2008; Herman, 1997).

Search terms used included "trauma-informed teaching," "trauma-informed learning," "trauma-informed teaching and learning," "trauma-informed education," "trauma-informed care," "trauma-informed practices," "trauma-informed educational practices," "traumatized learners," "complex trauma education," and "complex trauma learning."

The review begins with a brief exploration of trauma and complex trauma, including controversies and contentions surrounding these terms. After briefly exploring the impacts of trauma, it turns next to trauma-informed practices, with a primary focus on trauma-informed educational practices. Finally, it examines perspectives of traumatized learners.

Trauma and Complex Trauma

Trauma

Psychological trauma, and its effects, have existed throughout history. Descriptions of psychological trauma can be found as far back as the third century BC (Lasiuk & Hegadoren, 2006). Throughout history, however, those suffering from the effects of psychological trauma have been stigmatized, shamed, and derided, or their experiences have been hidden from view (Herman, 1997; Lasiuk & Hegadoren, 2006). Herman (1997) attributes this to society's reluctance to acknowledge and come to terms with the human capacity for evil, coupled with a

disinclination by individuals to acknowledge their own potential vulnerability. Instead,

victims/survivors are discredited or ignored (Herman, 1997).

It was not until 1980 that the notion of psychological trauma was medically validated by

the inclusion of PTSD in the *Diagnostic and Statistical Manual of Mental Disorders (DSM-III)*

(Lasiuk & Hegadoren, 2006).[3] At the time, the decision was controversial (Lasiuk & Hegadoren,

2006). Debate centered on the validity of the construct, the basic question of whether or not

psychological trauma was "credible and real" (Herman, 1997, p. 8). The debate continues to this

day, and survivors suffering from the effects of trauma continue to be stigmatized and silenced

(Anda et al., 2020; Lasiuk & Hegadoren, 2006; Petrone & Stanton, 2021; Schomerus et al., 2021;

Schwarz, 2018; Turmaud, 2019).

Complex Trauma

Complex trauma is recognized by some experts as distinct subset of trauma. See Table 1

below for a comparison of the precipitants of trauma and complex trauma.

Table 1

Comparison of Precipitants of Trauma and Complex Trauma

Variable	Trauma	Complex trauma
Frequency	One time (has a clear beginning and an end)	Repeated or ongoing
Escape	Possible	Difficult or impossible
Cause	May be a natural event (e.g., earthquakes or floods)	Deliberately perpetrated by humans; occurs within a personal relationship
Age	Any	Often begins in childhood

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[3] Currently in its fifth edition, the DSM is the handbook used by mental health professionals in the United States to diagnose mental illness (American Psychiatric Association, n.d.). It is also used in Canada by the majority of mental health professionals, despite ongoing advocacy to replace it with the World Health Organization's International Classification of Diseases (Kogan & Paterniti, 2017).

Variable	Trauma	Complex trauma
Recognition	Public	Covered up, kept secret, or denied
Examples	Natural disasters, being a victim of crime, witnessing or being involved in a serious accident, unexpected or violent death of a loved one	Child abuse, domestic violence, sex trafficking, torture

Note. The table describes common differences between the precipitants of trauma and complex trauma. As these are generalities, they do not apply to all instances of trauma or complex trauma. Adapted from "Fact Sheet I – Trauma and Complex Trauma: An Overview" by the International Society for the Study of Trauma and Dissociation, n.d. (https://www.isst-d.org/public-resources-home/fact-sheet-i-trauma-and-complex-trauma-an-overview/).

Complex trauma has not received even the same limited degree of official sanction as psychological trauma in general. While Herman (1992) proposed complex PTSD as a diagnosis thirty years ago, it was not included in the World Health Organization's International Classification of Diseases (ICD) until 2018, nearly 40 years after the original PTSD diagnosis was included in the DSM-III (Cloitre, 2020). To date, complex PTSD has not been included in the DSM (Cloitre, 2020; Giourou et al., 2018). According to the National Center for PTSD (n.d.), the diagnosis was not included in the latest edition of the DSM (i.e., DSM-V) because complex trauma was considered to result in a severe form of PTSD rather than a distinct disorder. This remains a controversial topic (Giourou et al., 2018).

Van der Kolk et al. (2019) have proposed a specific diagnosis of developmental trauma disorder (DTD) for those who experience complex trauma in childhood, which they define as "severe and chronic exposure to interpersonal violence and impaired primary caregivers" (p. 3). Van der Kolk et al. argue that because of the dose-response relationship between cumulative trauma exposure and severe negative outcomes, coupled with the fact that polyvictimized

children may receive numerous diagnoses while still not meeting the criteria for PTSD, a distinct

diagnosis would be useful in ensuring a comprehensive, integrated treatment approach and in

preventing further harm from a fragmented multiple-treatment approach that sometimes results

in severe adverse reactions.

Impacts of Trauma

As described above, the notion that traumatic experiences can be harmful has historically

been a controversial concept (Herman, 1997); the controversy continues to this day (for example,

see Veissière, 2021). However, the conversation has shifted over the past two decades, due in no

small part to a landmark epidemiological study conducted by the American Centers for Disease

Control and Prevention (CDC) and an American health maintenance organization (HMO), Kaiser

Permanente (Felitti et al., 1998). Known as the Adverse Childhood Experiences (ACE) study, it

established a definitive causal link between adverse childhood experiences (such as physical and

sexual abuse) and lifelong diminished health outcomes, including increased rates of cancer, heart

disease, and a host of other life-threatening disorders (Felitti et al., 1998). Subsequent data from

the same ongoing study point to the impact of early adverse experiences on neurodevelopment,

with lifelong effects across a variety of dimensions, including educational outcomes (Anda et al.,

2006). In addition, a strong dose-response relationship between adverse childhood experiences

(ACEs) and an array of damaging outcomes has been established (Anda et al., 2006). In other

words, greater numbers of traumatic experiences, extending across larger periods of childhood

and adolescence, increase both likelihood and severity of subsequent problems (Dierkhising et

al., 2019).

Bystanders unaffected by trauma sometimes wonder why traumatized persons can't just

"get over it" (Fader, 2019; Turmaud, 2019). While various factors—such as stigma—come into

play, one significant driver is the brain dysfunction resulting from cumulative exposure to trauma

(Anda et al., 2006; Kennedy & Prock, 2018). Alterations in brain function are neither temporary

nor time limited; Anda et al. (2006) describe them as "enduring" (p. 175), with impacts lasting

throughout the lifespan. Imaging studies show distinctive changes to white matter tracts, as well

as the hippocampus, amygdala, and prefrontal cortex, areas of the brain responsible for memory,

emotional and behavioral controls, and relay of sensory and motor input (Bremner, 2006; Reed,

2022).

>Van der Kolk (2014) summarizes the impact of trauma on the brain in this way:
>
>Long after a traumatic experience is over, it may be reactivated at the slightest hint of
>
>danger and mobilize disturbed brain circuits and secrete massive amounts of stress
>
>hormones. This precipitates unpleasant emotions, intense physical sensation, and
>
>impulsive and aggressive actions. (p. 2)

Unfortunately, such impacts are far from rare. Experts have described developmental trauma as

epidemic, with 48% of American children having experienced at least one ACE (Abrams, 2021;

Bethell et al., 2014; van der Kolk, 2014; van der Kolk et al., 2019). In addition, complex trauma

in adulthood may result in similar neurobiological responses, as described above (Cloitre, 2020;

van der Kolk, 2014).

Trauma is now recognized as a major public health problem (SAMHSA, 2014), with the

economic impacts of new child maltreatment cases identified in the United States for a single

year (2015) estimated to be between $428 billion and $2 trillion throughout the affected

children's lifespans (Peterson et al., 2018). Of note, these costs have risen sharply since a prior

study conducted six years previously (Fang et al., 2012). These economic and other impacts

extend well beyond healthcare. In the educational setting, traumatized learners are at risk of

lower cognitive functioning, poorer school engagement and academic performance, increased

absenteeism, and a greater likelihood of individualized program planning and retention in a grade

(Bethell et al., 2014; McIntyre et al., 2019; Perfect at al., 2016; Porche et al., 2016; Wolpow et

al., 2009).

As noted in the introduction, adults with four or more ACEs have a much higher risk of

severe educational and other impacts, including a lack of formal educational qualifications and

unemployment (Hardcastle et al., 2018; Otero, 2021). The risk of completing no educational

qualifications whatsoever (e.g., high school or equivalent) is double for this population, and the

resulting unemployment rate is exceedingly high at 62% (Hardcastle et al., 2018). Postsecondary

students' ACE scores have a tight inverse correlation to timely degree completion; as previously

noted, each additional ACE decreases the odds of timely undergraduate degree completion by a

further 17% (Otero, 2021).

Compounding the challenges for traumatized persons, many institutions and systems—

including educational institutions—are trauma-inducing in themselves or may retraumatize

persons who have previously been traumatized (Carello & Butler, 2015; Petrone & Stanton,

2021; SAMHSA, 2014). In other words, the institutions that traumatized persons should be able

to rely on for help and support sometimes harm them instead, which may in part account for the

negative correlation between ACE scores and levels of educational attainment (Houtepen et al.,

2020).

Trauma-Informed Practice

Trauma-informed practice (sometimes referred to as trauma-informed care) aims to

minimize the risk of harm to traumatized service users such as clients of a healthcare system or

learners attending an educational institution. It encompasses practices and policies that are

sensitive to clients' trauma histories and enables organizations to better serve their clients

(Thomas et al., 2019). This may sound simple on the surface, but it involves significant

complexity. For example, SAMHSA (2014) conceptualizes trauma-informed practice as follows:

>A program, organization, or system that is trauma-informed **realizes** the widespread
>
>impact of trauma and understands potential paths for recovery; **recognizes** the signs and
>
>symptoms of trauma in clients, families, staff, and others involved with the system; and
>
>**responds** by fully integrating knowledge about trauma into policies, procedures, and
>
>practices, and seeks to actively **resist re-traumatization**. (p. 9)

Note that trauma-informed practice as defined by SAMHSA is not simply a question of altering

individual service providers' practices (for example, the behaviors or interactions of a particular

educator with a particular set of students); it also involves examining policies and procedures at

the organization-wide level. Harper and Neubauer (2021) emphasize that becoming truly trauma-

informed involves "incorporat[ing] key trauma principles into the organizational culture" (p. 15).

As Lecy and Osteen (2022) describe, a trauma-informed approach is fundamentally

philosophical, as opposed to programmatic, and involves systemic changes across a school or

other organization.

Critique of Trauma-Informed Practice

While SAMHSA's (2014) definition of trauma-informed practice is widely used, there is

no definition or set of practices agreed upon by all researchers (Becker-Blease, 2017; Harper &

Neubauer, 2021). Some practices locate the problem of trauma within the victim/survivor, rather

than in the perpetrator or in enabling structures in society; they focus primarily on individual

trauma impacts or pathology (Becker-Blease, 2017). Becker-Blease (2017) describes such

practices as trauma-focused or trauma-specific interventions, rather than trauma-informed;

survivors may experience them as pathologizing rather than helpful (Petrone & Stanton, 2021). Trauma-specific interventions may have the reverse of the intended effect, not only shaming and silencing but even retraumatizing victims/survivors (Becker-Blease, 2017).

As an alternative, Becker-Blease (2017) emphasizes the importance of contextualizing trauma, making visible the connection between individual experiences of trauma and oppressive systems in which trauma occurs. For Becker-Blease, empowerment and relationship building are key elements of trauma-informed practice. She goes on to state:

> All too often, society is horrified with trauma survivors; their symptoms; and the burdens it places on the health care, child welfare, criminal justice, and educational systems—and insufficiently horrified by the systems of oppression that underlie so much trauma, violence, and abuse. (p. 134)

This horror with survivors' symptoms and behavior leads institutions to harm and betray those who may have already experienced extensive institutional and systemic trauma (Becker-Blease, 2017). Khasnabis and Goldin (2020) argue that there is pervasive stigma for victims/survivors and their families in the K to 12 educational context and that the concept of trauma has become weaponized against them. Thus those seeking to implement trauma-informed practices must recognize, explore, and challenge their own biases, as well as their instincts to judge, label and stigmatize (Boylan, 2021; Gorski, 2020; Khasnabis & Goldin, 2020). Researchers and practitioners should also consider the distinction between trauma-informed practices and trauma-specific interventions or trauma-focused practice (Becker-Blease, 2017).

Trauma-Informed Practice in Education

Overview

Trauma-informed educational practices include an array of techniques and strategies at

both the school- or institution-wide and individual practitioner level. These may include both systemic trauma-informed practices and trauma-specific interventions (Becker-Blease, 2017). Alexander (2019) describes trauma-informed educational practices as strategies to help learners feel safe, be connected, and learn. One example is for educators to use the PACE (playfulness, acceptance, curiosity, empathy) model to build relationships with learners (Alexander, 2019). Another example is deliberately creating classroom communities that collectively welcome and support learners who are experiencing trauma (Payne et al., 2020). This can be accomplished in part by modelling inclusive and patient behavior for all learners to emulate (Payne et al., 2020).

Davidson (2017) describes both campus-level and classroom-level strategies, such as ensuring all students are informed about choices and options, providing clear explanations and information about tasks and procedures, and maintaining open dialogue with learners by simply asking them, "What's going on?" Kostouros et al. (2023) discuss the importance for educators to be aware of and eliminate potential flashback and other trauma response triggers (such as lineups and windowless rooms for traumatized refugee and immigrant learners).

This small sampling of practices aligns with Fallot and Harris's (2009) values for cultures of trauma-informed care:

- safety
- trustworthiness
- choice
- collaboration
- empowerment

They additionally align with Wolpow et al.'s (2009) principles for compassionate instruction:

- always empower, never disempower

- provide unconditional positive regard

- maintain high expectations

- check assumptions, observe and question

- be a relationship coach

- provide guided opportunities for helpful participation

Finally, the above models both closely align with SAMHSA's (2014) key principles of a trauma-informed approach:

- safety

- trustworthiness and transparency

- peer support

- collaboration and mutuality

- empowerment, voice, and choice

- recognition of cultural, historical, and gender issues

All are intended to build trauma survivors' capacity, as well as minimize the potential that a practitioner or institution will cause further harm (Robertson, 2022).

Harper and Neubauer (2021) propose a model for implementation of SAMHSA's (2014) trauma-informed organizational assumptions and guiding principles in postsecondary educational institutions. For example, to implement the guiding principle of safety, they state:

Physical and emotional safety need to be defined by those with the least amount of power (e.g., students, educators) and should be created and promoted by those with the most power and decision-making authority (e.g., educators, administrators) in the teaching and learning environment. (p. 20)

For the guiding principle of collaboration and mutuality, they recommend that those with the

most power and decision-making authority partner with students and educators and actively

collaborate to reduce power differences, including collaboratively making essential decisions

about teaching and learning.

Harper and Neubauer's (2021) attention to questions of power, and their exploration of

the educational institution as a system (their model explicitly addresses the implementation of

trauma-informed practices within the administration of the institution, rather than merely at the

frontline), are arguably two of the most essential elements of implementing trauma-informed

educational practices (Petrone & Stanton, 2021).

Primary and Secondary Education

Over the past decade, the notion of trauma-informed practice has begun to make inroads

in primary and secondary education in North America and beyond, with spread accelerating over

the past five years (Boylan, 2021; Government of Alberta, n.d.; Maynard et al., 2019; Rahimi et

al., 2021; Thomas et al., 2019). For example, some schools with high rates of students living in

poverty, along with schools that provide alternative/flexible educational pathways (so-called

"second chance" schools), have implemented trauma-informed practices (Brunzell et al., 2016;

Golden, 2020; Thomas et al., 2019). Several American jurisdictions have introduced legislation

to implement special funding to support trauma-informed practices in schools (e.g., United States

Congress, 2019). Recent researchers have described this shift towards trauma-informed schools

as a national movement, at least within America (McIntyre et al., 2019).

Evaluation of Effectiveness. While trauma-informed approaches are increasingly being

implemented in schools, their impact and effectiveness is unclear (Becker-Blease, 2017; Hanson

& Lang, 2016; Maynard et al., 2019; Thomas et al., 2019). This may be due to relatively limited

research to date: the majority of published studies examining trauma-informed practices within

primary and secondary education are pilots or preliminary studies (Thomas et al., 2019). While

the results of these studies are promising, Thomas et al. (2019) argue that further, more robust,

research is needed. Maynard et al. (2019) go further:

> Despite the increasing adoption of trauma-informed approaches in schools, we found no
>
> rigorous evaluations of trauma-informed approaches in schools that might indicate
>
> whether or how this approach works to address the various impacts of trauma on young
>
> people, families, and educators. This review also could not provide any strong evidence
>
> to date of what the school-level impacts are (if any) of implementing this approach. (p.
>
> 13)

Maynard et al.'s criticism highlights an issue brought forward by other researchers: the question

of trauma-informed research methods for work with traumatized populations, as well as the

question of how best to explore trauma-informed educational practices. Petrone and Stanton

(2021) argue that qualitative research is more suited to trauma-informed educational practices,

given the importance of building trust and relationships with traumatized persons and to tell their

stories in depth. In their view, however, education research journals have a long history of

privileging quantitative research, both generally and for trauma-informed education research.

This is an essential target for change: Petrone and Stanton argue that a "humanizing, community-

centered, and participatory" (p. 539) approach to this research is essential.

Adult/Postsecondary Education

In contrast to K–12 education, trauma-informed educational practices have gained little

traction at the postsecondary level (see Howick, 2019; Olesen-Tracey, 2020; Robertson, 2021).

This may be due, at least in part, to the perception that postsecondary students have moved

beyond the potential for any impacts related to early trauma (Bentley-Edwards et al., 2019). This

perception is not borne out by the research. As previously discussed, 25% of undergraduate

students have probable PTSD, with 70% reporting exposure to at least one traumatic life event

(Cusack et al., 2019). Overall, 12.4% of American college students report exposure to four or

more ACEs, a level comparable to that found in community samples by the CDC (Windle et al.,

2018).

Given that traumatic exposure—particularly when cumulative—can alter brain structures

responsible for memory, attention, and self-regulation, the potential for impact to success in

postsecondary education is significant (Anda et al., 2006). Indeed, exposure to ACEs predicts

worsening mental health in college students over the semester (Karatekin, 2018), and learners

with high ACE scores are less likely to graduate from a postsecondary institution (Boden et al.,

2007).

Researchers have posited other explanations for the lack of uptake in the postsecondary

environment, including postsecondary educators' limited pedagogical education (as opposed to

discipline-specific expertise), resistance to the notion of trauma-informed or compassion-based

education, and an overall lack of awareness or knowledge of trauma-informed practices, as well

as an array of institutional and policy-related barriers (Olesen-Tracey, 2020; Robertson, 2021;

Smith, 2022). Regardless of the cause, it is clear that implementation at the postsecondary level

lags well behind the K–12 context.

Adult/Postsecondary Education: Open, Digital, and Distance

With the impact of trauma—particularly complex trauma—on lifelong outcomes across a

multiplicity of dimensions, and its demonstrable impact on educational outcomes and the ability

to learn, it appears likely that traumatized adult learners in all contexts could benefit from a

trauma-informed approach (Horsman, 1999; Perry, 2006). Adult/postsecondary learners studying

at a distance may be a particularly urgent target, however. Open, digital, and distance education (ODDE) is often positioned as improving access for underserved learners, and underserved learners—including veterans, former foster youth, learners who identify as members of the LGBTQ2S+ community, Indigenous learners, refugees, and adults who attend postsecondary institutions later in their lives—are at higher risk of having a history of traumatic exposure than the general student population (Davidson, 2017; Giano et al., 2020; Koseoglu et al., 2020). For example, racialized and sexual minority persons, as well as females, have higher ACE scores (Giano et al., 2020). This adds weight to the argument that implementing trauma-informed practices in the ODDE adult/postsecondary setting could be of significant value.

No empirical research has been performed to date on trauma-informed practice in ODDE at any educational level—at least none that this literature review has been able to identify—and little research has been performed on trauma-informed educational practice in the postsecondary or adult education environments, with the bulk of the published literature in this area consisting of gray literature or opinion or advocacy pieces (e.g., Carello & Butler, 2015; Davidson, 2017; Harper & Neubauer, 2021; Perry, 2006), supplemented by a few more recent dissertations (e.g., Howick, 2019; Howorun, 2021; Olesen-Tracey, 2020; Robertson, 2021; Smith, 2022). This literature review was unable to identify even a single academic research publication focused on trauma-informed practices for adult/postsecondary ODDE, although a small handful of recent peer-reviewed publication describe trauma-informed practices for postsecondary online learning from a theoretical or practice-based perspective (e.g., Chan, 2022; Hitchcock et al., 2021; Sherwood et al., 2021). It is unclear whether the paucity of research is due to a lack of implementation of trauma-informed practices within this context or whether they have been implemented and not studied. Fundamentally, however, despite a hypothesized need for

implementation of trauma-informed practice in the field of adult/postsecondary ODDE, the research base in this area is nonexistent.

The perception that trauma-informed practices have gained little traction within the field of adult/postsecondary ODDE is borne out by preliminary research conducted for a graduate-level education course at Athabasca University (Schmidt, 2022). Eight participants, including graduate students, recent graduates, and faculty members in a Canadian master's-level ODDE program were interviewed about their awareness of trauma and trauma-informed educational practices using a structured interview guide. Results suggested a relatively low level of familiarity with the basic concepts of trauma and trauma-informed educational practice: no participants had previously encountered the term ***trauma-informed educational practice***, and only two (both employed in the field of healthcare) had heard of trauma-informed care (Schmidt, 2022).

Perspectives of Traumatized Learners

The literature review identified only three studies to explore the perspectives of learners with a lived experience of trauma. West et al.'s (2014) study engaged youth in an exploration of the way in which trauma experiences manifest in the classroom and in developing trauma-informed classroom approaches. This valuable phenomenological study is focused on a very specific population: the participants attend a public charter school exclusively for female court-involved youth (typically coming from a background of abuse and neglect) who have been placed in residential treatment.

Golden (2020) interviewed two young people (aged 20) enrolled in a "second-chance" school that has implemented trauma-informed educational practices. Golden's commentary is illuminating, as are the voices of the young people with whom he spoke. He states:

For these young scholars, "trauma-informed" is synonymous with a humanizing

pedagogy, one in which they are not automatically assumed to be "bad kids." Within this

ethos, young people can define themselves and make mistakes without their errors being

seen as entrenched dispositions or commentaries on their possible life trajectories. It is a

pedagogy grounded in relationships in which they are known as promising young people

who have been through difficult circumstances or experiences. Within these narratives

and reflections, trauma-informed has nothing to do with self-regulation or executive

function. For these adolescent scholars, what matters is whether the educators they see

every day are part of their care network or people who exacerbate tensions or challenges

in other areas of their lives. (p. 76)

Most recently, Crosby et al. (2023) compared perceptions and experiences of

trauma-exposed female youth attending two high schools: one trauma-informed and one

non-trauma-informed. This crucially important study provides an important first step in

unpacking the impact of trauma-informed educational practices on trauma-exposed learners.

In contrast to the lack of exploration of learners' perspectives regarding trauma-informed

educational practices, numerous researchers have assessed educators' attitudes, perceptions, and

beliefs (e.g., Howick, 2019; Howorun, 2021; Kostouros et al., 2023; Rahimi et al., 2021;

Robertson, 2021; Smith, 2022). As previously discussed, this is a curious oversight, given the

importance of collaboration and consultation as foundational principles of trauma-informed

practice.

Implications

In the absence of published research focusing on the online adult/postsecondary setting

that establishes rates of traumatic exposure, explores perspectives of traumatized learners, or

examines trauma-informed educational practices, online universities and colleges and their

faculty and staff are missing essential information: how many of their learners' life histories

encompass trauma, traumatized learners' needs within this environment, how trauma-informed

educational practices might be operationalized within this setting, and the relative state of

readiness of faculty and staff. This understanding is essential to achieve equity for traumatized

online adult/postsecondary learners—particularly those experiencing the severe impacts of

complex trauma—and to ensure institutions are not harming or retraumatizing vulnerable

students by recruiting for failure (Kelly & Mills, 2007).

Chapter 3. Methodology

Introduction

This chapter reviews the methodology used for the study. The study's philosophical

foundations are explored first, with a focus on the essential role of epistemology and ontology,

particularly in relation to trauma-informed practice. Next, the role of the researcher is briefly

reviewed, and the research design and instrumentation are explored. Procedures used for data

collection are described, along with an introduction to the study participants and their selection.

The latter part of the chapter explains the data analysis and validation methods used, as well as

examining the ethical issues raised by the study.

Philosophical Assumptions

The philosophical assumptions underpinning this study align primarily with those of the

transformative research framework. Within the transformative framework, the primary purpose

of research is empowerment and change: to help people transform society or build a better world

(Creswell & Poth, 2018; Neuman, 2014). These principles align well with those of the

trauma-informed approach, which likewise underpins the study. As Lecy and Osteen (2022)

emphasize, the trauma-informed approach is fundamentally a philosophy, rather than a program

or a methodology: it centers the principles of safety, trustworthiness, collaboration,

empowerment, and choice (Davidson, 2017; Fallot & Harris, 2009; SAMHSA, 2014; Wolpow,

2009).

Epistemology and Ontology

The transformative framework is supported by a subjectivist epistemology—in particular,

the notion that no knowledge is neutral; it is inevitably impacted by power and the structure of

society and the relationships contained therein (Creswell & Poth, 2018). While the subjectivist

epistemology is often conflated with a subjectivist ontology (Grix, 2002)—and, indeed, common

philosophical frameworks such as social constructivism are subjectivist in both epistemology and

ontology—the transformative framework is compatible with a realist ontology (Kivunja &

Kuyini, 2017; Neuman, 2014). As Haslanger (1995) states: "even if we grant that there is no

objective reality, it still doesn't follow that there is no *independent* reality, or that there are no

genuine facts of the matter that would be good to know" (p. 118).

A realist ontology is consistent with the primary aim of the transformative framework:

changing conditions for marginalized persons (Kivunja & Kuyini, 2017; Neuman, 2014). After

all, if the existence of an independent reality is called into question, it would be contradictory to

simultaneously assert the objective existence of underlying power structures or other conditions

that cause suffering and require change. In fact, transformative researchers have critiqued social

constructivism on precisely this basis: that the individualized, tentative, and local knowledge

generated by the social constructivist approach ignores broader, long-term structural conditions

(Neuman, 2014).

A realist ontology may also be an essential element of a trauma-informed approach. As

Herman (1997) observes, trauma victims/survivors frequently undergo a lack of validation or

even a derealisation of their experience. She emphasizes that perpetrators typically have more

social power than their victims, and that the more power they have, the greater their ability to

define what is real and what is not. A subjectivist ontology on the part of researchers and

observers may insufficiently affirm traumatic reality, thus implicitly leading to a tendency to

discredit or silence the victim (Herman, 1997). Silencing and discrediting trauma victims and

survivors not only retraumatizes individual survivors—in direct contradiction to the basic tenets

of a trauma-informed approach—but impacts the entire field of psychological trauma, which has

repeatedly "foundered on fundamental questions of belief" (Herman, 1997, p. 8).

In addition, when combined with a subjectivist epistemology, a realist ontology forms the underpinning of what is known as critical realism (Botha, 2021). Within the field of education, critical realism supports researchers in challenging assumptions about knowledge, power, policies, and practices (Egbo, 2005). The critical realist philosophy has a long association with case study research (Priya, 2021) and has been demonstrated to be a useful framework for small-scale qualitative studies in education (Stutchbury, 2022). It is therefore highly suitable as the philosophical basis for a small-scale case study focused on trauma-informed educational practices.

Axiology and Methodology

Those who engage in transformative research take their values a step further than social constructivists (Spencer et al., 2014). Where social constructivists acknowledge their values, transformative researchers explicitly expect them to influence both the research process and outcome (Spencer et al., 2014). This is a key element of the transformative framework: emancipation and empowerment—the aims of transformative research—are inherently value-laden enterprises.

The concern with emancipation and empowerment informs the methodology used within this paradigm, which should involve meaningful collaboration with participants and must ensure participants are not further marginalized through the research process (Creswell & Poth, 2018; Spencer et al., 2014). To this end, participants' voices should be elevated throughout (Creswell & Poth, 2018).

Role of the Researcher

Within the transformative framework, researchers must critically examine their work and

its impact to ensure they are not complicit in current oppressive systems and practices; they should strive for justice and equity (Mertens, 2021). This involves applying a transformative lens to every step of the research process, including thinking about, planning, designing, conducting, and disseminating research (Mertens, 2021). Within the realm of researching trauma-informed educational practices in particular, Petrone and Stanton (2021) emphasize the importance of researchers striving to build a shared understanding between themselves and participants.

Within case study research, the primary role of the researcher is to "recognize and substantiate new meaning" (Stake, 1995, p. 97). Stake (1995) explicitly states that research is not a purely scientific enterprise but is also an art and a craft that belongs to anyone who strives to study and interpret phenomena. He highlights researchers' multiple roles, which include storytelling, advocacy, teaching, and more, arguing that each researcher continuously moves between them, choosing how much weight to give each one. In his view, the ultimate aim of research is to construct a clearer and more sophisticated view of reality, one that is capable of withstanding "scrutiny and challenge" (p. 102). Stake also strongly recommends including narrative description in case studies so research readers or consumers may generalize for themselves, rather than relying entirely on the researcher's interpretations. This approach aligns tightly with the transformative framework, through its empowerment of the research reader or consumer to generalize or transfer independently rather than relying exclusively on the researcher's interpretation of the data.

Research Design

As described above, this research project uses an instrumental multiple (collective) case study design following the procedures laid out by Stake (1995). The aim of instrumental case studies is to understand something other than the particular case being studied, such as a research

question, or a puzzlement (Stake, 1995). Multiple (or collective) case studies involve the study of

more than a single case; while each case individually is instrumental to investigating the research

question or puzzlement, cross-case comparison and coordination also provide opportunities to

learn (Stake, 1995).

Participants were selected after completing a screening survey, the Adverse Childhood

Experiences International Questionnaire or ACE-IQ (WHO, 2020a) with the addition of a

handful of questions (see Appendix C and the Instrumentation section below). Schoch (2020)

recommends a maximum of three to four cases for a multiple case study design; for this project,

three cases (i.e., three adult/postsecondary online learners with a history of complex trauma)

were selected for inclusion.

Instrumentation

This study used a combination of a well-researched, well-established, validated

questionnaire for screening (the ACE-IQ) and a semi-structured interview guide/detailed

questionnaire for case study participants. The rationale for using the ACE-IQ for screening is

explored in the Delimitations section in Chapter 1. The screening survey and semi-structured

interview guide/detailed questionnaire are described below, with full text available in

Appendices C, D, and E.

Screening Survey

Initial screening of participants was completed using the World Health Organization's

Adverse Childhood Experiences International Questionnaire (ACE-IQ), with the addition of

several questions; see Appendix C for full text of the screening survey (questions not included in

the original ACE-IQ are indicated with an asterisk). To be eligible for participation in the case

study, respondents required a score of 4 or higher on the ACE-IQ out of a maximum score of 13.

Note that two separate ACE-IQ scores were calculated using the two methods recommended by

the World Health Organization (2020b): a binary score and a frequency score. Respondents were

considered eligible as long as they scored 4 or more on either of the two scores.

      To be considered eligible for participation in the case study, respondents were also

required to answer in the affirmative to the following:

- Do you consider yourself to have experienced significant trauma in childhood (before the

  age of 18)?

- If yes, has the childhood experience of trauma continued to affect you in adult life?

In addition, participants were asked to provide a rationale for their interest in participation:

- If yes, why would you like to participate? (Please write as much or as little as you would

  like.)

The above questions supported the selection of suitable case study participants and the richest

possible data collection. (For additional information regarding selection of participants, see the

Participants section below.)

Semi-Structured Interview Guide

      A semi-structured interview guide was used to conduct the interview for the case study,

with a written version of the interview guide (i.e., a detailed questionnaire) provided to

participants who could not participate in a synchronous interview; see Appendices D and E for

complete details. The guide was written with a view to balance the collection of meaningful data

against the need to preserve psychological safety both for myself and for participants. In

particular, the guide was structured to avoid the potential for reactivation of past trauma through

triggers and flashbacks, as well as the potential for me to experience vicarious trauma.

Data Collection

Screening Survey

As noted above, participants were recruited via a link to the recruitment poster in the MyAU student portal at Athabasca University (the standard recruitment method for student research participants at the university); see Appendix A for a copy of the recruitment poster. Researchers do not have direct access to the student portal to post such links; a member of the university's information technology team created the link once the Research Ethics Board had provided approval to access institutional resources. The post went up on April 5, 2023, and was removed on May 23, 2023.

The recruitment poster contained a link to the letter of information and informed consent form; consent was implied by overt action (i.e., clicking a button labelled START SURVEY). On click, the survey opened up beneath the informed consent form. It consisted largely of the questions from the ACE-IQ, with a few additions, including specific demographic questions recommended by Athabasca University's Research Ethics Board to assist in selection of diverse participants and the three questions described in the Instrumentation section above (see Appendix B for the letter of information and informed consent and Appendix C for full text of the screening survey).

The screening survey was built in REDCap, a secure web application for online surveys and databases. The survey was built in my password-protected personal account, to which only I have access, although access to the platform itself was provided by my former employer (the provincial health authority, Alberta Health Services). Within the broader umbrella of Alberta Health Services' (AHS') REDCap system, data are stored in Canada on AHS servers, and the platform conforms to the province of Alberta's stringent privacy legislation. It should be emphasized that AHS and its employees do not have access to the survey account or the data.

Participants were clearly advised in the informed consent form that the software was owned by

AHS (see Appendix B).

A total of 118 responses to the screening survey were received between April 5, 2023,

and May 23, 2023. See Table 2 below for a summary.

Table 2

Screening Survey Responses

Total number of respondents	Number of respondents who met all criteria for inclusion	Percentage of respondents who met all criteria for inclusion
118	89	75

This response rate was substantially higher than anticipated; colleagues, thesis committee

members, and the university's Research Ethics Board had all asked me, prior to data collection,

to consider how to proceed if sufficient numbers of participants could not be recruited. With a

high volume of responses, selection of participants for the interview or detailed questionnaire

became significantly challenging.

Selection of Participants for Interview/Detailed Questionnaire

To minimize the potential for researcher bias, all screening survey response information

was hidden during the selection process, with the exception of total ACE score, demographics,

and response to the "why would you like to participate" question (in particular, names, contact

information, and responses to individual questions were concealed to minimize the potential for

unconscious bias). The key element for selection was the answer to the question "why would you

like to participate." The responses to these questions allowed me to begin to recognize

participants' unique voices and perspectives, which is particularly important, given that the ACE

score is a relatively blunt instrument in its measure of trauma exposure (Anda et al., 2020; Lacey

& Minnis, 2020). Demographics were used to assist in selection of a diverse range of participants, and the ACE score was considered as well. (For further details regarding interview/detailed questionnaire participants, refer to the Participants section below.)

Ten potential participants were selected, representing a range of ages, gender identities, and ethnicities, with invitations to the interview issued via email on a rolling basis in May and June 2023 (see Appendix F for full text of the invitation). My Athabasca University email account was used for all email communication with participants. Of the ten invited participants, three did not respond, two agreed to be interviewed but did not attend the scheduled interview time, one responded past the deadline for completion, and one was out of the country and hence unavailable, although she indicated interest in participating in future. Of the remaining three, two were unavailable to participate in an interview but completed the detailed online questionnaire. The third was interviewed on Friday, May 19, 2023.

Interview/Detailed Questionnaire

As described above, participants were invited to participate in an online interview (which was conducted with a semi-structured interview guide), with an alternative to complete a detailed written questionnaire. The aim of offering an alternative to the interview was to be as inclusive as possible; participants could have been experiencing a variety of life challenges—both trauma- and non-trauma-related—and as a result have limited capacity or willingness to participate in an interview, particularly with an unknown researcher. While my first preference was for an interview due to the potential for meaningful data to be collected from participants' body language and tone of voice (van der Kolk, 2014), offering an alternative was essential from the trauma-informed perspective, as it centres empowerment and choice for participants (SAMHSA, 2014).

Interview. The interview was conducted via the Microsoft Teams videoconferencing platform, using my Athabasca University account. Data included an audio- and video-recording, as well as an automated transcript generated by Microsoft Teams during the interview (the recording and transcript were available to the participant via Microsoft Teams). The audio- and video-recording was started once the preamble in the semi-structured interview guide was complete (see Appendix D), and the participant was made aware that recording had begun.

Detailed Questionnaire. The detailed questionnaire was created in REDCap, the secure online survey platform used for the screening survey, and provided to participants via an email link. The participants' text-based responses to the questions comprised the data collected. Two participants completed the detailed questionnaire between May 18, 2023, and June 1, 2023.

Artefacts

Interview and detailed questionnaire participants were asked for written documents or digital artefacts that might help me understand their experience as an adult online learner with a life history of trauma. Prompts/examples for participants (who might not have been familiar with the term "artefact") included emails from the university or a professor or a forum post or reading from a course that they found very helpful or very unhelpful. Two of three interview/detailed questionnaire participants agreed to provide artefacts and sent them to me by email. The participants provided an array of artefacts; see Table 3 below for a summary.

Table 3

Summary of Artefacts Provided by Case Study Participants

Participant	Artefact
MS	Link to article: Perry, B. (2006). Fear and learning: Trauma-related factors in the adult education process. *New Directions for Adult and Continuing Education*, *2006*, 21–27. https://doi.org/10.1002/ace.215

Participant	Artefact
MS	Link to article: National Scientific Council on the Developing Child. (2011). Building the brain's "air traffic control" system: How early experiences shape the development of executive function. Working paper 11. https://developingchild.harvard.edu/resources/building-the-brains-air-traffic-control-system-how-early-experiences-shape-the-development-of-executive-function/
Ryan Handy	Final project for online undergraduate psychology course (non-Athabasca University). Project is focused on 2SLGBTQA+ trauma resilience in education.
Ryan Handy	Essay completed for online yoga teacher training. Essay is focused on trauma-informed yoga as a way to support healing from trauma.
Ryan Handy	Yoga teacher certificate (online course)
Ryan Handy	Chair yoga teacher certificate (online course)
Ryan Handy	Graduation certificate: Spirit of Ayurveda (online course)
Ryan Handy	Digital fashion illustration with Adobe Photoshop certificate (online course)
Ryan Handy	Become a Graphic Designer certificate (series of online courses)
Ryan Handy	Advance Your Career as a Graphic Designer certificate (series of online courses)
Ryan Handy	Two-way email communication with online learning institution [name redacted] regarding negative educational experience
Ryan Handy	Personal essay completed for online graduate course in interdisciplinary studies. Essay is focused on how online learning at Athabasca University taught the author how to advocate for themselves while in medical jeopardy.

Research Journal

I maintained a research journal to record observations and begin the process of

interpretation (Stake, 1995). The journal contains handwritten notes and observations from the

study, including details regarding everything from my emotional and psychological responses

during initial review of the data, to the challenges around selecting participants for the interview

or detailed questionnaire, to observations from the interview and some initial analysis and

summary. The journal provided the foundations for analysis of the data, including early and tentative identification of themes.

Analytic Memos

Analytic memos were written during the formal data aggregation phase (the pre-coding and coding process). Saldaña (2016) states that analytic memos can reflect on how the researcher personally relates to the participants and/or the phenomenon; code choices and their operational definitions; emergent patterns, categories, themes, concepts, and assertions; tentative answers to the study's research questions; the final report for the study; and more. For the present study, I wrote analytic memos related to all of the above.

Participants

Inclusion/Exclusion Criteria

Participants were required to meet the following criteria for potential inclusion in the case study:

- 18 years or older

- currently enrolled, or has been enrolled within the past 12 months, in an online postsecondary course (at Athabasca University or another university or college)

- ACE-IQ score of 4 or higher

- answer "yes" to the following questions:

    o Do you consider yourself to have experienced significant trauma in childhood (before the age of 18)?

    o If yes, has the childhood experience of trauma continued to affect you in adult life?

    o Would you be interested in participating in an interview or completing an

additional questionnaire to explore your experiences as an adult learner? (Note:

The interview or additional questionnaire will not ask about your experience of

trauma but rather about your experience of online learning.)

Additional selection criteria included participant responses to the final screening question: ***Why***

would you like to participate? Please write as much or as little as you would like. Finally, the

demographic information provided by recipients (including age, ethnic or cultural background,

Indigeneity, highest level of education, and civic and employment status) was considered during

the selection process.

Screening Survey

As described above, a recruitment poster with a link to the letter of information, informed

consent form, and screening survey was posted in the MyAU student portal from April 5, 2023,

to May 23, 2023. In order to gain access, participants therefore required access to the MyAU

portal during that period. In addition, because the recruitment poster was posted as a link in the

Message Centre (see Figure 1 in the Delimitations section in Chapter 1), rather than being sent

directly to students, participants needed sufficient cognitive capacity to observe and process the

meaning of the link; undoubtedly some members of the AU community who met all criteria for

inclusion would not have had this capacity, whether due to the impacts of trauma or simply the

overall stress and demands of being a student.

Age and Ethnicity/Cultural Background. As previously noted, 75% (89 of 118) of the

screening survey respondents met all criteria for inclusion in the case study. Of these 89 qualified

participants, ages ranged from 19 to 59, with a mean age of 34. A broad array of ethnic and

cultural backgrounds were represented: Indigenous (including Cree, Métis, and First Nations),

French, American, English, Southeast Asian, Mennonite, Spanish, South American, Scottish,

Polish, Italian, Hungarian, German, Portuguese, Dutch, South African, Asian, Latina, Finnish, Traveller/Roma, South African, Indian, Irish, and Chinese.

Gender. Qualified participants overwhelmingly identified their gender as female (78, or 88%). Just 7 qualified participants identified as male (8%), with an additional 4 (4%) identifying their gender as nonbinary (2), nonbinary/masculine (1), or male/nonbinary (1). Although Athabasca University's student population is majority female (66% of undergraduate students and 77% of graduate students) and women have higher ACE scores than men, as previously noted, this disparity in gender is substantially beyond what might have been expected on that basis (Athabasca University, 2022a; Giano et al., 2020).

ACE-IQ Score. Two methods were used to calculate the ACE-IQ score from survey responses: the frequency method and the binary method (WHO, 2020b). The binary version scores all affirmative answers (once, a few times, many times) as a yes (1), with a total score from 0 to 13 (WHO, 2020b). The frequency version scores 7 of 13 questions on a frequency basis, with responses of "many times" typically qualifying as a yes (1) and responses of "a few times" or "once" typically scored as a no (0) along with responses of "never" (WHO, 2020b) . The other 6 of 13 questions are scored on a binary basis, with all affirmative participant answers scored as a yes (1). Once again, the frequency method yields a score between 0 and 13 (WHO, 2020b). Of note, while the frequency method aligns with the original ACE questionnaire and may also support cross-cultural comparison, it is considered more stringent and runs the risk of underestimating exposure to ACEs (Chen et al., 2022; Kidman et al., 2019; Wang et al., 2022).

ACE-IQ scores were not calculated for participants who answered "no" to the additional screening questions (considers self to have experienced significant trauma in childhood; trauma continues to affect self in adult life; willingness to participate). No participants were eliminated

due to age (i.e., younger than 18) or lack of enrollment in an online postsecondary course within

the last 12 months. In total, 29 participants answered "no" to one or all of the additional

screening questions, leaving 89 whose ACE-IQ scores were calculated.

Strikingly, all respondents who indicated that they had experienced significant trauma

before the age of 18 that had continued to affect them in adult life had an ACE-IQ score of 4 or

higher using at least one of the two scoring methods. In fact, only two qualified participants had

frequency scores below 4; both had binary scores of 7. All qualified participants' binary scores

were higher than 4. See Table 4 below for a summary.

Table 4

ACE-IQ Scores: Screening Survey (n=89)

Parameter	Binary scoring method	Frequency scoring method
Range	5 to 13	3 to 13
Mean (std. deviation)	9.52809 (1.87)	7.50562 (2.22)
Median	9	7
Mode	10	7

Participants Invited to Interview/Detailed Questionnaire

As described in the Data Collection section above, ten potential participants were chosen

from the qualified screening survey participants and contacted via email on a rolling basis. The

ten ranged in age from 26 to 56 and included varied ethnic and cultural backgrounds and civic

status (including single, married, and living as a couple). Three stated that their main work status

was "student," three were government employees, and four were nongovernment employees.

Eight participants identified as female, one as nonbinary masculine, and one as nonbinary. Three

were parents of at least one child. Their ACE-IQ scores ranged from 6 to 11 (frequency score)

and from 8 to 13 (binary score).

Statements regarding why they wished to participate in the case study were key elements of the selection. Seven of the ten specified wanting to help others as a primary motivator for their wish to participate (as did many of the other qualified participants). Several of the ten elaborated at length on their experiences and struggles. A standout response from one participant included (in part) the following:

As someone who experienced childhood trauma and (for the most part) has overcome it in the eye of society, it often is swept under the rug. I frequently am described as being "resilient," and it is frequently misunderstood that conditioned trauma responses are something I continue to have. I am going to use an analogy: Sometimes it feels as though everyone is going through their lives, riding a bike. I am riding a bike as well, however, I've always seemed to find it harder to get where I am going than everyone else. Just recently I experienced a "light-bulb" moment where I realized that my bike tires have been flat my entire life (largely in part to the adverse experiences I had as a youth). Instead of receiving offers to help fill up my tires to reach the finish line, I am praised by the people already at the finish line who did not have flat tires, for still getting there.[4]

Other common themes included the desire to raise awareness amongst educators and learning institutions. For example, one participant stated that she would like "to inform future educators how to manage this [students with a background that includes trauma]. None of my educators seemed to acknowledge my stressors or angst." Another participant said:

I find that my traumas have lead [sic] to a lot of issues with confrontation, criticism, and shying away from any work that involve [sic] other people. I've withdrawn from a course

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[4] The participant advised that the bike tire analogy was inspired by a blog post she had read; the analogy is not her own original thought.

purely because a TA was particularly aggressive on phrasing and I couldn't handle the

confrontation.

Speaking to the same theme, a third participant shared that "I would not have been able to pursue

university if not for Athabasca. However there have been many hurdles since starting at AU. If

my input can help other students or faculty (at AU or elsewhere), I'd love to help!" Yet another

stated: "A few times I have reached out for help and I haven't received any—either through

online learning supports or through an instructor. I don't feel there is much support for people

with my set of experiences/trauma, so I just trudge on."

A final participant made their commitment known in blunt terms: "Overcoming my life

trauma as an adult student is a major focus of my life. I would like to assist in any way possible."

This participant took the extra step of contacting me by email to express an interest in

participating (they had forgotten to include their contact information in their screening survey

response).

Case Study Participants

Of the ten invited participants, three completed an interview or a detailed questionnaire

(as described above, the other seven were either unavailable, did not attend the scheduled

interview time, or did not respond to the invitation). Brief descriptions of the three case study

participants can be found below, followed by a summary of their ACE-IQ scores. Note that each

of the participants was invited to select their own pseudonym: one chose initials (MS) and one

selected a name (Willow). The third participant elected to use their own full name (Ryan Handy)

rather than a pseudonym.[5]

Participant 1: MS. MS is a 28-year-old female who identifies her background as "Euro-

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[5] On the advice of Athabasca University's Research Ethics Officer, an additional informed consent form was created
to permit use of the participant's own name. See Appendix H.

Canadian." She is a licensed Red Seal tradesperson who identifies her main work status over the past 12 months as a nongovernment employee. She has never been married but lives as a couple and had her first child at the age of 17. MS is the author of the bike analogy quoted above. She is eloquent, highly self-aware, and determined, and expressed a strong desire to "shed some light on the challenges and help someone else in future" through her participation in the study. She is currently an undergraduate at Athabasca University. MS participated in an interview on May 19, 2023, and generously provided two artefacts.

Participant 2: Ryan Handy. Ryan Handy is a 41-year-old student who identifies as nonbinary masculine and uses they/them pronouns. Their ethnic/cultural background is "Celtic Caucasian with African and Metis family members" (R. Handy, personal communication, July 22, 2023). Ryan is nearing completion of a graduate (master's level) degree at Athabasca University and previously completed an undergraduate degree through another open/online university. In addition, they have completed numerous other online courses and programs through a variety of platforms and institutions, so they offer a wealth of experience of online learning. Ryan is highly articulate, with a crystal clear communication style that shines through in all their survey and questionnaire responses, emails, and artefacts. They preferred to complete the detailed questionnaire as they are generally not well enough to complete live interviews; they also provided a comprehensive package of 10 artefacts.

Participant 3: Willow. Willow is a 32-year-old female who identifies her cultural or ethnic background as "Canadian/Caucasian." She is currently an undergraduate at Athabasca University, and her student role comprises her main work status over the past 12 months. She is married and does not have children. Willow's ACE-IQ scores (11 frequency score; 13 binary score) were the highest of the three case study participants. In both the initial screening survey

and the detailed questionnaire (which she elected to complete), her writing is simple, clear, and powerful.

ACE-IQ Scores. Case study participants' ACE-IQ scores are summarized in Table 5 below.

Table 5

ACE-IQ Scores: Case Study Participants (n=3)

Parameter	Binary scoring method	Frequency scoring method
Range	10 to 13	10 to 11
Mean (std. deviation)	11.33333 (1.24)	10.66667 (0.47)
Median	11	11
Mode	n/a	11

Data Analysis

For Stake (1995), case study analysis is primarily a process of watching closely and thinking deeply, guidance I strived to follow in my data analysis process. The data were reviewed as they came in: I recorded possible interpretations, patterns, and linkages in my research journal and created written summaries of each interview or detailed questionnaire as it was completed to capture key ideas (Stake, 1995).

Stake argues that participants' exact words are typically much less important than their meaning. For Stake, the search for meaning is primary and typically takes place through a search for patterns:

> We can look for patterns immediately while we are reviewing documents, observing, or interviewing—or we can code the records, aggregate frequencies, and find the patterns that way. Or both. Sometimes we will find significant meaning in a single instance, but

usually the important meanings will come from reappearance over and over. (p. 78)

Stake advocates for the bulk of the researcher's time to be spent on direct interpretation rather

than on formal aggregation, although for instrumental case studies, he acknowledges there is a

greater need for formal aggregation. As a consequence, I spent the majority of my analytic time

on direct interpretation, although formal aggregation was also completed. Stake also maintains

that researchers should focus their efforts on analysis of the "best data" (p. 84) because in case

study research it is inevitably impossible to analyze the entire volume of data collected. I

therefore focused on analysis of the interview transcript and questionnaire responses.

Coding

Coding of the interview transcript and detailed questionnaire responses was completed in

several stages. First, pre-coding was completed on hard copy printouts by circling, highlighting,

and underlining quotes or passages that struck me as particularly significant (Saldaña, 2016).

Manual coding was then completed on the same hard copy printouts, using three complementary

methods in sequence: in vivo coding, emotion coding, and values coding, all of which Saldaña

(2016) recommends for case studies. Analytic memos were written throughout the coding

process to support and enhance my analysis. Codes were amalgamated and themed using

Microsoft Word and Microsoft Excel. Autocoding was then completed in the NVivo software

and compared with the manual coding.

Validation

Validation is essential to qualitative research, although it is approached differently than

validation for quantitative studies (Creswell & Poth, 2018). Qualitative validation is an evolving

construct, and many different strategies have been described in the literature (Creswell & Poth,

2018). Creswell and Poth recommend engaging in at least two validation strategies in any given

study. The authors divide validation strategies into three broad categories by the lens represented

by the strategy: the researcher's lens, participant's lens, and reader's or reviewer's lens. This

study employs a strategy from each of the three categories: triangulation of multiple data sources

(researcher's lens); member checking (participant's lens); and creating rich, thick descriptions

(reader's or reviewer's lens). Each is briefly described below.

Triangulation of Multiple Data Sources

Checking the accuracy of a qualitative account is an important aspect of the researcher's

role; triangulation of multiple data sources is one method of doing so (Creswell & Poth, 2018).

Triangulation involves using difference sources of data to corroborate one's analysis and limit

the impact of one's biases (Creswell & Poth, 2018; Noble & Heale, 2019). For Stake (1995),

triangulation is an essential element of case study research, comparable to celestial navigation for

the seafarers of the past. Additional data from additional sources supports researchers in revising

their interpretations as needed, just as navigators required observations of several stars to

accurately establish their location (Stake, 1995).

For the purposes of this study, triangulation was achieved by cross-case comparison and

comparison of multiple forms of data within and between cases (interview, detailed

questionnaires, and artefacts provided by participants).

Member Checking

Creswell and Poth (2018) describe member checking as soliciting participants' feedback

regarding the study's findings and researcher's interpretations; they argue this is an essential

element in establishing credibility for a qualitative study. Member checking typically involves

researchers sending transcripts to participants for review but does not involve participants in the

analysis (Lindheim, 2022). While involving participants in the analysis is less common, it both

enhances the trustworthiness of the results and addresses ethical questions around power and

transparency in the research process (Lindheim, 2022). In this study, I took the latter approach:

the initial rough draft based on each participant's data was sent to them for review and feedback.

Participants' comments were carefully considered and incorporated into subsequent drafts, with

the changes communicated to the relevant participants.

Creating a Rich, Thick Description

Creating a rich, thick description involves describing the study's participants or setting in

detail (Creswell and Poth, 2018). Ideally, it results in text "so rich in details that the event or the

object of description is palpable" (Stahl & King, 2020, p. 26). To achieve this, Creswell and Poth

(2018) recommend revising raw data as soon as possible after it has been collected to add further

description that might aid the researcher during analysis.

In the present study, rich, thick descriptions were generated by following Creswell and

Poth's (2018) guidance and revising raw data shortly after its collection. In addition, my analytic

memos contributed to the rich, thick descriptions.

Ethics

This study conforms to Athabasca University's (2016a, 2016b) Ethical Conduct for

Research Involving Humans Policy and Procedure, as well as the Tri-Council policy statement

on ethical conduct for research involving humans (Canadian Institutes of Health Research et al.,

2018). Athabasca University's Research Ethics Board reviewed and approved the study prior to

data collection (see Appendix G for the certification of ethical approval).

Ethical Issues

The study raised several ethical issues, namely the potential for

- the Adverse Childhood Experiences International Questionnaire and additional screening

questions to be experienced as intrusive or triggering;

- the interview (or written questions) to be experienced as intrusive or triggering;

- disempowered or marginalized participants to find it difficult to set boundaries regarding questions they were not willing to answer, artefacts they were not willing to supply, etc.;

- being a research participant and being written about by a researcher to be experienced as oppressive, objectifying, stigmatizing, marginalizing, or otherwise disempowering; and

- the results of the research to be conveyed in a pathologizing, stigmatizing, objectifying or otherwise marginalizing manner, inflicting further harm on traumatized persons.

Of note, Jaffe et al.'s (2015) major meta-analysis of over 70,000 participant responses to trauma research found that involvement in trauma-related research does not harm previously traumatized participants, although some transient and tolerable psychological distress may be experienced. Anonymous surveys with predetermined response options (such as the ACE-IQ) evoke less immediate distress than interviews requiring verbal disclosure (Jaffe et al., 2015); of note, the interview for the present study explicitly discourages any verbal disclosure. Overall, Jaffe et al. conclude that involvement in trauma research is a minimal risk for adult participants, including those who have a life history of trauma or a diagnosis of PTSD. In fact, the meta-analysis indicates that participants perceive a moderate to high benefit to their participation in trauma studies. Jaffe et al. observe that "participants may value the notion that they are contributing to the acquisition of knowledge that will help other trauma victims" (p. 54). This aligns with the comments made by participants in the present study when asked why they would like to participate. As Ryan stated, "I would like to assist in any way possible," a sentiment echoed by Willow in her comment "I like to help however I can" and by MS, who said: "I may be able to shed some light on the challenges and help someone else in the future."

I provided full and transparent information regarding the purpose of the research and the potential risks, as well as gaining consent by overt action, before participants accessed either the screening or the interview/detailed questionnaire process. Participants were informed that they could refuse to answer any questions or withdraw from the study at any time prior to the data becoming irretrievable (see Appendices B, D, and E). Given that traumatized learners' voices have been little heard in the literature, the research explored with participants what they felt was important to be included and what questions they felt should be asked of all participants. Overall, careful attention was paid to creating a psychologically safe atmosphere and a trusting alliance with participants and to the recognition of their expertise in navigating the impacts of complex trauma (Petrone & Stanton, 2021).

All data were stored securely and fully anonymized prior to being included in the written narrative of the study (with the exception of data related to Ryan Handy, the participant who chose to use their own name, which was securely stored but not anonymized). As noted above, participants were asked to provide their preferred pseudonym, as well as to identify any specific information they did not wish to be included (for example, vignettes or stories). Any additional potentially identifying information was removed for the two participants who chose to remain anonymous. Participants also had the opportunity to review the narrative of their own data prior to publication and to provide feedback or request changes.

Chapter 4. Findings

Introduction

This chapter explores the study's findings. First, summary narratives are provided, presenting the findings for each individual case or participant (who are briefly described in the preceding chapter). Then cross-case findings are presented thematically, structured around the research question and sub-questions.

Due to the nature of the findings, some interpretation and discussion is woven throughout this chapter, particularly in the cross-case findings. For further discussion and interpretation of the findings, refer to Chapter 5 (Discussion).

Summary Narratives

Case 1: MS

From the first review of screening survey responses, MS's eloquence and determination stood out. A 28-year-old female undergraduate at Athabasca University, she presents as capable and confident, and was the only participant to attend an interview (two others scheduled but did not attend, while Ryan and Willow preferred to complete the detailed questionnaire). With a very busy schedule balancing work, family, and school, MS completed the interview on her break at work (MS works for a community agency that provides counselling and family support).

When MS appeared on camera, I was struck by both her poise and her stillness. She sat at an L-shaped desk, its surface largely clear except for a neatly stacked pile of papers close to her right hand. A large black-and-white photo, shot from the ground and looking up into a canopy of trees, was visible over her left shoulder. She wore a hands-free headset, which she adjusted over the course of the interview. When my cat jumped on my desk and appeared on camera, her eyes sparkled behind her glasses, and she smiled slightly.

After reviewing the preamble, I began the questions. As I began, MS adjusted her posture and her expression changed to a look of determination and focus. I thought of her statement that childhood trauma is "often swept under the rug" and that "when I saw this survey, I knew I had to complete it." Like so many trauma survivors, MS wants her voice to be heard (Herman, 1997). In fact, not being seen or heard emerged as a theme in her interview as a major source of stress for her as an adult online learner.

MS clearly expressed the value she places on education. In high school, she had "big, big aspirations," which were placed on temporary hold due to her life circumstances (the birth of her daughter when she was in Grade 12). Her drive to be a "better role model" for her daughter led her to take a trades program at a local community college; she is a journeyperson in a Red Seal trade. Her breath caught as she described wanting to go to university and thinking that it would be impossible for her, struggling with the feeling that she was "not being a good [enough] role model" for her daughter despite completing community college and achieving journeyperson status in her trade. Her eyes lit up as she described learning about "correspondence university" during the pandemic. "I thought, hey, I can do this!" she said, smiling broadly and letting out a small laugh. "So here I am back as an adult learner."

MS's pride in her accomplishment is palpable. Like the other participants in the case study, her life circumstances did not allow her to attend university directly after high school or to study face-to-face as an adult learner; she was shut out of educational opportunities many Canadians take for granted. Learning online opened up the possibility for her to pursue long-held dreams, but—like the other case study participants—MS's history of complex trauma has impacted her experience of learning online.

MS is highly self-aware and described significant challenges with executive function and

working memory as a result of her trauma history; in fact, one of the artefacts she provided was a

working paper from the National Scientific Council on the Developing Child (2011), describing

how early experiences shape the development of executive function (defined within the paper as

including working memory, inhibitory control, and cognitive or mental flexibility and described

as the brain's air traffic control system). The working paper states that "children who experience

adversity at an early age are more likely to exhibit deficits in executive functioning, suggesting

that these capacities are vulnerable to disruption early in the developmental process" (National

Scientific Council on the Developing Child, 2011, p. 7). MS clearly experiences herself as

having been impacted by such disruptions, and she deploys many strategies to bridge the

resulting gaps in her functioning. However, as she stated in her original screening survey

submission: "I've always seemed to find it harder to get where I am going than everyone else."

MS's frustration was evident as she spoke of the challenge of "deciphering" processes at

the university—a challenge she suggested would not be experienced, or not be experienced in the

same way, by those without a trauma history. "You know, I'm going to call you and then ask all

the steps, and then, you know, they're going to tell me something, and then it's just…it's such a

runaround." The "runaround," the "rigmarole," "all the steps" leave MS "blind" and struggling to

decode the necessary steps to complete administrative tasks, a struggle intensified by "not having

the executive functioning to be able to, to manage.... When you have some executive functioning

impairment, it's challenging."

This challenge is heightened—and the basic principles of trauma-informed practice are

violated—when MS has the experience of not being seen or heard by staff. As an example, MS

described multiple attempts to communicate with the university's financial aid department prior

to beginning her first semester. "I needed to know that I hadn't forgotten to do something," she

said, her voice tight and firm. "I needed to know that everything was done on my part, and no one could [or would] give me that answer." In fact, MS's queries to university administrative areas are sometimes "not even acknowledged," which "stirs up trust issues." Of note, MS identified trust and transparency as the most important element of trauma-informed educational practice for her as an adult online learner.

MS's self-awareness and skill at self-advocacy and self-care have enabled her to navigate the system successfully. For example, every time she communicates with a staff person from the university, from program advising to financial aid, "right off the hop, I explain that I'm going to have challenges navigating the system, I don't know what I'm doing, and to please help me. Just stating that, I seem to get a fairly positive response." In fact, MS identifies her own strengths in self-advocacy as the most helpful element for her as an adult online learner with a life history of trauma. This, of course, opens the question: what happens to learners with a similar life history who do not have MS's skills and strengths?

When staff take the time to see and hear her concerns, it makes all the difference for MS. She smiles broadly, punctuating her statements with firm nods, as she describes speaking with a program advisor: "We spent 40 minutes just talking about how everything links together, which was REALLY helpful for me because now I know what I'm doing, I'm not just blind. That was VERY helpful." This program advisor demonstrated the transparency and communication MS identifies as essential to building her trust. She says: "The trust could definitely be improved by certain departments being more just receptive to the fact that maybe we're a first-generation postsecondary learner. Maybe we have trauma." If departments communicated proactively, that would make all the difference to MS's trust in the university, along with quick responses (which could be as simple as an acknowledgement that a query has been received).

This experience of "deciphering" processes and procedures at the university aligns with MS's experience within courses. She says: "I need to understand the whole picture and why we do the steps." She attributes this to trauma having "really shaped my experience" through impairment of her working memory: "I've talked to some other people that I know who went to school that didn't seem to have the same challenge." Working memory challenges impact MS's reading retention, an area she finds "much challenging." Intriguingly, MS immediately corrected the statement, saying "that's not English," but the brief misspeak in such a composed and precise young woman amplified my sense of the magnitude of the challenge. MS stated with some force that "by the time I finish [reading], say, two sentences, I forget the first sentence that I've read." She finds her working memory issues are worsened when trauma becomes activated: "when something has triggered me in my personal life that spills over . . . I can't retain information that I'm reading for schoolwork." She addresses this by "tak[ing] some time for myself, which then, you know, may intermittently put me behind in school, so it just makes it challenging that way." In other words, MS's solution is effective—it allows her to "decompress"—but adds additional stress by putting her behind in her courses.

MS identifies herself as "well versed in trauma-informed care," due in part to her work with a community-based organization that provides counselling and family support. She said she "push[es] for it at her kids' schools," and the artefacts she provided included a seminal article on trauma-related factors in adult education (Perry, 2006). Her awareness of trauma-informed care and "recognizing my own mental wellness" helps her "notice when something has triggered me" and take the appropriate steps. She uses numerous other strategies to help her manage her past trauma, including use of a custom planner (a substantial hardbound book which sat at her elbow during the interview and which she used to record and remind herself to send me artefacts—and

the artefacts arrived on schedule). She also spoke of the importance of balance, and how helpful

a program advisor was in "balancing my semesters so they're weighted appropriately, so it's not

a really overwhelming semester."

"It's just, I'm not even gonna lie. Life is a challenge." MS is high functioning, juggling

parenting, work, and school, but she wants her trauma recognized and believes help should be

offered. "I am frequently described as being 'resilient,'" she said in her initial screening survey,

"and it is frequently misunderstood that conditioned trauma responses are something I continue

to have." Her pain and frustration are evident in her bicycle analogy: "Instead of receiving offers

to help fill up my tires to reach the finish line, I am praised by the people already at the finish

line who did not have flat tires, for still getting there."

MS places evident value on "filling up the tires" of traumatized adults, including online

adult learners. Establishing trust and transparency through acknowledgement, quick responses,

openness to and awareness of trauma, increased peer support, and appropriate scaffolding within

courses (the "whole picture" and "why") would help "fill the tires" in her view.

Case 2: Ryan Handy

"Overcoming my life trauma as an adult student is a major focus of my life. I would like

to assist in any way possible." Ryan's initial comment in the screening survey immediately

caught my attention; their awareness of their trauma and their commitment to healing, speaking

out, and using their voice to advocate for a trauma-informed approach shone through in every

interaction. A 41-year-old nonbinary masculine graduate student at Athabasca University, they

have deep experience as an online learner, including completion of an online undergraduate

degree and numerous other short(er) online programs and courses, from teaching yoga to graphic

design. Although Ryan chose to complete the detailed questionnaire (their health challenges

made it impossible to participate in a synchronous interview), I had an opportunity to come to

know them through email conversation, their detailed questionnaire responses, and their

extensive package of artefacts.

My first hint of Ryan's commitment to a trauma-informed approach and determination to

"assist in any way possible" arrived in my email inbox. "Hello," they said, "I just filled out your

survey, but forgot to include my email. I think it is good work that you are doing" (R. Handy,

personal communication, April 24, 2023). The tone is mild and low-key (characteristic of Ryan's

email communication style, as I would later learn)—but the email stood out. Ryan was not the

only participant to forget to include contact information after completing the screening survey,

but they were the only participant to take the additional step of following up by email. After

reviewing their screening survey responses and manually calculating their ACE-IQ score to

ensure they were eligible, I invited them to participate in an interview.

In characteristically low-key fashion, Ryan made known their preference to complete the

detailed questionnaire rather than an interview. Once they had completed it, they emailed me

again: "I finished the second questionnaire, I hope it is beneficial and I am happy to help your

study in any way possible" (R. Handy, personal communication, May 18, 2023).

Opening Ryan's questionnaire responses was like opening a treasure box: their responses

are beautifully written, thoughtful, and richly detailed. For example, they offer a poignant and

evocative description of their response to forum work: "I tend to shrink and shrivel," they say.

Speaking of a negative experience with an online educational program, they say: "HIV stigma

robbed me [of] trustworthiness and safety." Their invocation of robbery—not merely theft, but

robbery, with its association with violence and threat (Merriam-Webster, n.d.)—offers a degree

of emotional resonance unexpected in written questionnaire responses, as does their comment

that "fear of stigma and rejection follows me like a dark cloud wherever I go."

Like MS, Ryan places a high value on education, which they have continued to pursue in spite of numerous barriers, including mental illness, poverty, health complications, and trauma. They achieved a GED (high school equivalency) at age 19, and went on to complete an Ontario Secondary School Diploma at the age of 24, discovering "a love for English and Philosophy" in the process. At age 27, they began university. Ten years later, they successfully completed their undergraduate degree after transferring to Thompson Rivers University's online/open learning division. Their "passion for literature" led them to Athabasca University's Master of Arts in Interdisciplinary Studies (Literary Focus) program, where they used "pain from life experiences to inspire me to write a play" and expanded their program to a double specialization: literary studies plus writing and new media. Their final project is a "multimedia play and study of 2SLGBTQ+ representation in science fiction, gothic and fantasy media."

Like MS and Willow, Ryan is explicit that "adult online learning has allowed me to access school work I would otherwise not be able to attend or complete." They state that "my history of trauma and medical challenges makes it almost impossible for me to sit in a room with people, so adult online learning has given me opportunities of intellectual and academic growth I thought was never possible." Courses structured as "independent studies . . . are much easier to navigate" than "grouped-pace classes that require weekly [discussion forum] posting." They emphasize the importance of "respectful moderation" to create a "safe space," which makes "peer interaction more palatable."

Ryan stresses that it is the "privacy and solitude of adult online learning" that allows them to learn effectively "without distraction, hyper-vigilance or fear of violence." The privacy and solitude "improves my concentration by incredible levels." Like MS, Ryan's working

memory is impacted by their trauma, and "the stress of sitting in a class makes it difficult to remember or retain anything." Ryan also finds "digital textbooks and class notes" extremely helpful in multiple ways: "Digital materials can be read aloud by software. Having my textbook read aloud to me is very helpful, especially if I am experiencing PTSD visual and/or auditory flashbacks."

Education has supported Ryan in their trauma healing process in multiple ways. Through their graduate program, they "discovered the healing power of narratives." They comment that while their program has been "very difficult" due to physical and mental health challenges, their "educational resilience [in an online learning environment] has empowered my healing journey." Learning online "always makes me feel better and acts as both an absorbing distraction and long-term goal motivation." Thus education is not merely instrumentally important for Ryan but serves as a healing and supportive mechanism in itself—and it is the ability to attend an online program that has made this possible.

Ryan's project work, in both their undergraduate and graduate programs, reflects the ways in which education has acted as a healing mechanism, allowing them to process elements of their trauma and act as an advocate for other traumatized learners. Their extensive package of artefacts included a final paper on 2SLGBTQA+ trauma resilience in education (written for an online undergraduate psychology course) and a paper on yoga as a healing mechanism for those with PTSD (written for an online yoga teaching course) (Handy, 2019, 2021). Both papers incorporate an awareness of trauma and a focus on healing, drawing on published studies as evidence for their perspective. For example, the yoga paper examines both quantitative and qualitative research, concluding that "the evidence strongly indicates that yoga can help calm the body, clear the mind and reduce the overall impact caused by post-traumatic stress disorder and

trauma" (Handy, 2021, p. 4). The final artefact shared by Ryan is an autoethnography written for

their graduate program. It describes their "year of fire" as they navigate the medical system as a

disabled, HIV-positive, nonbinary artist, while juggling their online graduate studies and

numerous other life challenges, including the death of their two elderly fathers from COVID

(Handy, 2023). In the paper, they note that online learning—and, in particular, sharing their

writing around healing within their program—has supported them in finding hope (Handy,

2023). In their email communication, they share that their experience as an online graduate

student taught them "how to find and express my voice regarding medical self-advocacy" (R.

Handy, personal communication, June 22, 2023), once again reflecting that online adult

education impacts the experience of trauma, as well as trauma impacting the online adult

education experience.

  Like MS, Ryan emphasizes trust as an essential element of trauma-informed practice. For

them, however, "safety and trustworthiness are interdependent principles and must be the basis

of all education situations." They see "trustworthiness and transparency [as] akin to safety, so it

is very difficult to separate these aspects as principles." Ryan's trust in one educational program

was "violated by HIV/AIDS stigma and unproven conspiracy theories" when "the textbook told

me that HIV and AIDS are unrelated." Ryan is forceful in their condemnation of this violation of

trust: "If I followed the advise [sic] in the book and doubted the success and truth of HIV causing

AIDS, I could go off my medication and risk death. I could die if I trusted the information in my

other program." This violation of Ryan's trust has resulted in worsened "trauma, anxiety and

panic attacks." They "feel like the carpet has been ripped out from under me . . . I no longer feel

safe." They are blunt in their assessment of trauma-informed educational practices: "If there is

no trust, there can be no safety."

Ryan would like to see a greater understanding regarding the causes, experiences, and signs and symptoms of trauma as part of trauma-informed educational practice. They note that trauma is multidimensional, including "physical, emotional, sexual, mental, racial or financial trauma" and that signs and symptoms can include "visual, auditory and semantic flashbacks." From their perspective, "Educating a little bit more about the causes and experiences of trauma . . . [would] help create clearer boundaries about what "trauma" is."

Intriguingly, Ryan notes in their email communication that participating in this study "gave me a chance to process my horrible student experience" at the online institution where their trust was broken (R. Handy, personal communication, June 22, 2023). In fact, one of the artefacts shared by Ryan was an email exchange with the program in question, initiated after Ryan completed the detailed questionnaire for this study. In it, Ryan clearly and calmly expresses their concerns regarding the scientifically inaccurate information and communicates the damage to their sense of safety and trust. Ryan states in their email communication with me that "your questionnaire helped me find my voice and perspective," demonstrating the positive personal impact of engaging in a trauma-related research study (R. Handy, personal communication, June 22, 2023).

Case 3: Willow

Willow was one of the first participants to complete the screening survey. A 32-year-old female undergraduate student at Athabasca University, her studies were her primary occupation for the past 12 months. Her comment in response to the question regarding why she would like to participate was simple but powerful: "I see the value in research, but especially a study geared towards understanding how online learning is experienced by those who experienced traumatic childhoods." Like so many others, she expressed an altruistic motive for wanting to participate:

"I like to help however I can," she stated simply.

Willow completed the detailed questionnaire rather than an interview. Her responses are briefer than those of MS or Ryan, but her unique voice shines through with clarity and simplicity. Like MS and Ryan, she came to adult online learning after her prior education was disrupted. "I did not finish high school," she says. "I went back as an adult and completed my GED." This matter-of-fact statement is characteristic of Willow; it does not describe the circumstances under which she "went back" or the many challenges she may have faced (see, for example, Horsman, 1999). After she completed her GED, Willow chose Athabasca University because it "offered classes one by one and online, which worked with my schedule," making it an accessible option for her. Like the other case study participants, she places a high intrinsic value on education. "The biggest reward is just finishing a course for me," she says.

Willow is frank in her assessment of the impact of trauma on her experience of adult online learning. Trauma has had "an effect on my self esteem and my belief in my ability to complete school." This poignant statement adds depth to her comment that "just finishing a course" is the biggest reward for her. She adds that she experiences "ongoing issues attached to the trauma which cause highs and lows mentally. It makes it difficult to focus or causes procrastination." While Willow does not specify the nature of the ongoing issues, complex trauma may result in "problems in affect regulation" and "persistent beliefs about oneself as diminished, defeated or worthless" (WHO, 2022), which align with Willow's comments about the impact of the trauma on her self-esteem and belief in her abilities, as well as her mental highs and lows.

Because of her life history of complex trauma, Willow "find[s] it challenging to stay on track." She draws attention to the fact that this is not merely because of long-term psychological

impacts of trauma, but also because of the landscape in which she was raised (and in which she had numerous adverse childhood experiences). "If you are someone who has never had a lot of structure, it requires a lot of self control to complete things." She observes that this is particularly the case in self-paced courses with limited interaction. "You have more accountability," she says, adding with a hint of pride, "[and] this is a great thing."

Willow also highlights the importance of open access/open learning. She states that "the ease in which you are accepted" was the most helpful element of adult online learning for her, adding "I was too afraid and unsure how to apply to in person courses." This statement hints at the importance of a comprehensive trauma-informed approach across every interaction with an institution for students and prospective students. What institutional assumptions are made, or what barriers are in place, to limit educational access for a survivor of complex trauma? How well do universities, colleges, and other postsecondary institutions recognize that many survivors of complex trauma live with a continual sense of threat and fear, with their minds and bodies in a constant state of readiness to confront danger (Herman, 1997; Perry, 2006)?

At Athabasca University, where Willow is studying, the admission process is open. The university states: "Program registration is non-competitive and you can start when it works best for you. First year undergraduate courses rarely have prerequisites, other than you need to be at least 16 years old to apply" (Athabasca University, 2023). Willow's GED would not have acted as a barrier to her acceptance, in contrast to many traditional universities (see, for example, University of Alberta, n.d.).

Another dimension of open access essential for Willow, as previously mentioned, is the flexibility to take courses "one by one." No specific course load is required. She also appreciates "being able to write an exam in my own space. It removes the anxiety of getting to the testing

facility on time."

The most important element of trauma-informed educational practice for Willow as an adult online learner is "empowerment, voice, and choice." Willow hints that she has "struggled with communication" and suggests that "empowering and giving a voice to students" could be achieved in part by improving "consistency among tutors." (Note that at Athabasca University, tutors occupy an instructional role for asynchronous online undergraduate courses, answering students' questions about academic content, providing feedback, and marking assignments and exams (Athabasca University, 2022b).) Willow has experienced "a large variation in the tutors." While "some are supportive and help develop your learning," others are less so.

Willow's comment about consistency connects to MS's and Ryan's perspectives about the importance of safety and trust. As Perry (2006) states:

> A creative and respectful educator can create safety by making the learning environment more familiar, structured, and predictable. Predictability, in turn, is created by consistent behavior. This implies not rigidity but rather consistency of interaction. The invisible yet powerful web of relationships that effective educators create between themselves and learners, and between and among learners, is crucial to an optimal learning environment. (p. 27)

Willow adds that choice (i.e., the third element of "empowerment, voice, and choice") could be strengthened by the university offering alternatives "for ways that courses can be completed. For example, if someone struggles with writing, being able to record an audio or write a test instead could be useful for them." Of note, Athabasca University (n.d.) currently offers such alternatives only to learners "with a [documented] permanent disability and those who may have temporary medical circumstances that require academic accommodations." Learners must present

documentation of the disability or medical circumstances to be eligible (Athabasca University,

2021). This presents a significant barrier to survivors of complex trauma, as the DSM-V (used by

the majority of Canadian mental health professionals to diagnose mental illness) does not yet

recognize complex PTSD as a unique entity but considers it a subset of PTSD, a diagnosis whose

criteria survivors of complex trauma may not meet (Cloitre, 2020; Giourou et al., 2018; Kogan &

Paterniti, 2017; National Center for PTSD, n.d.; van der Kolk et al., 2019). Those who do meet

diagnostic criteria may still not be diagnosed: Statistics Canada (2022) reports that while 8% of

Canadians meet criteria for probable PTSD, only 5% have been diagnosed by a health

professional. In other words, nearly 40% of Canadians with probable PTSD are undiagnosed. In

addition, 82% of Canadians who met criteria for PTSD have difficulty accessing needed health

care services, including unavailability of appointments or exorbitant cost (Statistics Canada,

2022). Given this, many survivors are unlikely not only to have received a formal diagnosis but

also to be able to access the required documentation to receive accommodations. Of note,

survivors whose traumatic life history includes institutional or other systemic trauma may also be

unwilling to engage with the healthcare system or to seek a diagnosis that could be weaponized

against them (de Boer et al., 2022).

Like the other case study participants, Willow was previously familiar with the concept

of trauma-informed care. The familiarity among case study participants is in striking contrast to

the (lack of) familiarity among graduate students, recent graduates, and faculty members in an

online graduate education program, who as previously discussed were interviewed about their

awareness of trauma and trauma-informed educational practices in 2022. Only two of the eight,

or 25% (both frontline healthcare professionals), had previously heard of the concept of

trauma-informed care (Schmidt, 2022). None were familiar with trauma-informed educational

practice.

Willow chose not to share any artefacts, but her perspective in her detailed questionnaire responses was invaluable to this research. In particular, her emphasis on the importance of open access; her mention of the challenges stemming not just from the psychological impact of trauma but also from features of the landscape in which the trauma may have taken place (e.g., a lack of structure); and her discussion of achieving empowerment through consistency make an indelible contribution to the study.

Cross-Case Findings

In this section, cross-case findings are presented thematically in response to the research question. The two sub-questions are addressed separately below.

Research Question: How do adult/postsecondary learners with a history of complex trauma experience online learning, and what are their unique needs in this environment?

Theme 1: Complex Trauma Impacts. Without exception, the case study participants were highly aware of both their past experience of complex trauma and its impact on them as online adult/postsecondary learners. Impacts they identified as affecting them as adult online learners are categorized and summarized in Table 6 below.

Table 6

Complex Trauma Impacts Affecting Participants' Online Learning

Category	Complex trauma impact
Executive functioning	- Limited working memory - Issues with reading retention - Difficulty focusing - Challenges staying on track - Issues around planning, structure, and self-control
Beliefs about self	Low self-esteem/low self-worth

	• Feelings of shame/not being good enough
	• Difficulty believing in one's ability to complete school (despite objective evidence to the contrary)
Relationships	• Difficulty communicating with tutors
	• Challenges interacting with other students
Affect regulation	• Mental highs and lows
	• Becoming overwhelmed
	• Difficulty managing fear
Re-experiencing	• Struggle with flashbacks and traumatic memory
	• Being triggered
Heightened perceptions of threat	• Persistent fear (including fear of violence, stigma, and rejection)
	• Hypervigilance

The categories were largely drawn from the ICD-11 diagnostic requirements for complex PTSD, which include:

- beliefs about oneself as defeated or worthless

- difficulties in sustaining relationships and feeling close to others

- problems with affect regulation

- re-experiencing the trauma (e.g., through flashbacks, nightmares, or intrusive memories)

- perceptions of heightened current threat (WHO, 2022)

The "executive functioning" category was added in part to honor participant MS, who brought this issue to my awareness through both her interview and the executive function- and trauma-focused artefact she provided, although executive function-related issues were raised by all participants. Of note, these impacts affected not only participants' engagement in courses and coursework but their ability to navigate the university when applying, registering, planning their programs, applying for financial aid, and more.

The psychological impacts identified by the participants are both extensive and profound. Heightened perceptions of threat, re-experiencing, and challenges with affect regulation may act as a continually self-reinforcing system, disrupting learning, as well as connection to instructors and other students. As Perry (2006) notes:

> A traumatized person in a state of alarm (for example, thinking about an earlier trauma) is less capable of concentrating, more anxious, and more attentive to nonverbal cues such as tone of voice, body posture, and facial expressions—and may, in fact, misinterpret such cues because of anxiety-induced hypervigilance. (p. 24)

Complex trauma survivors learning online may be highly attentive to nonverbal cues in emails, forum posts, and other text-based forms of communication, as well as in body posture and facial expressions in synchronous online classes. As a result, Perry argues that educators working with adult trauma survivors must remember that their emotional baseline is often one of significant fear. He suggests that "the major challenge to the educator working with highly stressed or traumatized adults is to furnish the structure, predictability, and sense of safety that can help them begin to feel safe enough to learn" (p. 25), comments echoed by all three participants, who emphasized the need for consistency, safety, and structure.

Trauma impacts were not limited to the psychological arena only. As Willow notes, "If you are someone who has never had a lot of structure, it requires a lot of self control to complete things." Having little structure in childhood is common for survivors of complex trauma, who may have experienced not only multiple forms of abuse and neglect, but parental incarceration and substance abuse, poverty, and community violence, a chaotic landscape in which continual danger is normalized and the mind and body become adapted to the quest for survival (van der Kolk, 2014). Complex trauma survivors whose life experience has left them well adapted to

confronting and managing multiple immediate dangers may be less skilled at navigating a safer environment—one in which planning and prioritizing are necessary tasks rather than an exercise in futility.

MS talks about the "spillover" impact of trauma: when she is overwhelmed at school and her trauma symptoms become activated, the impact spills over into her personal life, making it more difficult for her to manage (MS, like many other adult online students, is both a parent and employed, in addition to going to school). Conversely, when she is triggered in her personal life, the impact spills over into her academic life, reducing her executive functioning, making it more challenging for her to read and retain information, and ultimately causing her to fall behind. Ryan notes something similar: poverty and mental and physical illness (all of which are both additional sources and potential outcomes of trauma) have repeatedly disrupted their educational career.

Two participants (Willow and Ryan) did not complete high school, a common impact of complex childhood trauma; as previously noted, those who have experienced four or more ACEs are twice as likely to have no qualifications (including a high school diploma) than those with no ACEs (Hardcastle et al., 2018). Both Willow and Ryan completed a GED, however, and Ryan additionally completed a high school diploma at the age of 24. Of note, research has demonstrated that GED holders have similar intellectual capabilities as high school diploma holders but differ in skills crucial to success in the postsecondary environment, such as organization, motivation, and perseverance (Rossi & Bower, 2018). The differences may stem from GED holders' different educational trajectories and a comparative lack of opportunity to develop these skills; alternatively or in addition they may reflect GED holders' childhood environments. Rossi and Bower (2018) note that the majority of GED holders grow up in

families in the lowest quarter of socioeconomic status (i.e., in comparative poverty); poverty in

childhood, through multiple mechanisms (including underdevelopment of executive

functioning), serves to disrupt development of precisely these skills (Lipina & Evers, 2017;

National Scientific Council on the Developing Child, 2011). Willow's comment about it being

"challenging to stay on track" may therefore reflect multiple direct and indirect impacts of

trauma.

MS spoke of being "blind" and needing to "decipher" the administrative structure of the

university in order to navigate financial aid and registration, tasks made much more challenging

by the trauma-related impacts to her executive functioning and the at times unhelpful responses

(or non-responses) from the university. She described her attempts to navigate the administrative

structure as "runaround" and "rigmarole," hinting at her confusion and frustration as she sought

to decode or decipher the university while struggling with trauma-related impacts to her working

memory. Her comments were echoed by Willow, who was "too afraid and unsure how to apply

to in person courses." For Willow, the simpler administrative processes ("the ease in which you

are accepted") at an open, online university made it possible for her to enroll. For both MS and

Willow, however, trauma-related impacts act as an additional burden in interacting with

non-instructional elements of the university, a key point to note when considering

trauma-informed educational practice.

Extensive research has demonstrated the wide-ranging challenges faced by so-called

first-generation students, from learning to navigate the university to surviving the hidden

curriculum (Bamberger & Smith, 2023; Crawley, 2012; Speirs, 2020). When survivors of

complex trauma are also first-generation students, questions of intersectionality come into play

(Crenshaw, 1989). A student who lacks both a culturally transmitted understanding of how a

university works and sufficient executive function to easily decipher this may find it exponentially more challenging to surmount administrative barriers, particularly when amplified by fear, shame, and other trauma-related psychological impacts.

As undergraduate students at Athabasca University, neither MS nor Willow has a great deal of interaction with other students, as courses are run on a continuous-enrollment basis (i.e., they are asynchronous and unpaced). In contrast, as part of their graduate program, Ryan has taken both independent and paced group-study courses, the latter of which require extensive interaction with other students. Ryan finds this interaction with other students extremely challenging. "Online forums still provide the greatest challenge for me [in the adult online learning environment]," they say. "Grouped-pace classes that require weekly posting and student forum moderation are the worst for me, and I tend to shrink and shrivel in forum work." They add that this "might trigger my trauma," although they also note that other students "have all been wonderful and have tried their best." Thus Ryan's trauma response is not a response to other students' or faculty members' insensitivity or misbehavior; it is simply the result of the requirement to interact. A flexible learning space with a lighter commitment to student-student interaction is preferable for Ryan. In fact, it is precisely the "privacy and solitude of adult online learning, especially independent school work, [that] has allowed me to focus on my studies without distraction, hypervigilance, or fear of violence."

Interestingly, MS did not indicate that a lack of interaction was a problematic element of learning online for her. Willow did mention it, but in the context of needing additional structure (a need which could be met in a variety of ways). This, coupled with Ryan's comments, suggests that independent online learning—that is, learning with limited learner-learner interaction—may be particularly beneficial for at least some survivors of complex trauma.

Theme 2: Competent and Capable. Survivors of complex trauma who learn as adults online are competent and capable in navigating the impacts of their trauma. MS, who is "well versed in trauma-informed care" is highly adept at recognizing when she is starting to become overwhelmed or when she has become triggered. "I can definitely notice," she confidently says, "and thank goodness I do." When she notices, MS is skilled in self-care and "will decompress. I will go take some time for myself." MS's strong skills in self-care encompass highly honed self-advocacy. "Every time I communicate with someone from the university . . . right off the hop, I explain that I'm going to have challenges navigating the system, I don't know what I'm doing, and to please help me." This self-advocacy is effective for MS ("I seem to get a fairly positive response most of the time when I explain that I need help"). MS takes the extra step to provide constructive criticism when her needs are not met, advocating not just for herself but for future students who may experience similar issues. For example, after experiencing a high degree of anxiety as she attempted to confirm all her paperwork was in place for her initial acceptance to the university, she received a belated "congratulations" email from the university about a week before she began classes. MS "emailed back, explaining that this was not helpful and that this should have been sent months prior." Thus she uses her advocacy skills to improve the system and benefit others.

MS uses a custom planner to assist herself in coping with her challenges in executive functioning, a mechanism whose effectiveness was demonstrated during this research project (MS submitted her artefacts on precisely the promised schedule after recording this as a task in her planner). She is also highly aware of her need to "understand the whole picture and why we do steps," both within and outside of classes. She reached out to a program advisor who "spent 40 minutes just talking about how everything links together, which was really, really helpful to

me."

Like MS, Ryan demonstrates their competence and capability as an adult online learner, overcoming the odds to complete an online undergraduate degree, as well as a broad array of shorter programs in yoga teaching, graphic design, and more; they are now nearing completion of their Master of Arts. Like MS, Ryan is cognizant of their needs, including "digital textbooks and class notes." Ryan notes the benefits of "having my textbook read aloud to me," especially when they are "experiencing PTSD visual and/or auditory flashbacks." In fact, online learning soothes Ryan: it "always makes me feel better and acts as both an absorbing distraction and long-term goal motivation." They note that "my educational resilience has empowered my healing journey," demonstrating how competence and capability in navigating adult online learning can act as a healing mechanism in itself. Ryan clearly articulates their need to "accommodate mental health challenges and overcome symptoms of trauma in order to engage with content," yet again demonstrating their self-awareness and their competence in managing impacts of their trauma as an adult online learner.

Ryan's self-advocacy—both with an online educational institution that violated their trust and when navigating a severe allergic reaction to HIV medication—likewise reflects their high level of competence and skill in navigating impacts of their trauma. Intriguingly, Ryan states that their educational experiences, in part, contributed to the building of this skill. For example, Ryan's graduate-level studies assisted in building their awareness of intersectionality for nonbinary and transgender HIV-positive people navigating the healthcare system and supported them in finding their voice to challenge "medical gaslighting."

Willow, whose ACE-IQ scores were the highest of the case study participants, expresses the greatest degree of self-doubt and lack of belief in her abilities. Nonetheless, her competence

is plainly visible in her ongoing completion of courses—as well as continuing her postsecondary education after completing her GED, which places her in the minority of GED recipients (Rossi & Bower, 2018). Despite Willow's many challenges, she exercises the "self control" necessary to complete her assignments and courses. She takes courses "one by one and online," working within her limits, demonstrating her capability in recognizing and meeting her own needs. Her self-doubt—a common impact of complex trauma (WHO, 2022)—does not reflect an objective lack of competence or skill in managing her trauma effectively enough to complete her courses.

  Theme 3: Intrinsic Value of Education/Pride. All participants brought forward their belief in the intrinsic value of education and their pride in engaging in it. MS's drive to be "a good role model" for her daughter through the pursuit of education and the revival of her "big aspirations" from her high school years; Willow's statement that "just finishing a course" is the "biggest reward" and that the accountability required is "a great thing"; and Ryan's mention of their "love for English and Philosophy" and pride in their "educational resilience" all reflect the high value the participants place on education beyond its potential economic benefits. "I can do this," MS says, a clear statement of both pride and her determination to succeed. Likewise, Ryan's sense of pride and wonder are clear as they emphasize how "adult online learning has given me opportunities of intellectual and academic growth I thought was never possible."

  None of these participants, all of whom were shut out of the traditional pathways to face-to-face postsecondary education in some manner, takes the opportunity to learn for granted. Like Ryan, whose "passion for literature" led them to their graduate program despite the heavy burden of their health and financial challenges, and MS, who wants to be the best possible role model for her daughter, and Willow, who confronted what is likely an unimaginable degree of fear and uncertainty to embark on her university career, adult survivors of complex trauma may

have the strongest intrinsic motivations for learning, the deepest belief in its value, and the greatest degree of pride in their accomplishments.

      Theme 4. Wanting To Be Seen (and Unseen). All three participants expressed a desire to be seen. MS expressed this directly: "The trust [in the university] could definitely be improved by certain departments being more just receptive to the fact that maybe we're a first-generation postsecondary learner. Maybe we have trauma." For MS, if the university could see her, and be open and receptive to her life experience, safety and trust would be enhanced. In fact, not being seen—in particular, not being acknowledged—is painful for MS and "stirs up trust issues." Ryan expresses their desire to be seen primarily through their creative and academic writing, including a "multimedia play and study of 2SLGBTQ+ representation in science fiction, gothic and fantasy media," as well as their "healthcare whistleblower trauma essay," their essay on trauma-informed yoga teaching, and their essay on trauma and resilience in bullying of 2SLGBTQ+ students in the K to 12 setting. These highly personal topics use the "pain from life experiences" as inspiration, while also making the self visible to others. Ryan explicitly mentions that "Adult Online Learning [capitals in original] has given me a safe space to share my inspirations, ideas, hopes and fears," a poignant statement that captures the importance for them of sharing and being seen by others; Ryan's desire to be seen is also visible in their request to use their full name in reporting of these research results. While more tentative in her desire to be seen, Willow expresses it indirectly through her wish for "empowerment and giving a voice to students who have struggled with communication."

      Intriguingly, though, the wish to be unseen is also evident. Ryan appreciates "meaningful dialogue" and the connection with other students but also finds that "the stress of group-study peer interactions triggered my anxiety, trauma and panic disorder." MS hints at the desire to be

unseen when she corrects her own words. "It is much challenging," she says, when speaking of

her "reading retention issues." She then corrects herself with a sound of embarrassment: "Yeah,

much…that's not English." MS did not want her imperfections seen (or perhaps judged). Fear of

judgement is just one element of hypervigilance, one of the essential features of complex PTSD

(WHO, 2022). Survivors of complex trauma who have learned to be "perfect" or "good" to

minimize abuse may find it very difficult to allow their imperfections to be seen (Herman, 1997).

It is possible that this may have also fuelled Willow's fear and uncertainty around applying to

in-person courses.

Research Sub-Question 1: What do adult/postsecondary online learners with a history of complex trauma find most and least helpful to their learning?

Self-Advocacy. Intriguingly, MS locates the most helpful element within herself, naming

her own self-advocacy as most helpful to her online learning. As previously mentioned, in every

interaction with the university, she clearly states her challenges and asks for assistance. She has

found this an effective strategy in navigating the university.

Assistance From Advisors. MS also found "the student advisors that helped me select

programs" very helpful, in particular the person who helped with "balancing my semesters so

that they're weighted appropriately, so it's not a really overwhelming semester." The advisor

who took the time to explain "how everything links together" was also profoundly helpful. MS

clearly indicates that understanding the "whole picture," both within and outside her courses, is

essential for her success.

Privacy and Solitude. Ryan mentions several helpful factors, including "the privacy and

solitude of adult online learning," which allows them to "focus on my studies without distraction,

hyper-vigilance or fear of violence." Within the online context, Ryan finds "independent studies .

. . much easier to navigate" than grouped-pace courses which require online forum discussions.

Ryan's wish for privacy and solitude is echoed by Willow, who states that "being able to write an exam in my own space" is one of the most helpful elements (she acknowledges that it takes "a little getting used to," however).

Digital Materials. Another helpful factor for Ryan is "having visual (and audio materials) . . . [which are] way easier to learn from than sitting in a class." Not only are they easier to learn from, they can also distract them from visual and/or auditory flashbacks if needed. All in all, Ryan states that "access to digital textbooks and lessons is the most helpful to me as an adult online learner as it helps me accommodate [my] mental health challenges and overcome symptoms of trauma in order to engage with content."

Safe and Respectful Forum Moderation. "Safe and respectful forum moderation" is another crucial factor for Ryan as an adult online learner with a history of complex trauma. It "creates a safe space . . . that makes the process of peer interaction more palatable. Conflict may still happen in online learning situations, but with respectful moderation conflict can be directed towards meaningful dialogue." For Ryan, who struggles to manage interactions and relationships with other learners in the face of anxiety, panic, and other trauma impacts, this is a particularly important element.

Open Access. Willow names open access ("the ease in which you are accepted") as the most helpful element for her as an adult online learner with a history of complex trauma. This was an essential component for her in removing barriers to access, as she was "too afraid and unsure" to apply to in-person courses.

Lack of Communication and Transparency. For MS, least helpful is uncommunicative departments coupled with a lack of transparency regarding institutional processes. Her anxiety is

evident in her words: "I just kept calling . . . because I needed to know that I hadn't forgotten to do something. I needed to know that everything was done on my part." But despite her repeated calls, "no one could give me that answer"—at least not until she received an email congratulating her on her registration one week before classes began, which was "not helpful." Particularly for first-generation students like MS who are also complex trauma survivors, it is essential to be able to determine if "what they're doing is right."

        Online Discussion Forums. Ryan names online discussion forums within courses as "the greatest challenge for me," balancing their statement that "safe and respectful forum moderation" was one of the most helpful elements (perhaps it is most helpful in part because of the challenge posed by this course element). Interestingly, Ryan notes that their "ability to post to forums with ease has decreased as I have progressed." This is unsurprising; for survivors of complex trauma, repeated exposure to a trigger may increase the trauma response rather than promote familiarity and ease (van der Kolk, 2014). For Ryan, "grouped courses [that require weekly posting and forum moderation] . . . have caused my ability to interact academically with peers to digress over time." Of note, Ryan completed their undergraduate degree at a postsecondary institution whose online courses are largely unpaced, asynchronous, continuous enrollment courses, which require little to no peer interaction. In their responses to the detailed questionnaire, they specifically identified peer interaction as a trigger.

        Lack of Interaction/Lack of Structure. Willow names the lack of interaction with other students or tutors within her courses as the least helpful element of online learning. Of note, she does not appear to advocating for interaction for the sake of interaction; rather, the sense of being alone in her courses and the consequent increased "accountability" and need for "self control to complete things" is challenging for her because she "never had a lot of structure." Echoing this

comment, MS observes that "a peer support [program] where people who have previously taken

a course could sit down and explain general overviews" would "really, really help me." Such a

program would help provide the big picture and overall structure, as well as make connections so

MS would be "not just blind."

Research Sub-Question 2: What element or elements of established trauma-informed

educational practice are most important to adult/postsecondary online learners with a history

of complex trauma? How would they like to see these implemented?

The six elements of trauma-informed practice as formulated by SAMHSA (2014) were

presented to the participants, who were invited to select the element or elements most important

to them, or that they felt would make the biggest difference to them. The six elements include:

- safety

- trustworthiness and transparency

- peer support

- collaboration and mutuality

- empowerment, voice, and choice

- cultural, historical, and gender issues (SAMHSA, 2014)

Empowerment, Voice, and Choice. Willow selected the fifth element, empowerment,

voice and choice, as the most important or having the potential to make the biggest difference for

her: "It would be great if it [the university] could implement a variety of choices for ways that

courses can be completed. For example, if someone struggles with writing, being able to record

an audio or write a test instead could be useful for them." Of note, as previously described,

Athabasca University (n.d.) does offer accommodations for learners with a diagnosed disability;

however, extensive paperwork and documentation are required (Athabasca University, 2021), a

process that may be inaccessible for survivors of complex trauma, particularly those already

burdened with shame and struggling with executive functioning issues and a high degree of fear.

Thus the accommodation process may act as a systemic barrier to success, fuelling inequity for

complex trauma survivors. An alternative approach would involve making such choices available

to all students to "improve and optimize teaching and learning for all people" (CAST 2018).

Willow also suggests empowering and giving a voice to students who have "struggled

with communication" by "establishing consistency between tutors," with the aim of ensuring

tutors are "supportive and help develop your learning." Similarly, MS states that it would be

helpful if "certain departments" were "more just receptive to the fact" that learners may have

experienced trauma.

Safety, Trustworthiness, and Transparency. For Ryan, it is "very difficult" to separate

the first two elements, safety and trustworthiness and transparency, which they consider the most

important elements of trauma-informed practice. They state that "safety and trustworthiness are

interdependent principles and must be the basis of all education situations and makes [sic] the

most difference for me as an online learning [sic]."

As an example, Ryan shares the story of their safety and trust being violated as an adult

online learner when they encountered personally impactful inaccurate information in a course:

"the textbook told me that HIV and AIDS are unrelated." This statement "can cause much harm

as HIV retroviral medications are required to prevent AIDS. If I followed the advise [sic] in my

book and doubted the success and truth of HIV causing AIDS, I could go off my medication and

risk death. I could die if I trusted the information in my other program." For Ryan, this is a clear

example of "HIV/AIDS Stigma and unproven conspiracy theories." They state plainly: "if there

is no trust, there can be no safety. Without safety, trauma can be retriggered." Trust, then, relies

in part on institutions ensuring information found within courses is scientifically accurate.

Similar to Ryan, MS names "trust and transparency" as the most important element of established trauma-informed practice for herself. (Of note, during the interview, MS went back over the six elements to ensure she hadn't "missed one" of the elements and then reconfirmed trust and transparency as the most important to her.) The "transparency and communication . . . [along with] the trust" could be strengthened, in MS's view, through "proactive communications" and "quick responses." When she does receive a quick response, even "just saying hey, we've got your request, someone will get back to you," this is very helpful for MS. However, as previously noted, when her queries are "not even . . . acknowledged that it's been received," this "stirs up trust issues" for MS.

Chapter 5. Discussion

Introduction

The purpose of this study was to explore the experience of adult online learners who are survivors of complex trauma. The research question was: ***How do adult/postsecondary learners with a history of complex trauma experience online learning, and what are their unique needs in this environment?*** Two sub-questions were explored: ***What do adult/postsecondary online learners with a history of complex trauma find most and least helpful to their learning? What element or elements of established trauma-informed educational practice are most important to adult/postsecondary online learners with a history of complex trauma? How would they like to see these implemented?*** Underpinned by a critical realist philosophy and the transformative research framework, the study used an instrumental multiple (collective) case study design; data included interview and detailed questionnaire results, artefacts provided by participants, and my own analytic memos and research journal. Triangulation, member checking, and thick, rich description were used to validate the findings.

The primary aim of this chapter is to interpret and discuss the significance of the findings (note that discussion and interpretation are also woven throughout the previous chapter, which focuses on the study's findings). First, a brief overview of key findings is provided. Next, the findings are interpreted and placed within the context of prior research and other peer-reviewed literature. Potential future research directions are briefly reviewed. Finally, conclusions are summarized.

Overview of Key Findings

Each of the three case study participants (whose ACE-IQ scores are all more than double the level considered indicative of complex trauma) described their adult/postsecondary online

learning experience as being profoundly impacted by their life history of complex trauma. These impacts ranged from struggles with executive functioning to challenges managing a heightened perception of threat, re-experiencing trauma (for example, through flashbacks), negative beliefs about the self, challenges navigating relationships, and difficulties with affect regulation. These impacts affected participants' learning and course experience—but also, more broadly, their ability to interact with the administrative elements of the university and navigate the complex processes of applying, registering, accessing financial aid, and more. Trauma impacts were not just psychological: they included pragmatic impacts on learners' lives and educational trajectories, including not completing high school or completing high school but being unable to attend face-to-face university at the traditional age. Another pragmatic impact was participants' life experience of complex trauma having resulted in a less than solid foundation of fundamental skills typically learned in childhood and adolescence (for example, planning and "staying on track").

Themes emerging from the data also included participants' awareness of and competence and capability in managing their history of complex trauma and its impacts, participants' desire to be both seen and unseen, and the high intrinsic value placed by all participants on education. Participants identified elements of their online learning experience that have been most helpful to them as survivors of complex trauma, which included self-advocacy, assistance from advisors, privacy and solitude, digital materials, safe and respectful forum moderation, and open access. Participants also identified least helpful elements, which included lack of communication/lack of transparency, the requirement to participate in online discussion forums within courses, and lack of interaction/lack of structure. Finally, participants identified elements of established trauma-informed practice to prioritize in the adult/postsecondary online learning setting, which included

safety, trust and transparency, and empowerment, voice, and choice.

Interpretation of Findings

      This study is perhaps the first to explore the experience of survivors of complex trauma as adult/postsecondary online learners. Limited research has been performed exploring the perspectives of trauma survivors in any educational setting, with only three studies identified during the literature review (all focused on adolescents or young people: one with court-involved young women studying at the secondary level, the second within an alternative or "second chance" high school, and the third comparing the experience of young women attending two high schools—one trauma informed and one non-trauma informed). No studies were identified that focused on trauma-informed educational practices in the open, digital, or distance postsecondary setting, although these learners are at higher risk of having experienced trauma than the traditional postsecondary student population (Davidson, 2017; Giano et al., 2020; Koseoglu et al., 2020).

      Impacts of complex trauma identified by participants as affecting their experience as adult/postsecondary online learners align closely with the diagnostic criteria for complex post-traumatic stress disorder (WHO, 2022). This does not imply that participants can, or should, be diagnosed with complex PTSD, but the implication is that survivors of complex trauma share an array of common challenges that affect them as adult/postsecondary online learners. Five of the six ICD-11 diagnostic criteria appeared in the findings, including heightened perception of threat, re-experiencing trauma (for example, through flashbacks), negative beliefs about the self, challenges navigating relationships, and difficulties with affect regulation (WHO, 2022). The sixth criterion, deliberate avoidance of reminders of the trauma, did not appear in the findings—however, it is possible that participants were either less aware of this or that they considered it

less important (of course, it is also possible that participants are not affected by this as learners).

The findings also align with a broad range of opinion or advocacy pieces regarding trauma survivors as adult/postsecondary learners (e.g., Carello & Butler, 2015; Davidson, 2017; Harper & Neubauer, 2021; Perry, 2006). For example, Carello and Butler (2015) state that a trauma-informed approach requires postsecondary educators and administrators to consult with students and accept their expertise in identifying what helps them feel safe enough to learn. The findings of this study demonstrate that participants do, indeed, know what helps them feel safe: clear, consistent, and responsive communication; the opportunity for choice; supportive faculty and staff; and a transparent structure and expectations (to name just a few). In another example, Harper and Neubauer (2021) discuss intersectionality, acknowledging that trauma occurs at multiple ecological levels, affecting individuals, groups, and communities, and encompassing current and historical trauma. The findings for this study shine a light on intersectionality: when survivors of complex trauma are also members of the 2SLGBTQ+ community, or first-generation students, or hold a GED rather than a high school diploma, or are HIV positive, their trauma history and its effects are amplified and altered.

One participant explicitly discussed the impact of her complex trauma on her executive functioning as an adult, while the other two mentioned executive function-related challenges but did not use the term. All three appeared to frame their understanding of their trauma largely within what Golden (2020) describes as the dominant, predominantly biomedical, model of trauma, "which locates the 'problem' and 'solution' [of trauma] within the individual" (p. 76). This contrasts sharply with the voices of traumatized learners brought forward by Golden, perhaps because the learners in Golden's study attend a trauma-informed high school which has explicitly supported them in challenging dominant understandings of trauma as "entrenched

individual deficiencies" (p. 76).

Golden (2020) also argues that teachers of traumatized learners must carefully and deliberately build strong relationships, which requires educational environments that support their ability to do this. Golden's argument closely aligns with the findings from the present study, in which all three case study participants repeatedly highlighted the importance of relationships, coupled with challenges in establishing them. Of note, however, the findings of the present study suggest that not only instructional but also administrative staff should consider how best to build relationships with traumatized learners to support their success.

A handful of prior publications (e.g., Golden, 2020; Harper & Neubauer, 2021) have used an ecological lens when examining learners' traumatic histories, using "framings that illuminate ecologies of privilege, dispossession, and care" (Golden, 2020, p. 76). Eschewing the biomedical model, which locates the problem of trauma at the individual level, enables educators to enact a trauma-informed pedagogy that is culturally responsive, sensitive to context, and strengths based (Golden, 2020). In the present study, the participants (who do not attend a trauma-informed educational institution) nonetheless hinted at the importance of the ecological perspective, suggesting that they see the "problem" of trauma as located—at least in part—in their current and historical environments (such as Willow's comment that she "never had a lot of structure" or Ryan's artefact on bullying of 2SLGBTQ+ students in the K to 12 system). MS, too, brings an ecological perspective in her discussion of "spillover" of trauma impacts between her studies and the rest of her life. "How does it impact students' managing of the rest of their lives as well if they are overwhelmed [at school]?" she asks.

From the ecological perspective, participants in the present study provided several hints regarding the complexity and challenge of their lives as parents, partners, and individual human

beings, outside the educational context. Many of these challenges are either products or sources

of the participants' life history of trauma, including poverty, serious health challenges, parental

status, lack of prior formal education, and much more. The biomedical model of trauma does not

encompass the impact of this ecology, but it is an essential element to consider. As Lynn

Pasquerella, the president of the American Association of Colleges and Universities, recently

pointed out:

> We need to go beyond providing access to higher ed and ensure that all students are given
>
> the support necessary to complete education and have opportunities to engage in high-
>
> impact practices that we know are going to lead to success in life. (Zalaznick, 2022)

Ensuring this requires attention to ecology. Pasquerella goes on:

> We'll see the impact of economic segregation if a student is working and can't afford to
>
> spend time after class with professors and prefers [sic]. They'll be at a disadvantage in
>
> terms of what we know helps students thrive and succeed. (Zalaznick, 2022).

In a similar vein, Speirs (2020) argues that while equity of access is crucial, equity of experience

and equity of participation are essential components of true equity in higher education. Equity of

experience and participation are, of course, impossible to achieve without a recognition of the

complex ecology of students' histories and life circumstances.

Participants spoke of their desire for improved relationships with tutors (to support their

empowerment and voice), for enhanced peer support, and for a greater degree of understanding

and recognition of trauma and its impacts from both faculty and staff. These wishes align closely

with Golden's (2020) argument that when institutions understand trauma and care as sociological

phenomena (rather than as individual biomedical phenomena), learners receive and give

potentially life-changing care and support. Participants' wishes, then, would seem to support a

sociocultural or ecological understanding of trauma in the implementation of trauma-informed

educational practices, rather than the current dominant biomedical framework.

      The question of resilience also appeared in the findings, with Ryan repeatedly expressing

pride in their "educational resilience," while MS problematized the notion in her submission to

the screening survey, noting that she is praised for her resilience by people who face none of the

structural inequities she confronts on a daily basis, but does not receive offers of help to

overcome these inequities. MS's perspective aligns with that of Schwarz (2018), who argues that

the concept of resilience may in fact reinforce, rather than disrupt, existing power imbalances

and inequities. For Schwarz, resilience is not an ontological fact but a moral proposition

embedded within a particular society (an argument borne out by Ryan's pride in their resilience:

one would not expect them to feel pride if resilience were morally neutral). Ultimately, Schwarz

argues that resilience or its lack should be considered "a product of structurally embedded social

inequalities along dimensions of gender, socioeconomic status, ethnicity, etc." (p. 536). For

Schwarz, the development and maintenance of true resilience should focus on systemic and

structural issues and in particular on the way in which individuals are embedded within specific

contexts. Vasquez (2022) concurs, arguing that resilience discourse can serve as a form of

gaslighting, particularly when the emphasis on individual resilience obscures the need to

challenge, change, or abolish problematic structures.

      These questions of power and structure impact the implementation of trauma-informed

practices in the educational setting. Participants in the present study emphasized their desire for

their voices to be heard and the need for their perspectives to be considered in the definition of

safety. Ryan's and MS's experiences of being unseen and unheard in the educational context—in

Ryan's case, encountering scientifically inaccurate course material, and in MS's case being

unable to get answers to urgent questions about financial aid—align with Harper and Neubauer's

(2021) comment that higher education is complicit in the power imbalances and inequities that

are essential features of our social systems and structures. On the question of implementation of

trauma-informed practice in a higher education setting, Harper and Neubauer maintain that

"power brokers need to be willing to either share or relinquish their power in order to embrace

the six guiding principles for a trauma-informed approach" (p. 18). For example, "physical and

emotional safety need to be defined by those with the least amount of power (e.g., students,

educators) and should be created and promoted by those with the most power and decision-

making authority (e.g., educators, administrators)" (p. 20). This is consistent with all

participants' recommendations for implementation of a trauma-informed approach.

Recommendations for Future Research

The findings of this study suggest multiple pathways for future research. First, the high

volume of responses to the initial screening survey suggest that a plethora of survivors of

complex trauma who are adult/postsecondary online learners wish their voices to be heard. They

could be engaged in a variety of ways that would preserve and enhance their agency and

empowerment, for example, through participatory action research, prospectively (rather than

retroactively) examining their experience as online learners in real time. The question of

intersectionality raised by the findings of this study could also be more thoroughly explored: how

do different sets of identities and life experiences (e.g., gender identity, first-generation status,

Indigeneity, former foster youth) amplify or alter the impacts of complex trauma for

adult/postsecondary online learners? Do survivors of complex trauma experienced in adulthood

(e.g., gender-based violence, sex trafficking, genocide campaigns) experience online learning in

a different way from survivors of complex trauma experienced in childhood? If a pilot project of

trauma-informed educational practices were implemented in an adult/postsecondary online

setting, what would the impact be for these learners? Participatory action research could also

provide an empowering framework for learners, faculty, and staff to work together to implement

trauma-informed educational principles.

Another intriguing question was raised in the present study by participant Ryan Handy:

How does the experience of adult/postsecondary online learning impact the survivor's

experience of their trauma? Other interesting future directions for research suggested by Ryan

include the role of self-care in educational success for traumatized learners; and tools, resources,

and skills traumatized learners use to help them adapt to the symptoms of trauma in an online

adult learning situation.

A quantitative investigation of the numbers of adult/postsecondary online learners who

have experienced complex trauma would also be useful. Current estimates are inaccurate at best;

the proportion of the general population who has experienced 4 or more ACEs has been

documented, but this excludes those who have experienced complex trauma in adulthood. It may

also be inaccurate to assume that the population of adult/postsecondary online learners reflects

the general population; there may be far more survivors in an adult online learning environment

(or there may be fewer). An accurate number could assist postsecondary and other adult learning

institutions in data-based decision making regarding implementation of trauma-informed

practices.

Conclusions

As survivors of complex trauma, the participants in this study have an experience of

adult/postsecondary online learning that is distinct from that of their peers in a variety of ways.

They confront, on a daily basis, challenges not shared by others, from struggles with executive

functioning to challenges in regulating emotion, dealing with a heightened perception of threat, re-experiencing trauma, negative beliefs about the self, and difficulties navigating relationships. Their life history is embedded in a context that may have created numerous additional challenges, including a lack of prior educational credentials, lack of familiarity with the expectations and norms of postsecondary education institutions, and lack of fundamental skills others typically develop in childhood or adolescence.

And yet, these participants are highly skilled at navigating the impacts of their complex trauma. They have developed an array of coping mechanisms that allow them to function in the online learning environment and effectively navigate the university. They place a high intrinsic value on education, which motivates them in the face of sometimes seemingly insurmountable challenges. They are altruistic, expressing a desire to help and support others with a similar life history. The opportunity to learn online fills them with excitement, pride, and passion, but they would also like to see the implementation of trauma-informed educational practices, particularly the principles of safety, transparency, and trust.

In closing, I leave you with three quotes, one from each participant. "Adult online learning has given me opportunities of intellectual and academic growth I thought was never possible," Ryan says. Willow states: "The biggest reward is just finishing a course for me." And MS says, "I can do this!"

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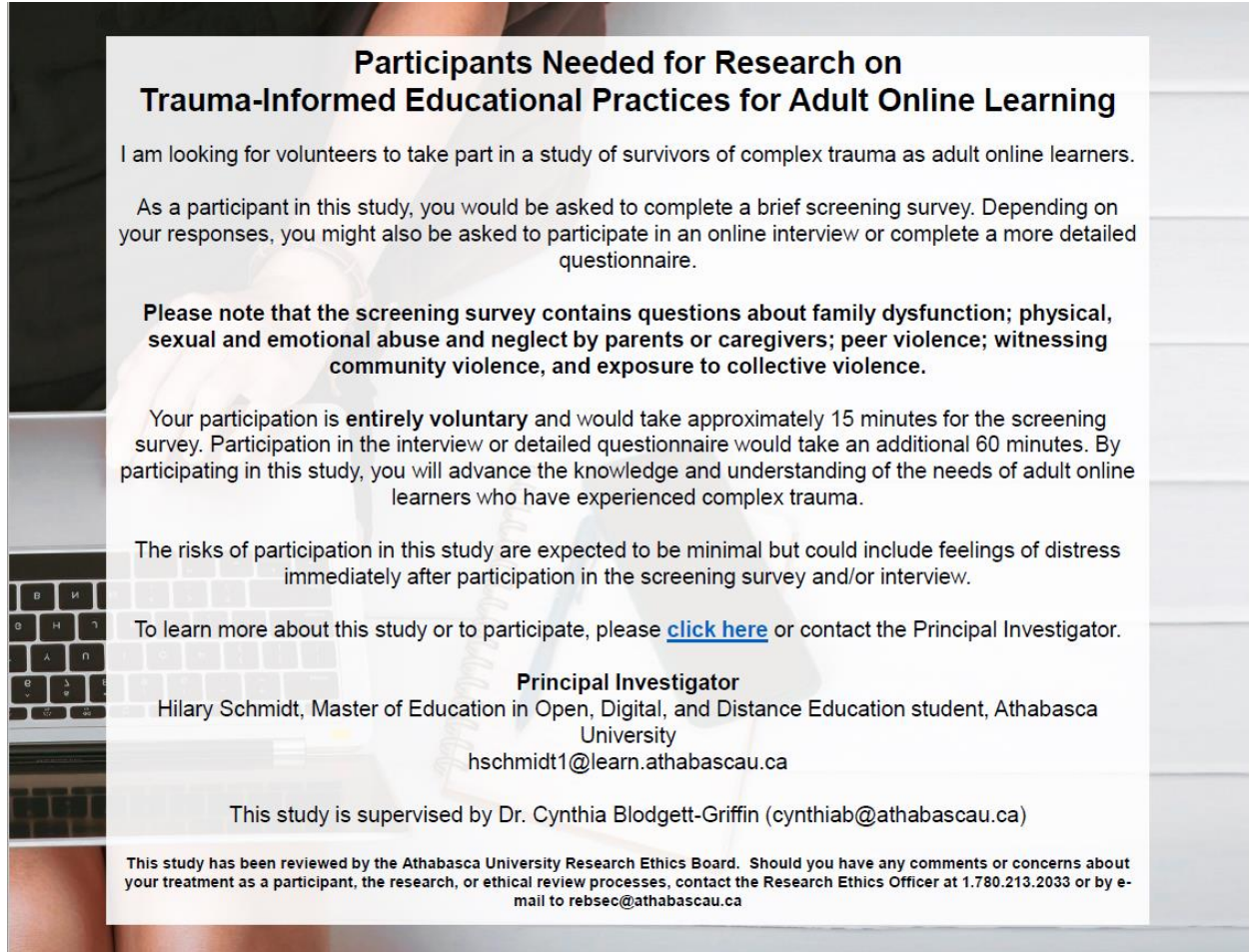
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Appendix A: Recruitment Poster

Participants Needed for Research on Trauma-Informed Educational Practices for Adult Online Learning

I am looking for volunteers to take part in a study of survivors of complex trauma as adult online learners.

As a participant in this study, you would be asked to complete a brief screening survey. Depending on your responses, you might also be asked to participate in an online interview or complete a more detailed questionnaire.

Please note that the screening survey contains questions about family dysfunction; physical, sexual and emotional abuse and neglect by parents or caregivers; peer violence; witnessing community violence, and exposure to collective violence.

Your participation is **entirely voluntary** and would take approximately 15 minutes for the screening survey. Participation in the interview or detailed questionnaire would take an additional 60 minutes. By participating in this study, you will advance the knowledge and understanding of the needs of adult online learners who have experienced complex trauma.

The risks of participation in this study are expected to be minimal but could include feelings of distress immediately after participation in the screening survey and/or interview.

To learn more about this study or to participate, please **click here** or contact the Principal Investigator.

Principal Investigator
Hilary Schmidt, Master of Education in Open, Digital, and Distance Education student, Athabasca University
hschmidt1@learn.athabascau.ca

This study is supervised by Dr. Cynthia Blodgett-Griffin (cynthiab@athabascau.ca)

This study has been reviewed by the Athabasca University Research Ethics Board. Should you have any comments or concerns about your treatment as a participant, the research, or ethical review processes, contact the Research Ethics Officer at 1.780.213.2033 or by e-mail to rebsec@athabascau.ca

Appendix B: Letter of Information and Informed Consent Form

Please read the Letter of Information and Informed Consent form below before completing the survey.

Thank you!

Principal Investigator (Researcher):   **Supervisor:**
Hilary Schmidt   Dr. Cynthia Blodgett-Griffin
hschmidt1@learn.athabascau.ca   cynthiab@athabascau.ca

You are invited to take part in a research project entitled Survivors of Complex Trauma as Adult Online Learners: A Case Study.

This form is part of the process of informed consent. The information presented should give you the basic idea of what this research is about and what your participation will involve, should you choose to participate. It also describes your right to withdraw from the project. In order to decide whether you wish to participate in this research project, you should understand enough about its risks, benefits and what it requires of you to be able to make an informed decision. This is the informed consent process. Take time to read this carefully as it is important that you understand the information given to you. Please contact the principal investigator, Hilary Schmidt, if you have any questions about the project or would like more information before you consent to participate.

It is entirely up to you whether or not you take part in this research. If you choose not to take part, or if you decide to withdraw from the research once it has started, there will be no negative consequences for you now, or in the future.

Introduction
My name is Hilary Schmidt and I am a Master of Education in Open, Digital, and Distance Education student at Athabasca University. As a requirement to complete my degree, I am conducting a research project about trauma-informed educational practices for adult online learners, with a focus on the experience of survivors of complex trauma as adult online learners. I am conducting this project under the supervision of Dr. Cynthia Blodgett-Griffin.

Why are you being asked to take part in this research project?
You are being invited to participate in this project because you are an adult online student.

What is the purpose of this research project?
The purpose of this research project is to explore the way in which adult online learners with a history of complex trauma experience online learning (including online learning within courses, as well as all associated interactions with an online educational institution, such as applying, registering, using academic and other support services, etc.). The research will explore what adult online learners with a history of complex trauma find most and least helpful to their learning, and what elements of established trauma-informed educational practice are most important to these learners and how they would like to see these implemented.

What will you be asked to do?

Your participation in this project would involve completing an online screening survey (the Adverse Childhood Experiences International Questionnaire). This survey was created by the World Health Organization and asks about experiences in your home when you were growing up and events in the community you experienced when you were growing up (you can read more about the survey here). Completing the survey would take approximately 15 minutes.

Please note that the survey contains questions about family dysfunction; physical, sexual and emotional abuse and neglect by parents or caregivers; peer violence; witnessing community violence, and exposure to collective violence.

Depending on the results of your screening survey, you may be invited to participate in an online interview, which would be arranged for a time convenient to your schedule. If you are invited to an interview but are unable or unwilling to attend, you will be offered the opportunity to complete a detailed questionnaire. The interview/detailed questionnaire focuses on your experiences with adult online learning. The interview/detailed questionnaire does not include questions about any trauma you may have experienced, and the researcher would draw the conversation away from any disclosures. The interview/detailed questionnaire would take approximately 60 minutes of your time. Interviews will be audio- and video-recorded. You would have an opportunity to review rough drafts of the analysis of your data and provide feedback if you wished. Please note, however, that review of the rough draft will take place after the point at which it will be possible for you to withdraw your data.

What are the risks and benefits?

The risks of participation in this study are expected to be minimal but could include feelings of distress immediately after participation in the screening survey and/or interview or questionnaire. As an Athabasca University student, you may access counselling services and other support by contacting the university's wellness provider, Carepath by BayShore, at 1-855-491-5744, or by visiting their website (carepathdigitalhealth.ca) at any time. More information about Carepath by BayShore can be found on the Athabasca University website here.

The research should benefit online adult learners who are survivors of complex trauma through the advancement of knowledge and understanding of their particular needs as learners. This results of this research may contribute to improving trauma-informed practice in online adult learning and advance the conversation regarding how online postsecondary institutions or other institutions offering adult online courses can best support learners who have experienced complex trauma. The results may also open up further pathways for research in the area of trauma-informed practice in adult online education. Finally, this study provides an opportunity for adult online learners who have experienced complex trauma to have their voices heard, as experts in their own experience.

Do you have to take part in this project?

As stated earlier in this letter, involvement in this project is entirely voluntary. You may refuse to participate or withdraw at any time during which data is being collected. You may also refuse to answer any specific questions. To withdraw from the study prior to completion of the initial survey (the Adverse Childhood Experiences International Questionnaire), simply close your

browser window prior to submitting your responses. To withdraw from the study prior to completion of the follow-up questionnaire or interview, contact the researcher by email. To withdraw from the study after completion of the follow-up questionnaire or interview, contact the researcher by email **within two weeks of the date of your interview or questionnaire submission**. If you contact the researcher within two weeks of your interview or questionnaire submission, your data will be deleted and destroyed. After that date (two weeks from your interview or questionnaire submission), your data will have been entered into the data analysis software, in which case it is fully anonymous and cannot be retrieved.

How will your privacy and confidentiality be protected?
The ethical duty of confidentiality includes safeguarding participants' identities, personal information, and data from unauthorized access, use or disclosure.

The initial survey is built in a secure software whose servers are housed in Canada; responses are accessible only from my password-protected account. Note that the secure software is owned by Alberta Health Services (AHS); I have access to this software through my employment. However, once again, only I have access to the survey account and data. AHS and its employees do not have access to the data.

The follow-up questionnaire uses the same software. Interview recordings and survey responses will be stored on a password-protected computer located in a locked space to which only I have access. Any printed material will be stored in the same locked space. Raw data will be stored for a minimum of five years, as per Athabasca University's policy.

How will my anonymity be protected?
Anonymity refers to protecting participants' identifying characteristics, such as name or description of physical appearance.

All data is collected one-on-one (that is, online interview will take place between the researcher and individual participants, with no third parties present). Every reasonable effort will be made to ensure your anonymity; you will not be identified in publications (by name, physical appearance, or other potentially identifying characteristics) without your explicit permission.

How will the data collected be stored?
- Raw data will be downloaded from the survey software and stored on the researcher's password-protected computer in a locked space to which only the researcher has access.
- All notes and physical printed materials will be stored in a locked space to which only the researcher has access.
- Apart from the researcher, no individuals or agencies will have access to the data now or in the future.
- Data will be anonymized prior to being entered into the analysis software.

Who will receive the results of the research project?
The existence of the research will be listed in an abstract posted online at the Athabasca University Library's Digital Thesis and Project Room and the final research paper will be publicly available. Participants can access the final research paper through the Digital Thesis and

Project Room.

Direct quotations from participants may be reported, although all personally identifying information will be removed. No audio/video recordings will be used in dissemination of the research.

The results of the research may also appear in academic or professional journal articles, in presentations at academic or professional conferences, or be communicated in some other manner.

Who can you contact for more information or to indicate your interest in participating in the research project?
Thank you for considering this invitation. If you have any questions or would like more information, please contact me (the principal investigator) by e-mail at hschmidt1@learn.athabascau.ca or my supervisor by email at cynthiab@athabascau.ca. If you are ready to participate in this project, please proceed to review the following consent and complete the screening survey.

Thank you.

Hilary Schmidt

This project has been reviewed by the Athabasca University Research Ethics Board. Should you have any comments or concerns about your treatment as a participant, the research, or ethical review processes, please contact the Research Ethics Officer by e-mail at rebsec@athabascau.ca or by telephone at 780.213.2033.

Informed Consent:
By completing this survey/questionnaire you agree that:

1. You have read what this research project is about and understood the risks and benefits.
2. You have had time to think about participating in the project and had the opportunity to ask questions and have those questions answered to your satisfaction.
3. You understand that you are free to withdraw participation from the project prior to completion of the initial survey by closing your browser window or navigating away from this page, without having to give a reason and that doing so will not affect you now or in the future.
4. You understand that you are free to withdraw participation after completion of the initial survey and prior to or after completion of the follow-up questionnaire or interview by contacting the researcher by email, without having to give a reason and that doing so will not affect you now or in the future.
5. You understand that you may refuse to answer certain questions in the initial survey, the follow-up questionnaire, or interview.
6. You understand that if you choose to withdraw, you may request that your data be removed from the project by contacting the principal investigator unless it has already been entered into the data analysis software, in which case it is fully anonymous and

cannot be retrieved.

Please retain a copy of this consent information for your records.

Clicking start survey **below and submitting this survey constitutes your consent and implies your agreement to the above statements.**

Appendix C: Screening Survey

Note: An asterisk (*) next to the question number in the left column denotes a question not

included in the original Adverse Childhood Experiences International Questionnaire.

	Section 0: Demographic Information	
*1	What is your gender?	[Open-ended response]
2	What year were you born?	[Open-ended response]
3	How old are you?	[Open-ended response]
4	What is your ethnic or cultural background?	[Open-ended response]
*5	Are you Indigenous?	Yes No
6	What is the highest level of education you have completed?	No formal schooling Less than primary school Primary school completed Secondary or high school completed College or university completed Postgraduate degree completed
7	Which of the following best describes your main work status over the last 12 months?	Government employee Nongovernment employee Self-employed Nonpaid Student Homemaker Retired Unemployed (able to work) Unemployed (unable to work)
8	What is your civic status?	Married Living as a couple Divorced or separated Single Widowed Not listed
*9	Are you currently enrolled, or have you been enrolled within the past 12 months, in an online postsecondary course (at Athabasca University or another university or college)?	Yes No
	Section 1: Marriage	
1	Have you ever been	Yes

	married?	No
2	At what age were you first married?[6]	[Open-ended response]
3	At the time of your first marriage did you yourself choose your husband/wife?[6]	Yes No Don't know/not sure
4	If you are a mother or father what was your age when your first child was born?	[Open-ended response]
Section 2: Relationship With Parents/Guardians **When you were growing up, during the first 18 years of your life…**		
1	Did your parents/guardians understand your problems and worries?	Always Most of the time Sometimes Rarely Never
2	Did your parents/guardians **really** know what you were doing with your free time when you were not at school or work?	Always Most of the time Sometimes Rarely Never
3	How often did your parents **not** give you enough food even when they could have easily done so?	Always Most of the time Sometimes Rarely Never
4	Were your parents/guardians too drunk or intoxicated by drugs to take care of you?	Always Most of the time Sometimes Rarely Never
5	How often did your parents/guardians not send you to school even when it was available?	Always Most of the time Sometimes Rarely Never
Section 3: Family Environment **When you were growing up, during the first 18 years of your life…**		
1	Did you live with a household member who was a problem drinker or	Yes No

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[6] This question only appears when participants click "Yes" in response to Section 1, Question 1.

	alcoholic, or misused street or prescription drugs?	
2	Did you live with a household member who was depressed, mentally ill, or suicidal?	Yes No
3	Did you live with a household member who was ever sent to jail or prison?	Yes No
4	Were your parents ever separated or divorced?	Yes No Not applicable
5	Did your mother, father, or guardian die?	Yes No Don't know or not sure
6	Did you see or hear a parent or household member in your home being yelled at, screamed at, sworn at, insulted or humiliated?	Many times A few times Once Never
7	Did you see or hear a parent or household member in your home being slapped, kicked, punched or beaten up?	Many times A few times Once Never
8	Did you see or hear a parent or household member in your home being hit or cut with an object, such as a stick (or cane), bottle, club, knife, whip, etc.?	Many times A few times Once Never
Section 4: These next questions are about certain things YOU may have experienced. When you were growing up, during the first 18 years of your life…		
1	Did a parent, guardian, or other household member yell, scream or swear at you, insult or humiliate you?	Many times A few times Once Never
2	Did a parent, guardian, or other household member threaten to, or actually, abandon you or throw	Many times A few times Once Never

	you out of the house?	
3	Did a parent, guardian or other household member spank, slap, kick, punch or beat you up?	Many times A few times Once Never
4	Did a parent, guardian or other household member hit or cut you with an object, such as a stick (or cane), bottle, club, knife, whip, etc.?	Many times A few times Once Never
5	Did someone touch or fondle you in a sexual way when you did not want them to?	Many times A few times Once Never
6	Did someone make you touch their body in a sexual way when you did not want them to?	Many times A few times Once Never
7	Did someone attempt oral, anal, or vaginal intercourse with you when you did not want them to?	Many times A few times Once Never
8	Did someone actually have oral, anal, or vaginal intercourse with you when you did not want them to?	Many times A few times Once Never
Section 5: Peer Violence **These next questions are about BEING BULLIED when you were growing up. Bullying is when a young person or group of young people say or do bad and unpleasant things to another young person. It is also bullying when a young person is teased a lot in an unpleasant way or when a young person is left out of things on purpose. It is not bullying when two young people of about the same strength or power argue or fight or when teasing is done in a friendly and fun way.**		
1	How often were you bullied?	Many times A few times Once Never
2	How were you bullied most often?[7]	I was hit, kicked, pushed, shoved around, or locked indoors. I was made fun of because of my race, nationality, or colour. I was made fun of because of my religion. I was made fun of with sexual jokes, comments, or gestures/I

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[7] This question does not appear for participants who click "Never" in response to Section 5, Question 1.

		was left out of activities on purpose or completely ignored. I was made fun of because of how my body or face looked. I was bullied in some other way.
3	How often were you in a physical fight?	Many times A few times Once Never

Section 6: Witnessing Community Violence
These next questions are about how often, when you were a child, YOU may have seen or heard certain things in your NEIGHBOURHOOD OR COMMUNITY (not in your home or on TV, movies, or the radio).

When you were growing up, during the first 18 years of your life...

1	Did you see or hear someone being beaten up in real life?	Many times A few times Once Never
2	Did you see or hear someone being stabbed or shot in real life?	Many times A few times Once Never
3	Did you see or hear someone being threatened with a knife or gun in real life?	Many times A few times Once Never

Section 7: Exposure to War/Collective Violence
These questions are about whether YOU did or did not experience any of the following events when you were a child. The events are all to do with collective violence, including wars, terrorism, political or ethnic conflicts, genocide, repression, disappearances, torture and organized violent crime such as banditry and gang warfare.

When you were growing up, during the first 18 years of your life...

1	Were you forced to go and live in another place due to any of these events?	Many times A few times Once Never
2	Did you experience the deliberate destruction of your home due to any of these events?	Many times A few times Once Never
3	Were you beaten up by soldiers, police, militia, or gangs?	Many times A few times Once Never
4	Was a family member or friend killed or beaten up	Many times A few times

	by soldiers, police, militia, or gangs?	Once Never
Section 8: Final Questions		
*1	Do you consider yourself to have experienced significant trauma in childhood (before the age of 18)?[8]	Yes No
*2	If yes, has the childhood experience of trauma continued to affect you in adult life?[8]	Yes No
*3	Would you be interested in participating in an interview or completing an additional questionnaire to explore your experiences as an adult online learner? (Note: The interview or additional questionnaire will **not** ask about your experience of trauma but rather about your experience of online learning.)[8]	Yes No
*4	Why would you like to participate? Please write as much or as little as you would like.	[Open-ended response]
*5	Please provide your name and preferred contact method (for example, your email address or phone number). If your preferred contact method is text message, please be sure to indicate that and include your cell number.	[Open-ended response]

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[8] The remaining questions do not appear for participants who click "No" in response to this question.

Appendix D: Interview Questions

Preamble: The aim of these questions is to explore your experience of adult online learning as a person who has experienced past trauma. Please note that the aim of these questions is <u>not</u> to explore your experience of the trauma itself. You will not be asked about your trauma history, and absolutely no disclosure is required.

If you do wish to discuss the details of the personal trauma you have experienced, I will provide contact information for Athabasca University's wellness provider, Carepath by BayShore. As an Athabasca University student, you have access to their services, including counselling, 24/7.

As described in the consent form, you may decline to answer any of these questions or choose to end the interview and withdraw from the study at any time.

Do you have any questions before we begin?

1. Can you tell me a little bit about what brought you to adult online learning?

2. Can you describe a little bit about your experience of adult online learning? For example, what have you found particularly challenging or particularly rewarding?

3. How do you think your past experience of trauma may have shaped your experience of adult online learning?

4. As someone who has experienced past trauma, what has been the **most** helpful to you as an adult online learner? This can include anything to do with the way in which you interact with the institution. For example, you might comment on the way in which courses are designed, rules and regulations of the institution, the way in which administrators, instructors, and others interact with you, or anything else.

5. As someone who has experienced past trauma, what has been the **least** helpful to you as an adult online learner? This can include anything to do with the way in which you interact with the institution. For example, you might comment on the way in which courses are designed, rules and regulations of the institution, the way in which administrators, instructors, and others interact with you, or anything else.

6. Have you heard of the concept of trauma-informed care or trauma-informed educational practice?

7. I am going to read a couple of paragraphs about trauma-informed practice. I would like you to listen, and then I will ask you a few more questions. I can provide you with the paragraphs in a written format if you prefer.

   *A program, organization, or system that is trauma-informed **realizes** the widespread impact of trauma and understands potential paths for recovery; **recognizes** the signs and symptoms of trauma in clients, families, staff, and others involved with the system; and*

*responds by fully integrating knowledge about trauma into policies, procedures, and practices, and seeks to actively **resist re-traumatization**.*

Six principles of trauma-informed practice are:
- *Safety;*
- *Trustworthiness and transparency;*
- *Peer support;*
- *Collaboration and mutuality;*
- *Empowerment, voice, and choice; and*
- *Recognition of cultural, historical, and gender issues.*

Listening to this description of trauma-informed practice, which element or elements are the most important to you, or do you feel would make the most difference to you as an adult online learner? What would this look like to you? That is, how could the institution implement this in a way that you would find helpful?

8. Is there anything not included in this description of trauma-informed practice that you feel would be helpful to you as an adult online learner who has experienced trauma?

9. Are there any written documents or digital artefacts that might help me understand your experience as an adult online learner with a life experience of trauma? For example, you might consider sharing an email from the institution or a professor, or a forum post or reading from a course that you found very helpful or perhaps very unhelpful.

   If the answer to the question above is yes, ask the participant, as the expert in their own experience, to prioritize their own psychological safety over the exploration of potential artefacts. This would include pausing, or stopping, the exploration of potential artefacts as needed, and being prepared in advance to reach out to supports (for example, having the contact information at hand for a supportive friend or Athabasca University's wellness provider, CarePath by Bayshore).

10. What questions have I <u>not</u> asked that you think are important for me to ask other learners in my research?

11. Is there anything we have discussed today that you would like <u>not</u> to appear in the published results?

12. What pseudonym would you like me to use to refer to you?

13. Do you have any questions for me?

Thank you very much for participating. As a reminder, if you decide to withdraw your data from the study, please contact me by email **within two weeks of today's date.** After that date, your data will be entered into the data analysis software, and it will be fully anonymized and

impossible to retrieve.

Once I have completed a rough draft of your data, I will send it to you. This will be your opportunity to provide feedback regarding my initial analysis and to comment on what may be missing. Please note that your review and feedback are entirely voluntary. In addition, please note that the rough draft will be provided after the date at which it will be possible to withdraw.

Thank you again.

Note: If the participant is triggered during the interview, take the following steps (adapted from Walker, n.d., 13 Steps for Managing Flashbacks):

- Pause the interview and ask: "Is it possible you are having a flashback?"
- State: "You are here with me now, in the present. You are not in danger."
- Confirm whether the participant would like to continue and encourage them to set boundaries.
- If the answer is yes (they would like to continue), confirm whether they would like to take a short break before continuing.
- When resuming the interview, take a moment to speak reassuringly and remind them that the flashback will pass. With their consent, take one or two minutes for grounding (a short mindfulness exercise such as following the breath).
- If the answer is no (they would not like to continue), confirm what steps they are going to take to ensure their own safety. Provide the contact information for CarePath by Bayshore as needed (1-855-491-5744 / 7 a.m. to 11 p.m. ET or via AU website)

Appendix E: Detailed Questionnaire (Alternative to Interview)

The aim of these questions is to explore your experience of adult online learning as a person who has experienced past trauma. Please note that the aim of these questions is <u>not</u> to explore your experience of the trauma itself. You will not be asked about your trauma history, and absolutely no disclosure is required.

If you do wish to discuss the details of the personal trauma you have experienced, please contact Athabasca University's wellness provider, Carepath by BayShore. As an Athabasca University student, you have access to their services, including counselling, 24/7. You may reach them at 1-855-491-5744, or by visiting their [website](carepathdigitalhealth.ca) (carepathdigitalhealth.ca) at any time. More information about Carepath by BayShore can be found on the Athabasca University website here.

As described in the consent form you previously completed, you may decline to answer any of these questions or choose to end the questionnaire and withdraw from the study at any time.

1. What is your name?

2. Can you share a little bit about what brought you to adult online learning?

3. Can you describe a little bit about your experience of adult online learning? For example, what have you found particularly challenging or particularly rewarding?

4. How do you think your past experience of trauma may have shaped your experience of adult online learning?

5. As someone who has experienced past trauma, what has been the **most** helpful to you as an adult online learner? This can include anything to do with the way in which you interact with the institution. For example, you might comment on the way in which courses are designed, rules and regulations of the institution, the way in which administrators, instructors, and others interact with you, or anything else.

6. As someone who has experienced past trauma, what has been the **least** helpful to you as an adult online learner? This can include anything to do with the way in which you interact with the institution. For example, you might comment on the way in which courses are designed, rules and regulations of the institution, the way in which administrators, instructors, and others interact with you, or anything else.

7. Have you heard of the concept of trauma-informed care or trauma-informed educational practice? (Yes/no/not sure)

8. Please read the below paragraphs about trauma-informed practice and then answer the questions below.

    *A program, organization, or system that is trauma-informed **realizes** the widespread*

*impact of trauma and understands potential paths for recovery; **recognizes** the signs and symptoms of trauma in clients, families, staff, and others involved with the system; and **responds** by fully integrating knowledge about trauma into policies, procedures, and practices, and seeks to actively **resist re-traumatization**.*

Six principles of trauma-informed practice are:
- *Safety;*
- *Trustworthiness and transparency;*
- *Peer support;*
- *Collaboration and mutuality;*
- *Empowerment, voice, and choice; and*
- *Recognition of cultural, historical, and gender issues.*

Reading this description of trauma-informed practice, which element or elements are the most important to you, or do you feel would make the most difference to you as an adult online learner? What would this look like to you? That is, how could the institution implement this in a way that you would find helpful?

9. Is there anything not included in this description of trauma-informed practice that you feel would be helpful to you as an adult online learner who has experienced trauma?

10. Are there any written documents or digital artefacts that might help the researcher understand your experience as an adult online learner with a life experience of trauma? For example, you might consider sharing an email from the institution or a professor, or a forum post or reading from a course that you found very helpful or perhaps very unhelpful. Please indicate whether the researcher may contact you for copies of these documents or artefacts.

   If the answer to the question above is yes, please prioritize your psychological safety over the exploration of potential artefacts. This means pausing, or stopping, the exploration of potential artefacts if you need to, and being prepared in advance to reach out to supports (for example, having the contact information at hand for a supportive friend or Athabasca University's wellness provider, CarePath by Bayshore).

11. What questions has this questionnaire <u>not</u> asked that you think are important to ask other adult online learners who have experienced trauma?

12. Is there anything specific in your responses that you would like <u>not</u> to appear in the published results?

13. What pseudonym should the researcher use to refer to you in the published results?

14. Do you have any questions for the researcher?

Thank you very much for participating. As a reminder, if you decide to withdraw your data from the study, please contact the researcher by email at hschmidt1@learn.athabascau.ca **within two weeks of submission of this questionnaire.** After that date, your data will be entered into the data analysis software, and it will be fully anonymized and impossible to retrieve.

Once the researcher has completed a rough draft of your data, she will send it to you. This will be your opportunity to provide feedback regarding the initial analysis and to comment on what may be missing. Please note that your review and feedback are entirely voluntary. In addition, please note that the rough draft will be provided after the date at which it will be possible to withdraw your data.

Thank you again.

Appendix F: Invitation to Interview

Hello,

Thank you very much for completing the screening survey for my Athabasca University research study (Trauma-Informed Educational Practices for Adult Online Learning). If you are still interested in participating, I would very much like to interview you.

Could you please let me know whether you would be available for a one-hour online interview on one of the following dates:

- *[List of four to seven dates]*

If none of the above dates work for you, could you please let me know when you might be available, and I will do my best to accommodate your schedule? Alternatively, please let me know if you are unable to complete an interview but would be interested in completing a detailed questionnaire.

Please note: The interview/detailed questionnaire focuses on your experiences with adult online learning. The interview/detailed questionnaire does not include questions about any trauma you may have experienced, and I would draw the conversation away from any disclosures.

If you would like to refresh your memory regarding the study, please see the attached letter of information (note that you previously reviewed the letter and completed the consent before completing the screening survey).

If you could please respond by ***[date and time]***, I would be most appreciative. I look forward to hearing from you!

Best regards,

Hilary Schmidt

Appendix G: Certification of Ethical Approval

Athabasca University
RESEARCH CENTRE

CERTIFICATION OF ETHICAL APPROVAL

The Athabasca University Research Ethics Board (REB) has reviewed and approved the research project noted below. The REB is constituted and operates in accordance with the current version of the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans (TCPS2) and Athabasca University Policy and Procedures.

Ethics File No.: **25118**

Principal Investigator:
Ms. Hilary Schmidt, Graduate Student
Faculty of Humanities & Social Sciences\Master of Education in Open, Digital, and Distance Education (MDDE)

Supervisor/Project Team:
Dr. Cynthia Blodgett-Griffin (Supervisor)

Project Title:
Survivors of Complex Trauma as Adult Online Learners: A Case Study

Effective Date: March 31, 2023   **Expiry Date**: March 30, 2024

Restrictions:

Any modification/amendment to the approved research must be submitted to the AUREB for approval prior to proceeding.

Any adverse event or incidental findings must be reported to the AUREB as soon as possible, for review.

Ethical approval is valid *for a period of one year*. An annual request for renewal must be submitted and approved by the above expiry date if a project is ongoing beyond one year.

An Ethics Final Report must be submitted when the research is complete *(i.e. all participant contact and data collection is concluded, no follow-up with participants is anticipated and findings have been made available/provided to participants (if applicable))* or the research is terminated.

Approved by: **Date: March 31, 2023**

Tobias Wiggins, Chair
Faculty of Humanities & Social Sciences, Departmental Ethics Review Committee

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Athabasca University Research Ethics Board
University Research Services Office
1 University Drive, Athabasca AB Canada   T9S 3A3
E-mail rebsec@athabascau.ca
Telephone: 780.213.2033

Appendix H: Informed Consent (Use of Full Name)
Survivors of Complex Trauma as Adult Online Learners: A Case Study

Principal Investigator (Researcher):   **Supervisor:**
Hilary Schmidt   Dr. Cynthia Blodgett-Griffin
hschmidt1@learn.athabascau.ca   cynthiab@athabascau.ca

This informed consent (use of full name) is intended as an addendum to (not a replacement of) the original Letter of Information and Informed Consent for the project, to which you previously agreed. It has been generated on the advice of Athabasca University's Research Ethics Officer to accommodate your request that the researcher use your full name when reporting the results of her research.

By signing and dating this document, you agree that:

1. You have requested that the researcher use your full name [insert name here] when reporting the results of her research rather than your initials or another pseudonym.
2. You understand this means you will be personally identifiable by readers or other consumers of the research.
3. You understand that the results of the research (including your full name) will be reported in the final research paper, which will be publicly available through Athabasca University's Digital Thesis and Project Room, and may also appear in academic or professional journal articles, in presentations at academic or professional conferences, or be communicated in some other manner as per the original Letter of Information and Informed Consent for the project.
4. You have had time to think about the researcher using your full name when reporting the results of her research and had the opportunity to ask questions and have those questions answered to your satisfaction.
5. You have had an opportunity to review and provide feedback to the researcher regarding the initial draft of the two sections or subsections of the final research paper that specifically focus on you, including *Methodology Chapter: Case Study Participants* section and *Findings Chapter: Case 2* section.
6. You agree to the researcher including the following quotes from your written communication (including screening survey, email communication, detailed questionnaire, and artefacts) in the results of her research (see table directly below):

Quote	Source

Please retain a copy of this consent information for your records.

Signature:

Date: