An exploration of factors that have facilitated and constrained access, adoption and availability of mind-body therapies as adjunctive interventions to treat trauma-related conditions in Aotearoa, New Zealand.

A thesis submitted in partial fulfilment of the requirements for the degree of Doctor of Clinical Psychology at Massey University – Te Kunenga ki Pūrehuroa, Albany, Aotearoa, New Zealand.

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29 June 2025

Acknowledgements

To my partner Gahan, I give immense thanks and gratitude for your continued unwavering support and belief in my ability as a writer and a therapist. You, above anyone else, have shown me what true love and kindness can do for another human being. You have changed my life immeasurably.

I am profoundly indebted to Dr. Ella Kahu. You have taught me so many things well beyond the role of supervisor of this thesis. You have shown me that the deepest of friendships and connections can be born of unusual circumstances. I am eternally grateful to you, my friend, for holding space for me in moments when my student life ceased to make any sense. You saw me in those times as I currently see you. Your unequivocal support all these years has been and always will be an absolute gift.

Thank you to Associate Professor Ian de Terte. You stepped into my field of vision when I was in great need. You not only guided me through the past few years in writing this thesis, but you also helped me stay the course during what can only be described as an unwieldy journey. I am indebted to you for this.

To Professor Darrin Hodgetts, you are a true scholar. Your contribution to this thesis has been immense. Your vision and knowledge of qualitative research have allowed me to reflect more deeply on the entire project. Thank you.

To my children, Brooke and Bailey, it has been a long few years with so many changes for all of us. Thank you for your continued belief in me as your mother, friend, and confidant. If nothing else, I hope that as you age into your middle years and beyond, I have shown you that you can realise your dreams and change the course of your lives if that is what you truly want. This is my legacy to you.

Abstract

This qualitative study explores factors that facilitate and constrain the use of mind-body interventions to treat trauma-related conditions in Aotearoa New Zealand (NZ). The phenomenon explored references mind-body therapies as an adjunctive treatment option with a focus on trauma-sensitive yoga. This study is intended to examine mind-body interventions as a complementary treatment approach and augmentation of interventions such as cognitive behavioural therapies and other validated, evidence-based approaches to treating trauma-related conditions. There is a significant body of literature that supports the use of talk therapies, such as cognitive behavioural therapy, to treat symptoms associated with trauma-related mental health conditions. Recent research has revealed that in many cases, trauma cannot be resolved through interventions that utilise talk therapies alone, as trauma, according to some theorists, is located not only in the core of the brain but also within the body. A practical treatment approach to mitigate individual experiences of trauma is to integrate Western psychological talk therapy approaches with those that focus on calming the nervous system, such as trauma-sensitive yoga, romiromi, mindfulness, and somatic experiencing. The current study highlights factors across the social system that have facilitated and constrained the access, adoption, and availability of mind-body therapies as complementary approaches for treating trauma-related conditions in the NZ context. Findings in the current study highlight that in the NZ context, few factors have facilitated access, adoption and availability of mind-body therapies as adjunctive interventions to treat trauma-related mental health conditions. A more significant number of factors, it appears, have constrained access, adoption and availability of mind-body therapies. Findings illuminate an overall positive attitude toward the utility of mind-body therapies as adjunctive treatments for trauma-related conditions, which highlights the potential for greater use of such interventions in the NZ setting.

Keywords: trauma, interventions, Aotearoa New Zealand, psychology, cognitive behavioural therapy, complementary therapy, mind-body, complementary and alternative medicine, integrative medicine, trauma-sensitive yoga, trauma centre trauma-sensitive yoga, traditional healing, Indigenous populations.

Glossary: English to Māori

Aotearoa: New Zealand

Hauora: health

Hinengaro: mind

Io: God – the source of all

Mamae: sadness / mental pain

Mātauranga: education

Mauri ora —the balance that maintains an individual's human connection

Papatūānuku: Mother Earth

Patu ngākau (the heart): deep wound to the heart

Pūrākau: story

Pōuritanga: sadness / physical pain

Ngākau the heart / source of emotions

Ngākau (the heart) ora— balance and equilibrium

Ritenga - customs

Romiromi: deep tissue manipulation

Rongoā Māori: a system of Māori healing based on herbal remedies

Taonga Puoro: traditional instruments of the Māori

Te reo Māori: Māori language

Tinana: body

Tipuna: ancestors

Te ira tāngata: human element

Te Tiriti o Waitangi: The Treaty of Waitangi

Te ira tāngata and the whenua: the people and the external environment

Tohunga: traditional healer/s or priest/s

Waiata: song

Wairua: spirituality

Whakapapa kōrero: genealogy conversations

Whānau: family

Whenua: land

Abbreviations:

Cognitive Behavioural Therapy (CBT)

Complex Post-Traumatic Stress Disorder (CPTSD)

Developmental Trauma Disorder (DTD)

Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5)

Eye Movement Desensitisation and Reprocessing (EMDR)

National Registry of Evidence-based Programs and Practices (NREPP)

National Center for Complementary and Integrative Medicine (NICCIM)

Prolonged Exposure (PE)

Post-Traumatic Stress Disorder (PTSD)

Somatic Experiencing® (SE)

Substance Abuse and Mental Health Services Administration (SAMHSA)

Trauma Centre Trauma Sensitive Yoga (TCTSY)

Trauma-Focused Cognitive Behavioural Therapy (TF-CBT)

Contents

Chapter One: An Introduction

The topic under investigation in this qualitative research study explores factors that facilitate and constrain the use of mind-body interventions to treat trauma-related conditions in Aotearoa New Zealand (NZ). This introduction to the topic will outline the overall structure and organisation of the following chapters.

Chapter One, "An Introduction," explains mind-body therapies, complementary and alternative medicine (CAM), and traditional healing practices in the treatment of trauma-related conditions. This chapter also provides a brief overview of the research design employed in the current study and the methodology used to investigate the topic under examination. Following this, Chapter Two identifies keywords and terms used in this thesis that relate to the discourse surrounding trauma theory, assessment, and treatment of this condition. This chapter also introduces a wide range of therapy practices, conventional, traditional, and complementary, that have been used in mental health to treat trauma-related conditions.

Incidence rates of trauma diagnoses, both internationally and in NZ, are highlighted in Chapter Three. Chapter Four is a literature review of trauma theory based on not only conventional Western evidence-based theoretical assumptions and traditional Indigenous healing practices, but in particular, theory relevant to the use of complementary mind-body interventions for treating trauma-related conditions. Several approaches, alternative ontologies, and epistemological perspectives on trauma are covered in this chapter, some of which have only recently been used in NZ by mental health professionals in the conceptualisation and treatment of trauma-related conditions.

In Chapter Five, titled "Interventions to Treat Trauma-Related Conditions," an exploration of the efficacy of complementary and alternative medicine in mental health is presented, with a focus on the use of mind-body therapies and yoga as therapeutic modalities. A deeper explanation of the intervention of trauma-sensitive yoga, when located as an adjunctive treatment modality alongside more conventional trauma therapies, both in NZ and overseas, is also found in this chapter.

Chapters Six, Seven, Eight, and Nine are specifically dedicated to a literature review that covers known factors facilitating and constraining access, adoption, and availability of CAM more broadly, as well as mind-body interventions and trauma-sensitive yoga. This literature review is divided into sections summarised under the headings 'health sector factors', 'organisational factors', 'cultural factors', and 'individual factors' that have influenced the accessibility, adoption, and availability of these interventions across the globe. Chapter Ten outlines the current study's research design, methodology, and ethical considerations, while Chapter Eleven presents the findings. Chapter Twelve, the discussion, examines selected points from the findings relevant to the topic of interest in the NZ context.

To begin, it is important to note that there is a significant body of literature that supports the use of talk therapies such as cognitive behavioural therapy (CBT), trauma-focused cognitive behavioural therapy (TF-CBT), Eye Movement Desensitisation and Reprocessing (EMDR), and prolonged exposure (PE) as effective treatments to address symptoms associated with trauma-related mental health conditions (Bradley et al., 2005; Ennis et al., 2020; Foa et al., 1995; Forbes et al., 2007; González-Prendes et al., 2019; Shapiro & Maxfield, 2002). Although these interventions have been proven significantly beneficial for trauma-affected individuals, symptom relief can be further enhanced by using complementary therapeutic approaches such as CAM, traditional healing practices, and the topic of this investigation, mind-body therapies (Cushing & Braun, 2018; Stewart et al., 2017). In light of the NZ

government's continued acknowledgment and commitment to improving health services, the broad aim of this study is to discuss the factors that facilitate and constrain access, adoption, and availability of these complementary ways of treating mental health conditions, namely trauma-related conditions (Gillifan, 2018; Lui et al., 2021). This study will focus mainly on mind-body therapies; however, trauma-sensitive yoga will be explored exclusively as a subset of mind-body therapies in reference to access, adoption, and availability as an adjunctive therapeutic intervention for trauma-related conditions (Emerson et al., 2009; van der Kolk, 2015).

In recent times, adjunct or complementary modalities, such as mind-body therapies, have become increasingly popular for treating mental health conditions (Cushing & Braun, 2018; Emmons et al., 2021). Van der Kolk (2015) suggests that for trauma sufferers to move toward wellness and to feel physically safe in their bodies, a mind-body connection in treatment, alongside talk therapies, must be cultivated and maintained. Van der Kolk (2015) proposes that while the brain/mind may, to some degree, be able to reconcile the traumatic exposure event via conventional trauma treatment, the body may not. Van der Kolk (2015) also suggests that it is the body, regarding the effects of trauma, that seems to keep the score; that is, while the mind may feel distressed regarding memories of the trauma, the body is as well, in a way that physiologically magnifies sensations associated with the traumatic event. Recent advances in neuroscience support this perspective, highlighting that maintaining a genuine sense of self requires a vital connection with bodily sensations and an accurate interpretation of physiological signals. This is most important for individuals diagnosed with trauma-related disorders. The management of intense emotions experienced by trauma-affected individuals, in terms of successfully navigating life in a tolerable and meaningful manner, is crucial (Shilson, 2019; van der Kolk, 2015). As such, complementary mind-body approaches that focus on somatic healing of the body, such as trauma-sensitive yoga, the

trauma resiliency model, sensory motor therapy, and somatic experiencing, as adjuncts to talk therapies, are instrumental (Emerson et al., 2009; Grabbe & Miller-Karas, 2018; Kelly et al., 2021; Lohrasbe et al., 2017; Payne et al., 2015; van der Kolk, 2015).

In particular, as a subset of mind-body interventions to treat trauma-related conditions, this study will explore the mind-body intervention Trauma Center Trauma-Sensitive Yoga (TCTSY). This is a specific protocol of trauma-sensitive yoga, and an example of a mind-body therapy developed to treat trauma (Emerson et al., 2009; Kelly et al., 2021; Kysar-Moon et al., 2021). TCTSY is taught at the Trauma Center, Justice Resource Institute in Brookline, Massachusetts in the United States (US) (Justice Resource Institute, n.d.). TCTSY was the US's first yoga-informed, trauma-specific therapeutic intervention to qualify for inclusion in the National Registry of Evidence-based Programs and Practices (NREPP) database, published by the Substance Abuse and Mental Health Services Administration (SAMHSA) (Wycoff et al., 2019). The SAMHSA registry was initially set up to provide communities, clinicians, and policymakers with information and tools about evidence-based health practices (Hennessy et al., 2006; Wycoff et al., 2019).

TCTSY employs the principles of hatha yoga and differs from other trauma-informed yoga approaches (of which there are many) in that this framework has been protocolised and, as such, lends itself well to research studies concerning the mechanisms at work in this intervention (Emerson et al., 2009; Emerson, 2015; Emerson & Hopper, 2011; Kelly et al., 2021; Kysar-Moon et al., 2021). Unlike modern-day Western yoga practices, the TCTSY protocol has been designed to treat trauma-related conditions specifically. TCTSY illuminates the importance of the internal aspects of traditional yoga, where awareness is turned inward (listening to and feeling the body) and is directed toward increasing introspection, the felt sense, in efforts to build awareness of sensation and ultimately reduce the impact of possible triggers that are often experienced as a result of trauma (Nguyen-Feng

et al., 2020). The TCTSY protocol emphasises five core domains; language, assistance (teacher support and aid to the participant), teacher qualities, environment, and exercise (Emerson et al., 2009; Emerson & Hopper, 2011; Emerson, 2015; Kelly et al., 2021; Kysar-Moon et al., 2021). Central to the TCTSY therapeutic protocol is the importance of establishing more explicit links between disrupted sensory information signals and emotional regulation (the ability to exert control over one's emotional state), a skill for survivors of trauma that can be difficult to sustain (Emerson et al., 2009; Kelly et al., 2021). Effective emotional regulation requires a clear and coherent relationship with the self, as well as effective communication between the mind and body, a dynamic for trauma-affected individuals that is often compromised (Antunes et al., 2021; Price & Hooven, 2018).

TCTSY, like many other mind-body interventions to treat trauma-related conditions, is a relatively new intervention in NZ (K. Swartz, personal communication, August 17, 2020). Until recently, TCTSY has been delivered by only a few trained TCTSY facilitators/private practitioners nationwide (K. Schwartz, personal communication, November 13, 2023). Typically, these facilitators have a particular interest in mental health and complementary and alternative whole-bodied treatment approaches to health and wellbeing (Oosterbroek et al., 2021).

In 2017, the Accident Compensation Corporation, Te Kaporeihana Āwhina Hunga Whara (ACC), an NZ Crown entity responsible for administering the country's no-fault accidental injury compensation scheme, added TCTSY as an adjunct intervention under their suite of services in the Integrated Services for Sensitive Claims (ISSC) contract (ACC, 2023). ISSC is a contract specifically designed to help those who have suffered a mental injury in NZ as a result of sexual abuse (ACC, 2021). There is growing recognition within ACC of the potential benefits of complementary and mind-body therapies such as TCTSY, provided these

are delivered as adjunctive supports within a clinically integrated treatment plan (ACC, 2022).

According to the director of operations at the Center for Trauma and Embodiment at the Justice Research Institute in the US, only 32 fully qualified practitioners based in NZ completed TCTSY certification for the 2020-2024 period (K. Schwartz, personal communication, November 13, 2023). With so few facilitators nationwide access, availability, and adoption of this intervention in NZ and in other mental health treatment contexts have remained limited. In part, this research aims to explore what other factors might be impacting availability, adoption and provision of this particular intervention as one example of a mind-body therapy to treat trauma-related conditions.

Many mind-body interventions can be categorised under the umbrella term of traditional healing (Mahindru et al., 2023; Moodley et al., 2008). Traditional healing practices often originate in ancient and Indigenous methodologies (Mark et al., 2022; Stewart et al., 2017). Traditional mind-body healing practices are also discussed in this study in terms of their relationship with alternative approaches to health and well-being and their role in improving mental health conditions such as trauma-related conditions. These practices in NZ include the likes of romiromi and mirimiri (Devan et al., 2021; Mark et al., 2010), which will be discussed in further detail in Chapter Five, under Interventions to Treat Trauma-Related Conditions. According to O'Connor (2008) and Elendu (2024), like other mind-body practices such as yoga (derived from India) and ayurveda (derived from China), spiritual and ancient knowledge to maintain whole-bodied functional health is considered supra-conscious and knowable. In NZ, romiromi, a technique derived from centuries-old Māori traditional spiritual lore, is an excellent example of this (Devan et al., 2021; Fajardo et al., 2022; Mark et al., 2010). Romiromi aims to heal the physical, emotional, and etheric layers of the self while

forging a sacred connection between the tipuna (ancestors) of the healer, the person in treatment, and Io (the God - the source of all) (Fajardo et al., 2022; Mark et al., 2010).

More broadly, in terms of the topic under investigation, Māori models of mental health such as Mason Durie's Te Whare Tapa Wha, developed in 1982 (Pitama et al., 2007), purports a degree of philosophical alignment with the practice of mind-body approaches. This model highlights the importance of healing the body (te tinana) alongside the mind (te hinengaro), each of these domains alongside whānau (family) and wairua (a connection to the unseen and unspoken energies), is considered critical to a person's ongoing journey of health and wellbeing (Kiyimba & Anderson, 2022; Pitama et al., 2007). As such, factors that have facilitated or constrained Indigenous mind-body approaches to treating mental health conditions are also of interest in the current study.

The current study identifies what health sector, organisational, cultural, and individual factors facilitate and constrain access to, adoption of, and availability of mind-body therapies and TCTSY (as a subset of mind-body therapies) to treat trauma-related conditions in the NZ context. As such, literature on the introduction, initial implementation, and sustainability of complementary/adjunctive evidence-based mental health practices in the healthcare sector (particularly approaches considered mind-body therapies) are highlighted throughout this study. The effects of the health sector, organisational, cultural, and individual decision-making and behaviours with respect to the topic of interest are also of keen interest to the current study.

A multilevel sociological lens is employed throughout this study, particularly in Chapter Twelve, the discussion, to explore the health sector, organisational, cultural, and individual factors, their relationships, and the interrelating impacts on access, adoption, and availability of mind-body therapies to treat trauma-related conditions in NZ. This sociological lens,

which borrows terminology from Bronfenbrenner's ecological systems framework, will highlight and evaluate setting agents at the macro, exo, meso, and microsystem levels (Bronfenbrenner, 1979) that have influenced the phenomenon under investigation. This study aims to contribute to the relatively scarce literature on mind-body therapies in NZ and seeks to examine how factors across the ecosystem have influenced the topic under examination. Bronfenbrenner's ecological systems theory, as represented in the current study, is illustrated below.

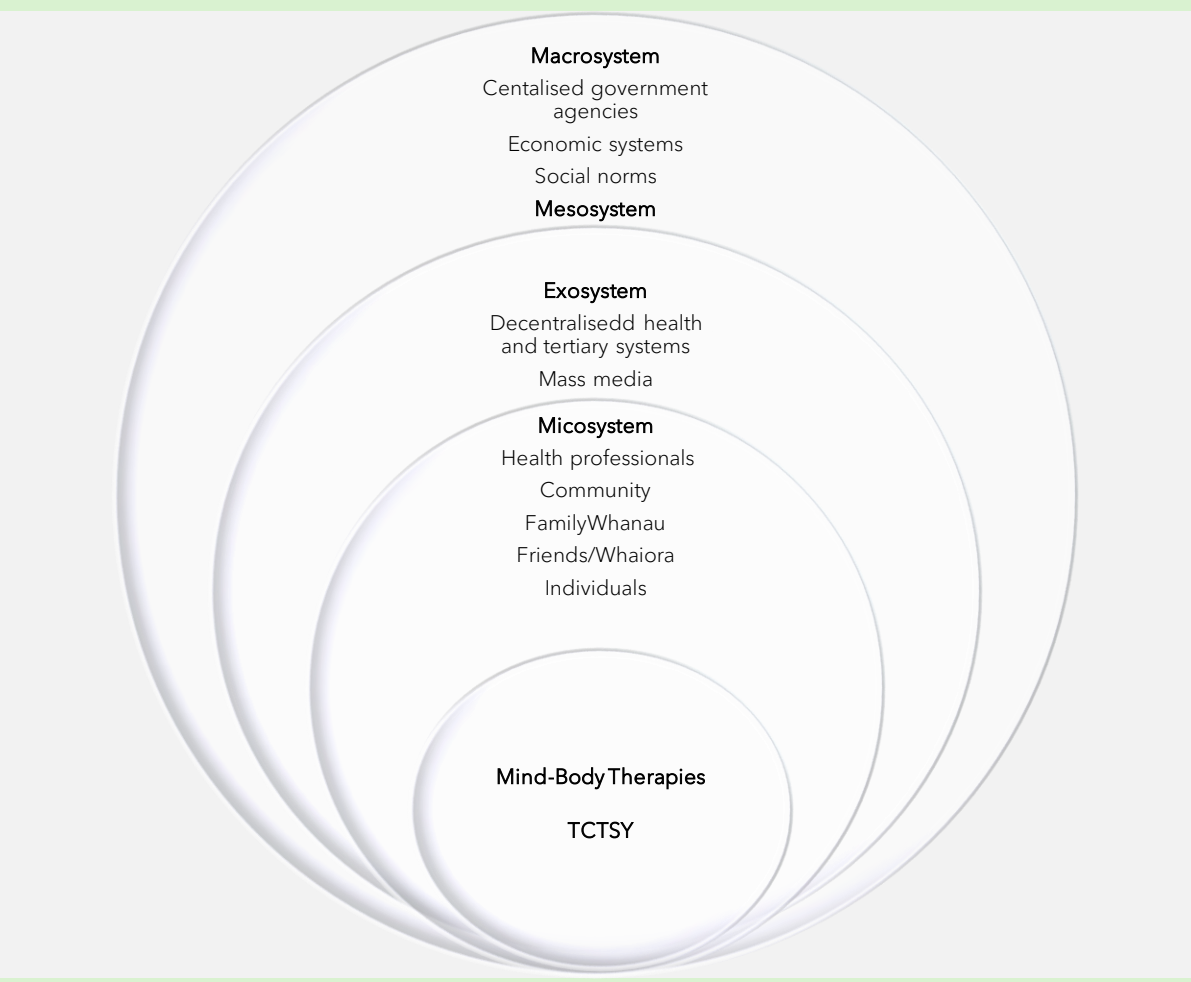

Figure 1: Figure 1 illustrates Bronfenbrenner's ecological systems framework as applied in the current study (Bronfenbrenner, 1979).

Organising the structure of this research study from a systems perspective pays homage to the influence of national and centralised government ministries, decentralised community organisations, and environmental, social, and individual dynamics that singularly, collectively, and interchangeably impact access, adoption, and availability of the phenomenon under investigation (Shelton et al., 2018). The specific research question, which is outlined directly below, may interest members of the health sector, mental health research communities, practitioners of Indigenous methodologies, practitioners of Western psychology, mind-body practitioners, and healthcare service users alike (Ahenakew, 2011; Park, 2013; Shelton et al., 2018; Wiltsey-Stirman et al., 2012).

The research question for this study is:

What health sector, organisational, cultural, and individual factors facilitate and/or constrain access to, adoption, and availability of mind-body complementary approaches used to treat trauma-related conditions in an NZ context?

To understand these factors, this study explores the opinions and experiences of three targeted groups: psychologists familiar with complementary and alternative approaches to treating trauma, tertiary educators delivering curriculum in applied psychology programmes nationwide, and TCTSY facilitators currently practising TCTSY in NZ. This is a homogeneous purposive sample based on knowledge of mind-body therapies to treat trauma-related conditions in NZ and/or understanding of interventions to treat trauma-related conditions.

Reflexive thematic analysis (RTA) has been selected as the qualitative methodology for this study. RTA, developed by Braun and Clark (2021), is a qualitative research method designed to straddle three main continua along which qualitative research is located: inductive versus deductive, experiential versus critical orientation, and essential versus constructionist

theoretical perspectives. The current research is considered inductive in that the analysis is grounded in the data but also deductive in that the data were viewed through the lens of a systems framework (Braun & Clark, 2021; Vogd & Knudsen, 2015). This research has an experiential constructionist orientation, prioritising the examination of participants' thoughts, feelings, and perspectives, albeit views that I have subjectively interpreted and analysed. These perspectives are contestable and textural representations of the participants lived experiences of the phenomenon under investigation (Braun & Clark, 2014). A constructionist epistemology alongside narrative psychology places conversation and language at the centre of this study (Murray, 2018). Language and meaning making in the current study play a significant role not only in the development and interpretation of specific codes and themes drawn from the data, but also in the conversations that also informed the analysis and findings (Braun & Clarke, 2012; Braun & Clark, 2021; Murray, 2018).

Having set the scene for the current research, the following chapter will explore and define the particular words and terms used throughout this thesis, helping the reader develop a deeper understanding of the topic under investigation.

Chapter Two: Keywords Relevant to the Study

The following chapter will highlight some keywords and terms relevant to this study and the topic under investigation. In the current study, the word trauma is defined according to the Diagnostic and Statistical Manual of Mental Disorders (DSM-5 Text Revision; DSM-5-TR) in the chapter 'Trauma and Stressor-Related Disorders' (American Psychological Association, APA, 2022). Trauma is an emotional or physical response to one or more physically harmful or life-threatening events or circumstances, with lasting adverse effects on mental and physical health and wellbeing (Gold, 2017). Worldwide, exposure to trauma is pervasive, and population-based data indicates that many adults will experience a traumatic event at some point in their lives. That said, cross-national variations in the prevalence of trauma-related conditions are noted (Benjet et al., 2016; Burri & Maercker, 2014; Dückers & Brewin, 2018). A substantial proportion of the younger population is exposed to trauma as a result of natural disasters, armed conflict, humanitarian emergencies, and physical, sexual, and emotional abuses (WHO, 2013b). This section of the thesis is dedicated to defining trauma, as suggested above, and descriptors of trauma-related conditions. These trauma-related conditions include posttraumatic stress disorder (PTSD), complex posttraumatic stress disorder (CPTSD), developmental trauma disorder (DTD), and historical trauma (APA, 2022; Denton et al., 2017; Sotero, 2006; van der Kolk, 2005; WHO, 2019).

The essential features of a PTSD diagnosis include the development of symptoms following exposure to one or several traumatic events through which actual or threatened death, serious injury, or sexual violence has occurred (APA, 2022). The term traumatic event, according to the DSM-5-TR (APA, 2022), can include witnessing an exposure event where a child, partner, close relative, or friend is considered the primary victim. PTSD symptoms include

intrusion symptoms, persistent avoidance of internal or external stimuli associated with the traumatic event, adverse changes in cognition and mood, and significant alterations in arousal and reactivity associated with the exposure event (APA, 2022). To meet the threshold for a PTSD diagnosis, symptoms must cause clinically significant distress and impact social, occupational, or other important areas of functioning (APA, 2022). The symptoms cannot be attributable to the physiological effects of a substance or another medical condition (APA, 2022).

Individuals exposed to trauma over prolonged periods may exhibit a broader range of symptoms than those currently captured under the DSM-5-TR PTSD diagnosis (APA, 2022; Herman, 1992). This broader symptomatology is referred to in the International Classification of Diseases and Related Health Problems 11th Edition (ICD-11) as complex posttraumatic stress disorder (CPTSD) (Brewin et al., 2017; Herman, 1992; World Health Organisation, 2022). Symptoms of CPTSD are similar to PTSD but more severe, longstanding, and challenging to treat (Brewin et al., 2017; Herman, 1992). The ICD-11 classification for CPTSD includes three of the PTSD symptom clusters referred to in the DSM-5-TR (APA, 2022): re-experiencing of the trauma in the present, avoidance of traumatic reminders, and a persistent sense of threat manifested by increased arousal and hypervigilance, but also includes additional symptoms that identify disturbances in self-organisation; affective dysregulation, negative self-concept, and disturbances in relationships (World Health Organisation, 2022). The diagnostic features of CPTSD surpass those of PTSD in the domains of avoidance, hyperarousal, and numbing symptoms, with added features of affect regulation difficulties, alterations in attention and consciousness, and severe interpersonal difficulties (Brewin et al., 2017; Luxenberg et al., 2001). The CPTSD ICD-11 criteria illuminate the impact of poly-traumatisation (where a person has sustained multiple traumas) (Karatzia et al., 2020). This diagnostic development has provided an opportunity to consider

CPTSD-specific treatment interventions for those suffering from a more pervasive and debilitating history of trauma (Karatzias et al., 2017).

Children reporting multiple cases of abuse across their lifetime can meet criteria for both PTSD or CPTSD; however, according to DeJong (2010), Finklehor et al. (2009), Spinazzola et al. (2021) and Streeck-Fischer et al. (2000), symptoms for children as they develop across the lifespan can well exceed these diagnostic criteria in the domains of affect regulation, memory, attention, self-perception, interpersonal relationships, somatisation, and systems meaning. In contrast to isolated incidents of trauma, which may produce discrete conditions, the symptomology and behaviours as a consequence of repeated traumas can set the stage for significant changes in neurobiological development. These changes in neurobiological development can interfere with the trauma-affected individual's capacity to integrate sensory, emotional, and cognitive information into a cohesive whole (Campbell, 2022; van der Kolk, 2005; van der Kolk et al., 2021). The Complex Trauma Task Force for the National Child Traumatic Stress Network in the US has adopted a diagnosis for symptoms of trauma associated with this population, that is, children who have experienced multiple cases of abuse, and has provisionally named this diagnosis DTD (Spinazzola et al., 2021; van der Kolk et al., 2005; van der Kolk et al., 2021). The diagnostic criteria for DTD, which has been defined as a childhood syndrome, includes symptoms similar to those of CPTSD in terms of disturbances of self-organisation but with adaptations such as boundary confusion, reactive aggression, hostile self-appraisal, and relational detachment (Spinazzola et al., 2021). According to van der Kolk (2005; 2021) and Spinazzola et al. (2021), further manifestations of DTD that set this condition apart from PTSD and CPTSD include an unfocused response to subsequent stressors in the trauma-affected individual's life, which can lead to an increase in the use of medical, correctional, social, and mental health services. It is important to note that DTD was proposed as a diagnosis in the most recent version of the DSM-5 but was

rejected due to a lack of empirical evidence for this classification at the time of publication (Morelli & Villodas, 2021; Spinazzola et al., 2021).

Historical trauma refers to significant cataclysmic events targeting a collective group of people (Henderson et al., 2021; Sotero, 2006). These events and their effects can include both general and specific atrocities of colonisation perpetrated against Indigenous peoples, as well as consequences of historical events that continue to be negatively experienced by affected populations (Hill et al., 2010; Smallwood et al., 2021). Historical trauma is not only considered an intergenerational transfer of trauma but also a phenomenon that has long-standing negative consequences (Pihama et al., 2014; Smallwood et al., 2021). Trauma in this context is known to manifest as persistent and unresolved symptoms different from those of PTSD, CPTSD and DTD, and which can include a range of behaviours that can impact the functioning of not only the individual affected, but also the collective group and subsequent generations (Gutiérrez, 2022; Pihama et al., 2014). As such, this specific type of trauma or intergenerational wound resides at the very core of long-standing Indigenous suffering (Duran & Duran, 1995; Henderson et al., 2021; Cerdeña et al., 2021). Given the broad range of descriptors used for trauma-related conditions by various classification systems and scholars in the trauma field and beyond, in the current study, unless specified otherwise, the term trauma-related conditions will be used as a generic term.

The subsequent paragraphs will examine the origins and historical conceptualisations of the term trauma. The word trauma has its origins in psychology and has existed since 1893 when Isaac Ray, who was the founder of the American Psychiatric Association, promoted the idea of mental hygiene. The term mental hygiene was defined as the art of preserving the mind against all incidents and influences calculated to deteriorate its qualities, impair its energies, or derange its movements (Jones, 2023; Weiss, 2006). Where once the promise of liberation

from psychological torment was dependent on an individual's relationship with God or another transcendent and eternal entity, according to Madsen (2014), psychology through Isaac Ray's lens offered an alternative narrative – liberation and deliverance from suffering through therapy and personal self-determination.

Different stages of the evolution of psychology have been coined "the age of psychology," "the triumph of the therapeutic," "the psychological society," "the therapeutic state," and the "therapy culture" (Madsen, 2014, p.2). These transformations signalled a shift from faith as the ultimate authority over psychological destiny toward a more autonomous, self-deterministic, and to some extent collaborative, approach to understanding and managing personal distress (Madsen, 2014). This epistemological transition marked the emergence of the Western psychological era (Singh, 2022; Shiraev, 2014).

According to Gergen (1996) and Singh (2025) the profession of Western psychology can be described as conservative at best. Western psychology includes psychological theories, assessments, and treatments, which are for the most part tethered to Western interests, ideas, values, and practices (Dueck et al., 2017; Phiri et al., 2023). It is important to note that the foundations of Western psychology are based on scientific principles that according to some theorists, in some respects assume Western superiority (Dueck et al., 2017; Paranjpe, 2002a; Singh, 2025). Scientific principles have functioned as self-serving projections of Western conceptualisations. Gergen (1996) argues that Western psychology has further perpetuated colonisation by exporting colonial interests, ideas, and values to other cultures with little regard for alternative cultural frameworks.

Examples of Western psychological theories, assessments, and treatments specifically for trauma-related conditions include Mowrer's (1951) two-factor learning theory of PTSD etiology, the Trauma Symptom Inventory (TSI) for trauma symptoms in PTSD (Ales et al.,

2022; McDevitt-Murphy et al., 2005), Prolonged Exposure (PE) and Eye Movement Desensitisation and Reprocessing (EMDR) (Shapiro, 2001). These are evidenced and efficacious approaches involved in the assessment and treatment of symptoms of trauma-related disorders (Foa & Kozak, 1986; Shapiro, 2001; Rosen, 2023).

Since its emergence as a field of health, Western psychology has often presupposed that its models of understanding mental distress are universally relevant. However, the World Health Organisation (2019) has highlighted that such assumptions may be unhelpful and culturally inappropriate. The WHO (2019) has highlighted the global value of Western psychology and traditional, Indigenous, and complementary medicine in attaining and maintaining physical and mental health and well-being. Traditional medicine is defined broadly as knowledge, skill, and practices based on the theories, beliefs, and experiences Indigenous to different cultures, whether explicable or not, used not only in the maintenance of health but in the prevention, diagnosis, improvement, and/ or treatment of physical and mental illness (WHO, n.d).

Examples of traditional medicines and health practices to treat trauma include the use of Native American traditional healers to treat posttraumatic stress disorder, in conjunction with Western psychotherapeutic interventions (Buchwald et al., 2000). Additionally, practices such as whakapapa kōrero (genealogy conversations), waiata, and performing arts to reflect the knowledge that has been transmitted within and across whānau, hapū, and iwi, remain widely used across a range of cultures, not only Māori, as a means of treating trauma while preserving moral and historical messages, and imparting values of importance to culture and to those suffering from mental health conditions (Rameka, 2016; Vaeau, 2019).

Traditional healing practices aside, CAM and mind-body therapeutic interventions are also available to treat a number of health conditions. The challenges of the 21st century and the

provision of adequate healthcare have made CAM increasingly popular (WHO, 2019). The NICCIM describes CAM as a diverse medical and healthcare system that includes practices and products not considered part of conventional medicine (Fouladbakhsh & Stommel, 2007; Ng et al., 2022; Tangkiatkumjai et al., 2020). These practices encompass a broad range of healing resources and various health systems, modalities, and ways of delivering healthcare services (Fouladbakhsh & Stommel, 2007; Ng et al., 2022).

According to Ng et al. (2022) historically speaking an operational definition of CAM has been challenging to delineate due to the many and varied frameworks across different countries and cultures that have been employed over time. In the early 2000s NCCIM noted that CAM could be segregated into five categories: (1) alternative medical systems, (2) mind-body interventions, (3) biologically based therapies, (4) manipulative and mind-body methods, and (5) energy therapies (Leckridge, 2004). This definition has evolved since. According to WHO (2019), CAM encompasses a broad set of healthcare practices utilised by members of a population that are not part of a specific country's tradition or conventional medicine and are not yet fully integrated into the dominant healthcare system. As highlighted in this thesis, the term CAM is best described by a definition subscribed to by the National Center for Complementary and Integrative Health (NCCIH) (Ng et al., 2023). If a non-conventional healthcare approach is combined with conventional medicine, it is considered complementary, while a non-mainstream approach used in place of conventional medicine is considered alternative. This study is concerned with complementary mind-body practices to treat trauma-related conditions. An alternative definition was proposed over a decade ago by Cochrane researchers in 2011, which encompassed 70 different therapies under the umbrella term CAM (Ng et al., 2022). These researchers according to Ng et al (2022) failed to use systematic methods to compile the therapies and did not capture the concept of integrative medicine, Complementary and Alternative Integrative Medicine (CAIM) (Ng et al., 2022).

Integrative medicine is an increasingly popular aspect of the use of complementary therapies in practice and is an important term with regard to this study (Rakel & Weil, 2022). Integrative medicine is a patient-centred and healing-oriented principle that emphasises the use of therapeutic approaches originating from both conventional as well as CAM (Maizes et al., 2009). Integrative medicine emphasises the incorporation of a full range of therapeutic approaches to benefit healthcare service users. Integrative medicine has recently found traction in healthcare spaces across the globe (Lake & Turner, 2017). An updated operational definition reflective of CAIM is warranted, given the rapidly increasing body of CAIM research literature published each year (Rakel & Weil, 2022).

CAM includes a range of mind-body therapies specifically designed to treat trauma-related conditions. Examples of CAM mind-body practices as adjunctive interventions to treat trauma-related conditions include somatic experiencing (Payne et al., 2015), trauma-sensitive yoga (Kelly et al., 2021), and the trauma resiliency model (Grabbe & Miller-Karas, 2018). In this study, complementary therapies are not typically considered part of conventional medicine; they do not replace standard evidence-based practice but are used as an adjunctive approach to enhance therapeutic outcomes (Wynn, 2015).

Regardless of the operational definition of CAM, this study is concerned explicitly with mind-body interventions (under the umbrella of CAM or traditional healing) that complement talk therapies in the context of treating trauma-related conditions. It is important to note that mind-body therapies in the context of this study are not defined or supported as alternatives to conventional mental health care but as complementary treatment approaches (Sornborger et al., 2017). Further to this, in the context of this study, it is also essential to note that mind-body therapies differ significantly in terms of historical precedent, cultural applicability and acceptability, epistemological roots, cost, safety, and the plausibility of the mechanisms at work. Some of these factors will be illuminated in this study as variables that have impacted

access, availability and adoption of mind-body approaches to treat trauma related conditions (Willison et al., 2007; Zhang et al., 2025).

This study will illuminate a range of different therapeutic methods and approaches to trauma treatment. More specifically the current study will explain how these therapeutic methods and approaches have developed in the field of healing trauma affected individuals across time and context.

To begin, I would like to draw the reader's attention to more conventional treatments for trauma-related conditions that involve talk therapy, such as CBT. This approach and approaches like CBT sit in the background of this study, they are protocols that are sometimes referred to as a top-down therapies. In the context of a trauma-related condition the mechanisms at work in top-down therapies draw on the trauma-affected individual's knowledge and recollection of the trauma event. This information in the context of talk therapy helps the trauma-affected individual interpret the exposure event and make sense of it. Evidence suggests that when these recollections are witnessed and interpreted alongside a top-down therapist in therapeutic setting, it is likely the trauma-affected individual will experience reduced personal distress (Solomon & Heide, 2005). Top-down approaches like CBT rely on the trauma-affected individual awareness and articulation of the exposure event in the context of conscious thoughts (Zaleski & Zaleski., 2015). Through talk therapy trauma-affected individuals may learn to identify stimuli that are triggering, understand their responses to trauma cues, and learn to manage their responses to reminders of the trauma more effectively (Solomon & Heide, 2005). Most mental health treatments for trauma-related conditions in the current Western world are based on top-down cognitive approaches such as CBT. Other talk therapies similar to CBT include Trauma Focussed – Cognitive Behavioural Therapy, Dialectical Behaviour Therapy (DBT), Cognitive Processing Therapy (CPT), Prolonged Exposure (PE) and more (Solomon & Heide, 2005).

Top-down approaches focus on treating the prefrontal cortex at the expense of, according to Levine et al. (2018), the limbic region, where the trauma response originated in terms of fight, flight, and freeze. The primary function of fight, flight, and freeze response is to keep the person encountering the traumatic event alive (Levine et al., 2018). These traumatic reactions/responses have been described from a survival perspective as a way of coping with danger in the face of a life-threatening or life-endangering situations (van der Kolk, 2015; Ozturk et al., 2021). Walter Cannon, the first person to offer psychological meaning to the terms 'fight' and 'flight', referred to these responses as an instinct or an attempt to eliminate or escape possible threats (Katz et al., 2021). Katz et al. (2021) state that a freeze response has two functions. The first function is an initial reaction to harmful stimuli, which allows time to assess the threatening situation regarding potential harm, while the second function is described more in terms of tonic immobility (Katz et al., 2021).

The fawn response is a more recent term used to describe a type of traumatic reaction to exposure events, representing another survival strategy employed by victims of trauma (Ozturk et al., 2021). Unlike the classic fight, flight, or freeze responses, the fawn response involves ingratiating oneself, placating others, or over-functioning in an attempt to avoid harm and maintain safety. This pattern often reflects a dissociative coping mechanism, similar to the freeze response, where the individual disconnects from their own needs to prioritise appeasement and reduce threat (Ozturk et al., 2021). Understanding these varied trauma responses broadens the scope of how trauma manifests and informs more nuanced approaches to treatment and support.

These trauma responses and impact of the traumatic event have a significant impact on the trauma affected individual's brain, specifically the amygdala, an area located at the base of the brain (Thomason et al., 2015). The amygdala is often referred to as an alarm centre; that is, this region in the brain sends off signals about an inherent threat, often without warning

(Miller-Karas & Sapp, 2015). When this alarm goes off, the person experiencing the trauma may struggle to access the top part of their brain, the prefrontal cortex, the area in the brain that helps with decision-making, rational thought and action (Akirav & Maroun, 2007; Arnsten, et al., 2015).

Whilst top-down approaches to treating trauma symptoms are considered very helpful, for trauma-affected individuals whose symptoms may be difficult to resolve, the feeling that they remain under threat may still prevail (van der Kolk, 2015). As such, these individuals may not only present as functionally compromised but they may respond to reminders and cues somewhat related to the trauma in maladaptive ways (Howell et al., 2015). Even after many years since the exposure event, significant and unhelpful responses to stimuli can remain psychologically and physiologically triggering, presenting many problems in the trauma-affected person's day-to-day social functioning (van der Kolk, 2015).

Over the past 30 years, an explosion of new knowledge in the field of trauma has brought with it a curiosity as to the physiological mechanisms affected by a traumatic event (Grabbe & Miller-Karas, 2018; Levine, 1997). This new knowledge supports multisystemic whole-bodied trauma theory and an integrative approach to trauma treatment. This new knowledge also advocates for the inclusion of talk therapies and mind-body interventions as a collaborative approach to treatment, the latter slowly gaining evidence and momentum in terms of legitimacy in the trauma field (Grabbe & Miller-Karas, 2018).

More recent mind-body trauma theory suggests that a response to trauma is etched and persistently lodged in the body, so much so that, according to Levine (2010), this response is considered subcortical. Levine (1997) suggests that traditional Western trauma theory, for example Mowrer's theory (Mowrer, 1951), has paid little attention to the mind-body connection or, from a treatment perspective, the act of restoring wholeness to individuals who

experience the debilitating effects of trauma. Levine (1997) notes that ancient rituals and processes once considered critical to human health and healing, have been lost and forgotten in today's world of psychology. Levine (1997) notes that rich ancient rituals and processes have been surpassed in Western society by epistemological theories and practices in healthcare that treat the ailing person as fragments of the whole (Levine, 1997).

What Levine (1997) is suggesting is that the healing power of whole-bodied practices that for centuries have been performed by the likes of Shaman, Bian Que, Navajo Natalie, and Tohunga, have been relegated to the margins and replaced by top-down cognitive approaches, which for the most part, rely entirely on an individual's ability to think clearly and articulate their experiences of the trauma and distress (Krippner, 2012; Mildon, 2018; Ramos, 2018; Salguero, 2009). The Western world's scholarly penchant for civilisation, innovation, and discovery, according to Levine (1997), has to some degree forsaken invaluable resources that were once revered in the primitive worlds, practices in the context of mental health and health more generally that treat the whole person and their personhood as integral to the journey to wellness.

Levine (1997) notes that healing in primeval times was synonymous with and inextricably linked to embodiment and the natural world. Healing from this perspective refers to the whole person and how the person and their body interacts within the environment in which they reside. Embodiment through this lens with regard to healing brings the body into focus alongside the individual's inner experiences (both physical and mental) in the face of internal and external challenges and demands (Grassmann et al., 2023).

Somatic psychology refers to embodiment. Somatic psychology encompasses the idea of mindful movement practices that awaken the whole body and draw on increased mind-body awareness. Embodiment through this lens is central to the current study as embodiment

highlights the importance of physiology as an integral tool for wellness (Cook-Cottone et al., 2020). The topic under investigation draws on the same premise. In times past, healing the human body relied on and employed primal reserves, which were presumed to be innate embodied treasures that could be summoned from within as medicine for a person to become whole again (Levine, 1997). Levine (1997), and more recently Schmit et al. (2021), suggest that humans, like other species, frequently encounter life-endangering events. Evolutionarily, these events inevitably shaped how the human central nervous system responds to danger. Although in today's world, we may have learned to think otherwise, with our reliance on the benefits of modern medicine, we as human beings, according to Levine (1997), possess a natural capacity to face and respond to significant external challenges with abundant biological resources. Our central nervous system, which previously met and managed the likes of predators, peril, threat, and danger, has evolved to such an extent that we are not only powerfully biologically equipped to manage and respond to life's threatening circumstances, but we are as a species also abundantly biologically predisposed to live whole, expansive, emotionally and physically enhanced lives (Levine, 1997).

In summary, Chapter Two, Keywords and Terms, highlighted terminology pertinent to the current study. This chapter defined and outlined diagnoses such as PTSD, CPTSD and DTD and highlighted the importance of CAM and CIAM in the context of the phenomenon under investigation. Chapter Two also defined language, such as embodiment, which is referred to either directly or indirectly repeatedly throughout this study. Chapter Two also illuminated the authors and theorists who have added value to the field of trauma, whether it be through psychology, CAM or traditional healing practices. These viewpoints, ontologies and interventions will help inform the reader's understanding of prevalence and incidence rates of trauma, PTSD, CPTSD, and DTD in countries across the globe, including NZ, which have been highlighted in Chapter Three.

Chapter Three: Incidence Rates

To better understand the phenomenon under investigation Chapter three explores rates of trauma and trauma-related conditions in NZ and across the globe. To begin, it is important to emphasise that not everyone exposed to trauma will develop a trauma or stress-related condition. Estimates in the US suggest that nearly 90% of adults will experience at least one traumatising event in their lifetime. From a diagnostic perspective, most recover (82%); however, approximately 10% will develop trauma-related symptoms such as PTSD and CPTSD, conditions classified according to the DSM-5-TR and ICD-II criteria. In some cases, individuals incur trauma-related injuries that fall under the term historical trauma, an intergenerational, pervasive trauma injury that to date has remained devoid of an actual diagnostic label or symptom classification criteria and has been highlighted as complex to treat with conventional trauma treatment approaches (APA, 2022; Daskalakis et al., 2018; World Health Organisation, 2022).

Epidemiology: PTSD – CPTSD - DTD:

With regard to PTSD, experts have questioned the reliability of national PTSD incidence rates based on significant variances noted across national averages, developed countries, and in differing populations (Burri et al., 2014; McDonald et al., 2010). According to Atwoli et al. (2015), although subtle methodological shifts have been credited as one explanation for variances across countries and across studies, other factors concerning variance that might explain the significant differences in incidence and prevalence are yet to be fully understood.

Epidemiological studies have suggested that incidence rates of PTSD across developed countries appear to be significantly higher than those of CPTSD. This said, CPTSD has increased rates of comorbidity with other conditions, such as depression, alcohol dependence, and substance dependence (Hyland et al., 2018). In terms of DTD and poly-victimisation,

there is a substantial amount of research that suggests that exposure to multiple forms of trauma in childhood is widespread (Finkelhor et al., 2007; Saunders et al., 2014; Shahid, 2022). According to studies in the US, the incidence rate of poly-victimisation is as high as 20% of all youth, with 10% of adolescents aged between 15 and 18 have experienced 15 or more types of abuse in their early years (Saunders et al., 2014).

In NZ, the lifetime prevalence of PTSD in the general population is estimated to be around 6.1%, with a 12-month prevalence of approximately 3.8% (OT&P Healthcare, 2023). Among those diagnosed with PTSD, 17% are hospitalised. Of those diagnosed with PTSD 12% of the non-hospitalised individuals reported PTSD symptoms 12 months after the exposure event (Ameratunga et al., 2021).

There are specific populations in NZ that experience high rates of PTSD. Military personnel in NZ show elevated rates of PTSD, with roughly 33% experiencing PTSD symptoms and about 10% meeting criteria for a PTSD diagnosis (Koia, 2020; University of Otago, 2020). Refugee populations demonstrate further elevated levels of PTSD; for example, a prevalence study of Cambodian refugees living in Dunedin found PTSD rates around 12.1% (Kinzie et al., 1994). These findings (although in places somewhat dated) suggest that while PTSD affects a significant portion of the general population, rates are substantially higher among those with injury-related trauma, military service experience, or forced migration histories.

According to Dückers et al. (2016), rates of PTSD in NZ appear slightly higher than those in Australia, Canada, and the Netherlands. NZ and the US have an average lifetime prevalence of PTSD of 7.34%. As suggested earlier, data on incidence reported from various countries should not be considered directly comparable due to methodological differences in survey administration and sampling strategies.

Epidemiology: Historical Trauma

Beginning in the mid-1990s, the construct of historical trauma was introduced into the literature in the field of clinical and health sciences to help contextualise, describe, and more specifically explain, disproportionately high rates of psychological distress and health disparities among Indigenous populations (Gone et al., 2019). In terms of Indigenous historical trauma, which will be discussed in further detail later, the cumulative impact and collective experiences of oppression and marginalisation as a result of colonial injury have left generation upon generation with a legacy of trauma, pain and identity confusion (Hartmann & Gone, 2014). With historical loss studies being fairly sparse to date (although on the rise), the real extent of the impact of this phenomenon is as yet unknown, with clear implications for health policy and/or professional practice (Gone et al., 2019). In the NZ context, what research studies have highlighted is that Māori communities are overwhelmed by the impacts of historical, collective and individual trauma, which, according to Wirihana and Smith (2019), supports a need to embrace and utilise a range of methods for healing to address the insurmountable injury occurred in the past and maintained in the present.

To recap, lifetime prevalence of a traumatic event is very high. Of those who encounter a traumatic event, a relatively small proportion of that population might meet the criteria for diagnoses such as PTSD and CPTSD. In colonised countries, a large proportion of the indigenous population may experience the effects of historical trauma. In NZ, the lifetime prevalence rates for PTSD appear to range somewhere between 6.1% and 7.4%. Although prevalence rates for these conditions have been identified via research, rates of historical trauma in the NZ context remain unknown. Epistemological research which is somewhat outdated on trauma-related conditions has been focused solely on the diagnosis of PTSD (Oakley Browne et al., 2006). Based on the information at hand, the effects of trauma on the population in NZ appear significant, that is, significant enough to warrant particular attention,

including treatment options that might augment current conventional evidence-based practices to help serve the trauma-affected population.

Chapter Four: Key Theories

The following chapter critically examines trauma theories that inform and support the use of mind-body therapeutic practices in the treatment of trauma-related conditions. Emphasis is placed on the theoretical underpinnings of both conventional Western psychological models and alternative, multisystemic, and somatically-informed frameworks, with particular attention to the contributions of Van der Kolk (2015), Herman (1994), and Levine (1997). These models advance a broader understanding of trauma as a phenomenon that extends beyond the mind to include profound physiological and biological effects. In parallel, Indigenous theories—particularly those grounded in Mātauranga Māori—are presented as essential epistemological frameworks that challenge and expand dominant Western conceptualisations of trauma, emphasising holistic, intergenerational, and spiritual dimensions of distress and recovery.

Further, the following chapter addresses key sociocultural considerations that shape the accessibility, adoption, and implementation of mind-body therapies within the context of Aotearoa New Zealand. These include the principles of data sovereignty and data governance, intercultural third space theory, and the process of decolonisation. Together, these frameworks underscore the importance of culturally responsive and ethically grounded therapeutic practices that uphold Indigenous rights, support self-determination, and promote integrated approaches to healing. In doing so, this chapter establishes the theoretical foundation for understanding how mind-body therapies may offer more inclusive, effective, and contextually appropriate interventions for trauma-affected populations in Aotearoa New Zealand.

Trauma Theory Aligned with Mind-Body Therapeutic Practices

Of particular relevance to this study are trauma theories that support mind-body therapies to treat trauma-related conditions. Trauma theories are theoretical views of how the traumatic event(s) have impacted the human subject. Some trauma theories such as those developed by Van der Kolk (2015), Herman (1994), and Levine (1997), in many ways sit apart from Western conventional trauma theory, which tend to focus on the impacts of trauma on the mind in terms of diagnosis and treatment. Van der Kolk (2015), Herman (1994), and Levine (1997) have written extensively about how both the mind and body are impacted by trauma, while Western conventional trauma theory purports that the central treatable feature in a trauma diagnosis such as PTSD is mind-related. The decrease of intrusive thoughts and trauma-related memory in these more conventional approaches is the primary goal of therapy (Mowrer, 1960). Van der Kolk (2015), Herman (1994), and Levine (1997) argue that conventional Western psychological explanations of trauma have in some respects been conceptualised too narrowly and that the symptoms explaining memory imprint have been exaggerated at the expense of other biological or even spiritual mechanisms that may be at play in the trauma clinical frame. Van der Kolk (2015), Herman (1994), and Levine (1997) appear to agree that the mind is one aspect of the human being affected by trauma. These scholars argue that multiple biological and psychological systems are also affected during the exposure event. As such, these systems are integral to treatment planning and healing the whole person. According to both van der Kolk (2015) and Levine (1997), Western theory has given little credence to the multisystemic impact of traumatic exposure events in terms of their effects on physiological, hormonal, and psychological systems (Levine, 1997). During and after a traumatic event, the body activates numerous biological processes to assist with the trauma-affected individual's survival. These processes, which take place in a split second, include the release of adrenaline, flooding of red blood cells, an increase in the pace of

breath, dilation of the lungs, an increase in both heartbeat and sweat and the tightening of muscles, all of which are directly connected to the survival of the person under threat (van der Kolk, 2015). From this perspective, a trauma response can conceptualised, not only in terms of impact on the brain/mind regarding memory imprint, but also in terms of a whole-body experience, where in a single moment, a myriad of primal biological systems is activated to prevent the death of the organism (Levine, 1997; van der Kolk, 2015).

According to van der Kolk (1994), trauma-affected individuals do not only experience bodily sensations in the form of physiological arousal, which can trigger trauma-related repressed memories, but trauma-related memories can also precipitate physiological arousal. Either way, the central nervous system, if reminded by external or internal stimuli, reorganises and recognises the traumatic event as a threat to survival and, in doing so, releases hormones as a combatant. Van der Kolk (1994; 2015) notes that from a mind-body perspective, regardless of whether the trauma memory is suppressed or integrated, the body remembers the trauma on a cellular level. From this perspective, the body too requires treatment.

This premise is supported by studies in neuroscience and neuroimaging using magnetic resonance imaging and positron emission tomography (van der Kolk, 2015). Testing has revealed specific alterations in brain structure following a traumatic event, suggesting that activation of the amygdala triggers outputs to the hypothalamus, a fundamental part of the brain that controls the autonomic nervous system, breathing, blood pressure, and blood flow. The hypothalamus is linked to survival (Leistner & Menke, 2020). The hypothalamic-pituitary-adrenal (HPA) axis, located in the hypothalamus, is a hormonal response system that responds to stress by altering cortisol levels through a signal system and neurotransmitters. From a survival perspective, the hormonal system is highly regulated to ensure that the body responds to stress quickly and efficiently and, in turn, returns to normal after the threat is over (van der Kolk, 2015). In a study conducted by van den Heuvel et al.

(2020), it appears that in high-stress environments, individuals who have experienced significant trauma show a greater level of cortisol output, that is, alterations in HPA axis function, than those who have not been involved in a traumatic episode. In addition, it appears that for those who have experienced trauma, the body continues responding with stress hormones in situations that do not necessarily warrant this response. This elongated hormonal response can take place long after the threat is over. This study supports van de Kolk's (2015) trauma theory of a chronically dysregulated neuroendocrine stress response (in the body) in those who have been exposed to significant levels of trauma.

Recent findings in a study by Gosnell et al. (2020) with a population diagnosed with PTSD highlighted that in the brain, the right temporal pole volume is significantly smaller than in both healthy controls and psychiatric controls when matched for demographic characteristics and all other psychiatric diagnoses, past and present. The temporal pole is a part of the brain's paralimbic system along the anterior cingulate, orbitofrontal cortex, and insula. These are all regions directly linked to emotion. If the temporal pole is damaged as a result of trauma (this area is responsible for social and emotional processing), invariably, the trauma-affected individual's mood states will influence self-organisation, concepts of self and relationship stability. These are symptoms linked to the diagnosis of CPTSD.

In line with the trauma theory purported by van der Kolk (2015), van den Heuvel et al. (2020), and Gosnell et al. (2020), trauma is not only a fundamental reorganisation of the mind and brain in terms of how an individual perceives the world around them, but it is a condition that also situated in the body. For real change to happen in terms of a reduction in symptomology, focusing on reducing hypervigilance to threats on a physiological level, specifically regarding the body's autonomic physical and hormonal responses, is imperative (van der Kolk, 2015). The body must understand that the danger of threat has passed, and it is

safe to live in the present moment; this is critical for a successful recovery from trauma-related conditions (van der Kolk, 2015).

A mind-body theoretical perspective of trauma advocates the notion that trauma is impactful on a cellular level. It includes many and varied automatic physical and hormonal changes activated in the body in the face of trauma. Therapeutic attention to these biological systems, according to Levine (1997) and van der Kolk (2015), is critical in terms of treatment to ensure symptoms resulting from trauma exposure are fully addressed (Levine, 1997; van der Kolk, 2015). This multisystemic theory, supported by Levine (1997) and van der Kolk (2015), emphasises the interconnection of multiple aspects of a person's identity and their personhood within a specific context, as well as the importance of a whole-body approach to healing (Schwartz, 2016; Zoellner et al., 2003).

The use of multisystemic trauma theories, including those advanced by van der Kolk (2015), Herman (1994), and Levine (1997), provides a critical foundation for understanding trauma as an embodied experience. These theories underscore the physiological, neurological, and hormonal impacts of trauma, thereby supporting the rationale for incorporating somatic or body-based interventions—such as yoga, mirimiri, or breathwork—into treatment approaches. By framing trauma as a disruption of multiple interconnected systems rather than solely a cognitive or emotional disturbance, these theories substantiate the therapeutic relevance of practices that target bodily regulation and interoceptive awareness.

Traditional/Indigenous Theories on Trauma

Western psychology, including research methods, methodologies, theories, diagnostic nosologies, constructs, and applied interventions and practices, has for many Indigenous Nations and communities served not only as an extension of colonisation, but also as experiences of oppression and longstanding marginalisation (Hill et al., 2004; Quinn, 2022).

Indigenous peoples have endured European and American conceptualisations of mental health for hundreds of years; these constructs developed and promoted by Western psychology and psychiatry, constructs that have played a critical role in perpetuating individual and collective experiences of historical and multigenerational trauma (Hill et al., 2010; Quinn, 2022). The development of culturally appropriate and relevant conceptualisations of mental health issues, such as trauma, is of paramount importance to many Indigenous Nations and communities. This is to uphold mana, to dignify an accurate representation of Indigenous peoples' lived experiences and worldviews, and to shape treatments that are better suited to Indigenous perspectives and ways of conceptualising mental health and healing.

As a result of Western psychologies dominating the epistemological viewpoint on mental health, traditional local knowledge to address physical, mental, and spiritual illnesses such as trauma has, according to Hill et al. (2010; Smith et al., 2019), been ignored, denied or otherwise delegitimised. Western approaches to healing have at best been very effective for Indigenous peoples, and at worst have further marginalised communities and nations. Western approaches to psychology, according to Hill et al. (2010; Smith et al., 2019), have left a void in terms of Indigenous voices across platforms informing psychological discourse. The effectiveness of Indigenous approaches has not been realised, and the harm done to Indigenous communities has been overlooked, with little if any regard for personhood, culture or context (Hill et al., 2010; Smith et al., 2019).

According to Smith et al. (2019), Walter (2006), and Haaken (2020), Western conceptualisations of trauma have, more often than not, situated a traumatic reaction to an exposure event(s) as symptoms of PTSD. PTSD is conceptualised as a pathological by-product of traumatic circumstances that have affected brain structure and function. Indigenous cultures, including Māori, have been critical of this conceptualisation and have, as

an alternative, offered an epistemology in favour of a broader and somewhat more complex explanation of a traumatic reaction. Māori, like other Indigenous populations, support an explanation for trauma symptomology that resides in the whole person, across generations and beyond (Smith et al., 2019).

Mātauranga Māori posits that memory is not only located in the brain, but also within the entire body, the environment, within objects, and within the realm of tūpuna (ancestors) who have since passed away. The origins of trauma and memory, according to Matauranga Māori, are timeless, dating back to the creation story and the fracture experienced with the separation of Ranganui (the sky father) and Papatūānuku (the earth mother) (Smith et al., 2019). Trauma memory is described from a Matauranga Māori perspective as a collective phenomenon that exists in both the present and the past, a human response to stimuli experienced and located within the ngākau (the heart). The ngākau is considered a repository where collective and individual memories and knowledge are contained and protected. Matauranga Māori considers that the ngākau is a source of emotion, a phenomenon that includes the mind and organs that are centrally located within the body (Smith et al., 2019).

Trauma defined through this lens impacts an individual's physical, mental, and emotional well-being. Māori refer to this as patu ngākau. Patu ngākau is described as a deep wound, a wound so profound that it has caused a shock to the whole person and their personhood as a result of a significant event. The resulting experience is both pōuritanga (physical) and mamae (mental) pain. When pōuritanga and mamae are referenced alongside patu ngākau, these terms assume both physical and psychological pain associated with trauma. In addition, pōuritanga can also mean darkness and is suggestive of a sad mental state, ranging in intensity from general anxiety to suicidal depression (Smith et al., 2019). The traumatic event or assault, classified under the term patu ngākau, is referred to as an assault to the heart or

source of emotion, suggestive of abuse towards the core of the person, either physically or psychologically, that may render the person powerless (Smith et al., 2019).

This perspective suggests that, for Māori, mental health is whole-bodied and the journey toward wellness requires a holistic process that emphasises the importance of the whole person in treatment. These interventions should incorporate spirit, body, mind, society, and the natural environment (Pitama et al., 2017; Hawaikirangi, 2021; Wirihana & Smith, 2014).

Indigenous theories of trauma, particularly those grounded in Mātauranga Māori, are essential for contextualising trauma within the specific cultural, historical, and spiritual frameworks of Aotearoa New Zealand. Concepts such as *patu ngākau*, *mamae*, and *pōuritanga* reflect a holistic and collective understanding of trauma, linking emotional suffering to historical injustice, intergenerational trauma, and disruptions to *whakapapa*, *wairua*, and connection to *whenua*. These perspectives challenge the universality of Western diagnostic categories (e.g., PTSD) and call for therapeutic responses that align with Māori worldviews and culturally grounded notions of healing. In doing so, they also help to illuminate barriers to access, such as cultural dissonance, mistrust of Western services, and the marginalisation of Indigenous healing knowledge.

Conventional Western Theories of Trauma

From a Western psychology perspective, the relationship between trauma and mental illness was first investigated by neurologist Jean-Martin Charcot, a French physician working with traumatised women in the late nineteenth century (Waraich, & Shah, 2018). A major focus of Charcot's study was hysteria, a disorder commonly diagnosed in women, characterised by symptoms of sudden paralysis, amnesia, sensory loss, and convulsion.

One of the earliest Western psychological formulations to explain symptoms of PTSD was theorised by Orval Mowrer. Mowrer's two-factor theory was based on the tenets of classical

and operant conditioning (Mowrer, 1951). This explanation accounted for not only the high levels of distress experienced by trauma-affected individuals in response to trauma-related stimuli but also the development of avoidance symptoms and the maintenance of fear over time (Bixenstine, 2014; Mowrer, 1951; Richardson & Shook, 2019). Although this was a popular theory in its time, it was criticised for its simplicity, as it suggested that if a trauma-affected individual repeatedly confronted the feared object, there should be a reduction in the strength and intensity of symptoms (Hughes, 2006). In practice, this outcome was more difficult to achieve than Mowrer's theory originally proposed (Hughes, 2006). Theories and explanations following Mowrer's theory were inclined to liken trauma phenomenon to a highly complex, multifaceted psychological web of mechanisms that require equally complex treatment, directed at a broad range of symptomology (Khanom, 2024; McLean & Foa, 2011; van der Kolk, 2015).

As Western theoretical explanations of trauma evolved, the concept of emotional processing theory emerged (Rauch & Foa, 2006; Foa & Kozak, 1986; McLean, & Foa, 2024). According to Foa and Kozak (1986), emotional processing theory of trauma proposed that specific pathological fear structures are at the foundation of all anxiety disorders (anxiety disorders once an umbrella term that included trauma-related conditions). Pathological fear structures differ from typical fear structures; they include excessive response elements to the feared stimuli, are resistant to modification, and include associations about the traumatic event that do not accurately represent reality (Foa & Kozak.,1986; McLean, & Foa, 2024). The fear structure, from an emotional processing standpoint, includes both excessive stimulus and response elements, as well as pathological meaning elements for the trauma-affected individual. For example, an earthquake survivor may accurately associate ground movement with danger but may also fear sounds that are similar to an earthquake, such as strong wind or the sound of a train in the distance. In addition, trauma survivors can have problematic

meaning elements in their fear structures, directly or indirectly paired with the traumatic event, such as the outdoors being an unsafe space to venture into, or new environments requiring a great deal of planning before they are visited (Foa et al., 1986; McLean, & Foa, 2024).

Another information/emotional processing theory developed to explain trauma-related conditions was proposed by Ehlers and Clark (2000) and has been referenced in a number of articles, including most recently Smith and Jones (2024). This model suggests that PTSD symptoms persist due to the inadequate processing of the traumatic event and its sequelae, a phenomenon which, in turn, illuminates a sense of serious and imminent threat (Ehlers & Clark, 2000). Symptoms of PTSD can also be accounted for by individual differences, which include specific appraisals of the trauma and its sequelae, the nature of the individual's memory of the event, and links to other autobiographical memories (Ehlers & Clark, 2000). Once activated, an individual's perception of imminent threat is accompanied by intrusive thoughts and other re-experiencing symptoms, such as increased arousal, anxiety and intense emotional responses (Falsetti et al., 2005; Murty et al., 2022). Concerning avoidance symptoms, the perceived imminent threat is said to generate a series of cognitive and behavioural responses which reduce distress in the short term, but in reality prevent cognitive change, therefore maintaining the unhelpful psychological condition (Harricharan et al., 2021; Pineles et al., 2011). According to this model, recovering from PTSD includes elaborating on and integrating the traumatic memory into the context of an individual's preceding and subsequent experiences via talk therapy, in turn reducing intrusive reexperiencing (Ehlers & Clark, 2000). Recovery also includes modifying problematic appraisals of the exposure event and its sequelae, as well as appraisals that maintain an individual's imminent sense of threat (Kleim et al., 2013; Wilson et al., 2018).

Brewin et al. (1996) offered another explanation that focussed on the development and maintenance of PTSD symptoms over time. This theory refers to an imbalance between what these authors coined 'situationally accessible memory' and 'verbally accessible memory'. According to Brewin et al. (1996), an individual's situational accessible memory is responsible for storing aspects of the traumatic event such as taste, smell, and vision, while the verbal accessible memory stores the cognitive and verbal aspects of the event. Brewin et al. (1996) suggest that recurrent, involuntary, and intrusive distressing stories or memories about the traumatic event can remain intrusive and present due to certain situational elements of the exposure incident not being accounted for in the verbally accessible memory. According to Brewin et al. (1996), this state results in fragmented narratives or stories of the exposure event, which may or may not resemble a cohesive timeline of the actual experience as it has occurred. To promote the resolution of symptoms, this theory suggests that via talk therapy such as CBT, the elements stored in the situationally accessible memory can be assimilated into the verbally accessible memory, allowing these elements of the trauma to be adequately processed and formed into a narrative that makes temporal and cohesive sense to the trauma sufferer.

Judith Herman (Herman, 1996), a pioneer and clinician in the field of trauma, alongside other scholars interested in trauma and trauma theory including van der Kolk (2015), firmly believes in the phenomenon of dissociation – specifically, repressed memory or traumatic amnesia as a result of trauma (Suleiman, 2008). These theorists agree that the more severe the exposure event(s), the more likely the individual who witnessed or experienced the trauma may experience dissociation, which can include having partial or no memory of the traumatic event (Schimmenti, 2018).

In summary, there are a wide range of theories to explain the effects of trauma and trauma symptomology. Multisystemic trauma theory, which purports a broader view, includes the

impacts of trauma on the whole person. Multisystemic trauma theory has significant implications for treatment planning for mental health practitioners in the field of trauma. Whilst trauma theories proposed by Mowrer (1960), Foa and Kozak (1986), Ehlers and Clark (2000), and Brewin et al. (1996) have very much set the stage for the relevance of talk therapy, theories such as those supported by van der Kolk (2015), Herman (1994), and Levine (1997) speak to the importance of healing the whole person after a traumatic event. The theories purported by van der Kolk (2015), Herman (1994), and Levine (1997) are particularly relevant to the current study, specifically in terms of the use of mind-body therapeutic practices for treating trauma-related conditions.

Other Relevant Sociocultural Theories and Considerations

There are other sociocultural theories and considerations relevant to the access, availability and adoption of mind body therapies as adjunct interventions to treat trauma related conditions in NZ. The first two I would like to discuss are data sovereignty and data governance.

Data sovereignty refers to the principle that data is subject to the laws and governance structures of the country where it is collected or stored. In NZ, this means that data held on servers within the country is governed by laws such as the Privacy Act 2020 and, in the case of health data, the Health Information Privacy Code (Privacy Act 2020; Office of the Privacy Commissioner, 2020). For example, if an NZ government agency stores citizen data on servers in Wellington, that data must comply with NZ's privacy laws. Data sovereignty becomes especially important for sensitive data such as health information, financial records, or Indigenous data, including Māori data. For instance, Māori data sovereignty is grounded in the view that Māori have the right to own, control, and protect data about themselves, their communities, and their resources in accordance with tikanga (customs and values) (Kukutai & Taylor, 2016). An example of Māori data sovereignty is the Te Mana Raraunga Māori

Data Sovereignty Network, which advocates for Māori governance over Māori data, ensuring that data collected about iwi, hapū, and whānau is managed and used in ways that uphold Māori rights and interests (Te Mana Raraunga, 2018). Another example is the requirement in some iwi research projects that any data gathered is stored on servers located within NZ, and that Māori researchers or kaitiaki (guardians) oversee its use (Smith, 2012). Cloud computing poses challenges to data sovereignty because data stored offshore may fall under the laws of other countries, such as the U.S. CLOUD Act, potentially conflicting with New Zealand's privacy protections and undermining Māori self-determination over their data (Hudson et al., 2017). As a result, many Māori organisations are demanding that their data remain onshore and under Māori governance to protect cultural and community interests (Te Mana Raraunga, 2018).

Data governance, by contrast, is the overall framework that an organisation uses to manage and protect data responsibly. It defines policies, processes, roles, and standards to ensure data is secure, accurate, ethical, and fit for purpose (Office of the Privacy Commissioner, 2020). For example, an NZ district health board (DHB) might have a data governance framework that specifies who can access patient records, how often data quality is checked, and what cybersecurity measures are in place to prevent misuse (Ministry of Health NZ, 2020). Data governance covers data quality, privacy, security, compliance, and accountability within an organisation, and it must align with the laws of the country where the data is stored. For example, a Māori health provider may establish data governance policies that ensure patient data is not only protected under NZ's Privacy Act but also managed in line with Te Tiriti o Waitangi principles and Māori data sovereignty expectations — for example, requiring collective consent from whānau rather than just individual consent, or ensuring Māori data is stewarded by Māori (Kukutai & Taylor, 2016; Smith, 2012).

To enable traditional mind-body therapies to continue working in ways that empower and sustain communities' data sovereignty and data governance must be upheld to not only protect people's deeply personal, culturally significant information but to promote trust and respect within NZ's health and organisationally milieu. Data sovereignty and data governance are highly relevant to traditional mind-body therapies as these practices often involve collecting and managing deeply personal, sensitive, and sometimes culturally sacred information. Mind-body therapies such as Rongoā Māori, yoga, or traditional Chinese medicine frequently require clients to share details about their physical health, mental health, cultural practices, spiritual beliefs, and personal histories. In NZ, for example, Rongoā Māori practitioners may collect data considered *tapu* (sacred), including whakapapa (genealogy) or spiritual narratives. Māori data sovereignty principles argue that Māori have the right to govern data about themselves, their whānau, hapū, and iwi according to tikanga and Māori values (Kukutai & Taylor, 2016; Te Mana Raraunga, 2018). This ensures that sensitive cultural data is respected, protected, and used in ways that maintain the mana and dignity of Māori clients.

Traditional mind-body therapies also rely heavily on trust between practitioner and client. Because clients often disclose intimate details about their emotional struggles, trauma, and wellbeing, strong data governance frameworks are essential to safeguard this information. Effective data governance clarifies who owns the data, who is allowed to access it, and how it is securely stored, helping to maintain client trust and confidentiality (Office of the Privacy Commissioner, 2020). Even traditional practitioners are subject to modern legal requirements; for instance, any Rongoā Māori practitioner recording client notes electronically must comply with the New Zealand Privacy Act 2020, which sets clear expectations around data access and protection (Privacy Act 2020). If data is stored on

offshore servers, there is a risk of breaching data sovereignty, as foreign laws like the U.S. CLOUD Act might compel disclosure of sensitive client data (Hudson et al., 2017).

Moreover, data sovereignty empowers communities to maintain self-determination over their knowledge and healing practices. For traditional mind-body practitioners, this means ensuring that information about Indigenous or culturally embedded healing protocols is not misused for commercial exploitation or shared without appropriate community permissions (Smith, 2012). Protecting these data rights reinforces the holistic worldview often held in traditional therapies, where wellbeing is inseparable from collective identity, land, culture, and spirit. Good data governance frameworks respect this interconnected view of health and ensure that information is managed in a way that aligns with community ethics and values (Te Mana Raraunga, 2018).

Data sovereignty and data governance are vital considerations for traditional mind-body therapies. These practices handle sensitive, often culturally significant information that demands protection, respect, and ethical stewardship. Upholding data sovereignty, particularly for Indigenous communities such as Māori, ensures that cultural values, tikanga, and community authority guide how data is collected, stored, and shared. At the same time, robust data governance frameworks safeguard privacy, maintain client trust, and ensure legal compliance, creating a foundation for safe, respectful, and culturally aligned healing practices. By prioritizing both data sovereignty and governance, traditional mind-body therapies can continue to support holistic wellbeing while empowering communities to maintain control over their own knowledge and stories (Kukutai & Taylor, 2016; Smith, 2012; Te Mana Raraunga, 2018).

I would also like to draw attention to intercultural third space theory. This theoretical perspective is also relevant to the current study. The term intercultural third space refers to a

dynamic, creative space where different cultural perspectives, knowledge systems, and practices come together and interact, often leading to new, hybrid forms of understanding and healing (Bhabha, 1994). In the context of mind-body therapies, this third space is relevant as it allows for the integration of traditional healing methods with Western health practices in a way that respects and values both. For example, in NZ, practitioners may blend Rongoā Māori with contemporary psychological or physical therapies, creating a holistic approach that honours Māori cultural values while also drawing on biomedical knowledge (Durie, 2001). This intercultural third space fosters collaboration, mutual respect, and innovation, enabling therapies to be culturally responsive and more effective by addressing the whole person — body, mind, and spirit — within their unique cultural context (Bishop & Glynn, 1999). It also helps to overcome cultural barriers or misunderstandings by creating a shared space where diverse healing traditions can coexist and enrich each other, ultimately enhancing wellbeing for clients from diverse backgrounds (Durie, 2004).

To conclude this section on relevant theories to the current study I would also like to highlight the relevance of decolonisation and how this has impacted access, adoption and availability of mind-body therapies to treat trauma related conditions in NZ. Decolonisation in NZ is deeply relevant to how mind-body therapies are accessed, adopted, and made available—especially for treating trauma-related conditions.

The process of decolonisation involves recognising and challenging the ongoing impacts of colonialism on Indigenous peoples, including the historical and intergenerational trauma experienced by Māori communities (Smith, 2012). Traditional Western models of trauma treatment often overlook or marginalise Indigenous worldviews, healing practices, and understandings of wellbeing. Decolonising health care from this perspective means valuing and revitalising Indigenous healing systems, such as Rongoā Māori, which purports a holistic

approach to trauma treatment by addressing the physical, emotional, spiritual, and cultural dimensions of wellbeing (Durie, 2001).

Decolonisation in NZ also highlights the importance of self-determination and sovereignty over health services, empowering Māori to lead and design therapies that align with cultural values and experiences (Came & McCreanor, 2015). This shift enhances accessibility because therapies developed by and for Māori are more likely to be culturally safe and accepted within communities. Decolonisation also encourages mainstream health services to adapt services and service provision by integrating mind-body approaches that respect Māori concepts of healing, such as tinana (physical) wairua (spirit), whānau (family), and whenua (land), rather than imposing Western-only wellness models such as those discussed earlier in this thesis (Kukutai & Taylor, 2016).

Moreover, addressing colonial legacies in health care improves availability by encouraging funding, policy support, and research into Indigenous and hybrid mind-body therapies tailored for trauma recovery. This means more resources for culturally grounded therapies and better training for practitioners in culturally responsive care (Smith, 2012; Durie, 2001). Without decolonisation, many Māori and other marginalised groups may continue to face barriers such as cultural dissonance, mistrust, and lack of representation in trauma treatment services.

In summary, the integration of data sovereignty, data governance, the intercultural third space, and decolonisation frameworks is essential to enhancing the access, adoption, and availability of mind-body therapies for trauma-related conditions in NZ. Upholding data sovereignty and governance ensures that sensitive and culturally significant information, particularly that of Māori communities, is managed with respect, legal compliance, and cultural integrity, fostering trust and empowerment. The intercultural third space provides a

transformative platform where traditional healing and Western modalities can collaborate and innovate, creating culturally responsive approaches that address the holistic needs of individuals. Meanwhile, decolonisation acts as a critical catalyst, challenging historic injustices and promoting Indigenous self-determination in health care, which in turn improves cultural safety, acceptance, and resource allocation for mind-body therapies. Together, these sociocultural considerations provide a foundation for trauma treatment practices that are not only effective but also equitable, respectful, and aligned with the values of Aotearoa NZ's diverse communities.

Chapter Five: Interventions to Treat Trauma-Related Conditions

The following chapter further defines specific terms directly associated with mind-body therapies, such as embodiment and the felt sense, in terms of how these mechanisms are conceptualised in mind-body therapies and somatically orientated treatments for trauma-related conditions. This chapter also explores a wide range of mind-body therapies and their usefulness in reducing symptoms experienced by individuals affected by trauma. This chapter concludes with a brief overview of conventional Western psychological and pharmaceutical interventions to treat trauma-related conditions.

To begin, before exploring different mind-body trauma treatments, it is necessary to further define embodiment as this term is a fundamental doctrine of mind-body therapies and a term crucial to the development of this thesis. Embodiment, according to Ziemke (2013), can be conceptualised in several ways. The term "embodiment" has been employed in literature to describe the structural coupling between an agent (a person) and their environment. It has also been referenced to explain historical structural coupling, that is, the embodiment of historical events such as colonisation and trauma (Thomas et al., 2023). Embodiment has also been applied in the context of physical embodiment, as seen in mind-body trauma theory (Levine, 2010; van der Kolk, 2015) and whole-bodied traditional healing (Baker, 2018). Embodiment, from this perspective, involves the somatic practice of mindful attention toward internal sensory body-based information (Muehsam et al., 2017). Embodiment has been described as an age-old practice employed throughout history across the globe by different groups, ethnicities, and cultures to sustain wellness and recover from injury (Muehsam et al., 2017). Research suggests that hunter-gatherer societies remained connected to the environment (nature), their own bodies, and the bodies of others to help discern threats and to sustain and maintain survival as a group (Levine, 2010; Muehsam et al., 2017). Researchers who have examined embodied practices note that group survival has been

linked to a population's ability to sense their internal and external environments (the felt sense) in order to self-regulate during times of threat and help others. Embodiment from this perspective is considered a critical behaviour essential for healthy human functioning, individual and social well-being, and optimal social development (Narvaez et al., 2013). The practice of embodiment involves heightened emotional and physical awareness, as well as the promotion and development of healthy interpersonal relationships.

Enhancing embodiment, the felt sense, and increasing body awareness are described in this study as fundamental mechanisms of action in mind-body therapeutic approaches (Jindani & Khalsa, 2015). Approaches that illuminate the principal benefits of embodiment include yoga, somatic experiencing, body-oriented psychotherapy, body awareness therapy, mindfulness-based therapies/meditation and others, some of which have evidenced benefits for a variety of health and mental health conditions in terms of symptom reduction (Macy et al., 2018; Mehling et al., 2011; Payne et al., 2015).

Mind-Body Treatments for Trauma

Many CAM therapies, specifically mind-body treatments, are known to be effective in managing both physiological and psychological symptoms experienced by those suffering from trauma-related conditions (Fleming, 2017; Hill, 2012; Kysar-Moon et al., 2021). They are known to ameliorate the acute distress sometimes experienced by trauma-affected individuals (Libby et al., 2013). In terms of the impact and effectiveness of these interventions in assisting with experiences of trauma-related symptomatology, research results have been positive (Kim et al., 2013). In a systematic review conducted by Schneider et al. (2013), mind-body practices were associated with positive impacts on PTSD symptoms, with benefits including reduced stress response, anxiety, depression, and anger, alongside an increase in pain tolerance, self-esteem, energy levels, ability to relax, and coping skills.

Schneider et al. (2013) consider mind-body practices as viable interventions to improve the constellation of PTSD symptoms, which include intrusive memories, avoidance, and increased emotional arousal.

Studies on the effectiveness of somatic interventions for treating other conditions, such as DTD, in relation to emotional dysregulation, have also shown promise (van der Kolk et al., 2019). Management of somatic symptoms, specifically regarding children diagnosed with DTD, has been credited positively (Ford, 2021). Developmentally, children are often ill-equipped cognitively and verbally to recognise and express trauma-related distress via conventional therapies that rely on language and meaning-making. As such, mind-body interventions can be beneficial in some instances by augmenting treatment gains and improving outcomes (Ford, 2021).

In terms of mind-body therapies and the principle of embodiment practices to treat trauma-related conditions, mindfulness, yoga, tai chi, relaxation, somatic experiencing, and trauma-sensitive yoga have been highlighted as applicable (Niles et al., 2018; Mehling et al., 2011; van der Kolk., 2015, Emerson., 2021). According to a systematic review conducted by Niles et al. (2018) of randomised controlled clinical trials (RTCs) on mind-body therapies (mindfulness, yoga, tai chi, and relaxation), of the studies that met the inclusion criteria, evidence suggests that mindfulness, yoga, tai chi, and relaxation add therapeutic benefit to individuals with PTSD. The evidence provided by Niles et al (2018) with regard to mindfulness, yoga, and relaxation supports mind-body treatments for PTSD. That said, Niles et al. (2018) noted that the literature base for this support of these approaches to treat PTSD remains limited because many of the RCT studies suffered from methodologic weaknesses. Niles et al (2018) reported that it was encouraging that there are increasing numbers of RCTs

to draw on and that some larger, more rigorous studies have more recently been added to the nascent evidence base.

Niles et al (2018) referred to a trial by Polusny and colleagues (2015) which demonstrated superior outcomes for mindfulness compared to Person Centred Therapy, an empirically supported talk therapy treatment for PTSD. Similarly, Niles et al (2018) referred to the van der Kolk et al. (2014) RCTs (a study referred to on a number of occasions in the current study) which provided support for yoga as an efficacious treatment for PTSD compared to a health education control.

Niles et al. (2018) singled out these two studies based on the use of stronger research designs, relatively large samples, active and credible control groups (rather than treatment as usual or waitlist comparisons), blinded assessors, and reported Intent to Treat analyses.

One specific mind-body protocol, Mindfulness-Based Stress Reduction (MBSR), is an approach that incorporates body postures, breathwork, relaxation, and meditation (Taylor et al., 2020). Mindfulness-based interventions such as this, when employed as adjuncts to treatment-as-usual (medication and psychotherapy), according to Taylor et al. (2020), have also demonstrated promising results, with mindfulness and as well yoga demonstrating comparable effectiveness. Taylor et al. (2020) note that to truly understand the impact of mindfulness and yoga on trauma symptomology, more rigorous reporting in research studies related to the type of trauma exposure experienced, alongside details of the specific mindfulness-based treatment protocol, is recommended (Taylor et al., 2020). According to Taylor et al. (2020), these considerations will enhance understanding of the mechanisms at work in mind-body therapies going forward (Taylor et al., 2020).

Tai chi is another mind-body therapy used in the treatment of trauma (Nile et al., 2022). Tai chi is a martial art and neuromotor exercise originating in China (Niles et al., 2016). This

practice is generally considered an integrated mind-body approach to enhance physical and mental health (Garber et al., 2011). Tai chi includes several dynamic components, including physical activity, alongside slow, graceful, low-impact movements, mental attention, balance training, visualisation of body position, choreographed sequential shapes and forms, deep diaphragmatic breathing, and mindful relaxation (Niles et al., 2022). A systematic review conducted by Niles et al. (2022) on the impact of tai chi in treating trauma-related conditions found that tai chi has the potential to reduce symptoms of trauma and improve functioning in trauma-affected individuals. Evidence suggests that tai chi is also a feasible, acceptable, and low-risk approach for the trauma-affected population. That said, according to Nile et al. (2022), of the studies that met the criteria in this systematic review, most had a small number of participants (ranging from 4–26 in number), there were few control groups, and follow-up research to determine the long-term effects of this approach to trauma therapy was scarce. In addition, there were limited formal assessments across studies concerning pre-treatment assessment to ascertain the presence or severity of post-traumatic stress symptoms; in most cases, symptoms were inferred from client medical documents and reports (Nile et al., 2022). As such, according to Nile et al. (2022) these limitations in research design highlight a greater need for larger samples and research representative of greater methodological rigour. Nile et al. (2022) also noted that RCTs would be helpful in fully understanding the effects of tai chi as a treatment for PTSD.

Sensorimotor psychotherapy, another body-oriented psychotherapy developed to address the profound somatic effects of trauma on the body, has been developed by Pat Ogden (Ogden & Goldstein, 2016). Sensorimotor psychotherapy involves enhancing embodiment, or the felt sense, via attention to posture, movement, and expression, as these relate to verbal content and the presenting problem. Langmuir et al. (2012) investigated sensorimotor psychotherapy as the primary treatment with women with a history of childhood abuse. This

study noted that, over 20 sessions of group therapy, participants demonstrated significant improvement in body awareness, symptoms of dissociation, and receptivity to soothing. Positive outcomes for sensorimotor therapies were also demonstrated in a study by Classen et al. (2021) with survivors of complex trauma. Classen et al. (2021) noted that sensorimotor therapy was a valuable tool to enhance both mindfulness and self-soothing techniques and to reduce symptoms of PTSD. These authors also suggest that sensorimotor psychotherapy assists trauma-affected individuals with avoidance of trauma-related triggers located in their bodies and triggers experienced in their interpersonal relationships. According to Classen et al. (2021), this approach is also credited with improved body awareness, the capacity for self and relational soothing, and reduced anxiety symptoms (Classen et al., 2021).

Somatic Experiencing® (SE) is another body-oriented therapeutic approach that has been employed to treat posttraumatic symptoms (Payne et al., 2015). The mechanisms in this therapeutic approach focus on changing the interoceptive and proprioceptive sensations associated with the traumatic experience (Kuhfuß et al., 2021). Somatic experiencing has, more recently, been researched and evidenced as a valuable therapeutic practice, and preliminary evidence of SE on PTSD-related symptoms suggests that SE has a positive impact on affective and somatic symptoms (Kuhfuß et al, 2021). However, in a study quality assessment by Cochrane there appears to be a risk of bias in research on SE, and as such, the mechanisms at work in SE warrant further investigation concerning evidence that this approach has a positive effect on trauma-affected individuals (Higgins & Green, 2008; Kuhfuß et al., 2021).

Kelly et al. (2021) conducted a systematic review of the effects of trauma-sensitive yoga on symptoms of PTSD in war veterans, and the results appear favourable. Systematic reviews by Rosenbaum et al. (2015) also highlighted positive results when physical activity was

employed as a therapeutic mechanism in the treatment of PTSD and depressive symptoms in a sample of 200 adults.

Mind-Body Therapies as Complementary/Adjunctive Treatments

Over the past 20 years, the use of adjunctive therapies alongside more conventional Western treatments to treat trauma-related conditions has been given considerable attention in trauma psychology (Gantt & Vesprini, 2017; Sornborger et al., 2017; van der Kolk et al., 2014). These treatments include various types of CAM and arts-based approaches. These approaches are hypothesised to treat trauma somewhat differently than conventional Western verbal interventions (Gantt & Tinnin, 2009; Naff, 2014). Levine (2006) and van der Kolk (2015) postulate that therapies requiring significant communication (CBT, TF-CBT, PE) can, in some cases, impede the processing of traumatic experiences, particularly concerning narrative organisation and verbal coding of the exposure event. As such, adjunctive therapies such as CAM, of which there are many, in some cases represent a viable treatment option, particularly for affected individuals who might be at risk of dropping out of talk therapy treatment, or who are not responding well to Western psychological evidence-based therapies (Libby et al., 2013).

Several mind-body therapies employed as adjunctive interventions alongside talk therapy focus specifically on interoceptive awareness, that is, an individual's perception of internal changes and sensations within the body (Neukirch et al., 2019; Payne et al., 2015). These therapies are intended to illuminate interoceptive awareness (the felt sense), a process considered critical to healing from trauma exposure, in the context of diagnoses of a trauma-related disorder (Emerson et al., 2009; Ferentzi et al., 2021). Mind-body therapies, when coupled with talk therapy, address the cognitive processing issues associated with the trauma event, for example, reorganising the trauma narrative while employing somatic techniques for

the body. The somatic adjunct primarily works on the limbic system and interoceptive awareness (Foa & Rothbaum, 2001; Payne et al., 2015). This is helpful, according to Kugler et al. (2012), in that some trauma sufferers experience immediate responses to triggering stimuli that manifest as physiological expressions rather than intrusive memories or avoidance behaviours (Kugler et al., 2012). These expressions can include an increased startle response, chronic traumatic stress felt in the body, as well as overwhelming and debilitating emotions (van der Kolk, 2006). Individuals affected by trauma may also experience alexithymia. Alexithymia is the inability to identify the meaning of physical sensations and muscle activation, a condition characterised by an inability to modulate internal states (Schimmenti et al., 2018). Some theorists describe the clinical construct of alexithymia as disrupted emotional awareness, which can be present in a range of psychiatric disorders, including CPTSD, PTSD and DTD (Ditzer et al., 2023; Hogeveen & Grafman, 2021; Putica et al., 2021). In the face of perceived threat, alexithymia can promote habitual emotional collapse, impulsivity, and emotional dysregulation (lashing out), in response to what some might perceive as minor irritations (Mullet et al., 2022). As such, futility can become the hallmark of daily living for those living with trauma-related conditions (Niles et al., 2018; van der Kolk & Fisler, 1994; van der Kolk, 2006).

Failures to recognise what is going on in the body can, in some cases, result in the trauma-affected individual losing touch with their own needs. As a consequence, these individuals may struggle to care for themselves (van der Kolk, 2006). Van der Kolk (2006) suggests that an inability to identify sensations, emotions, and physical states accurately can extend to difficulty understanding one's own emotional state and the needs of others.

Targeted complementary physiological therapies such as TCTSY are intended to help to increase the trauma-affected individual’s ability to identify sensations and emotional states and to manage them more effectively. Targeted complementary physiological therapies also

broaden the therapeutic treatment plan, potentially enhancing the effects of cognitive/behavioural-focused approaches, which are critical to an individual's journey toward healing (Emerson & Hopper, 2015; van der Kolk, 2006; Wells et al., 2016).

Van der Kolk et al. (2014) explored the impacts of yoga when employed as an adjunctive therapy, with 64 participants with PTSD. The participants in this study were randomly assigned to two groups with classes of equal length and duration: the adjunctive treatment group ($n = 32$) consisted of a 10-week yoga class focusing on trauma-sensitive yoga (TSY), and the control condition ($n = 32$) consisted of a 10-week women's health education class as a standalone (van der Kolk et al., 2014). Results indicated that both groups experienced significant symptom reduction; however, only participants in the yoga group could maintain this symptom amelioration at post-treatment follow-up, compared with those in the stand-alone treatment group (van der Kolk et al., 2014). Of the 64 participants who began the study, 60 completed the pre and post-treatment measures (van der Kolk et al., 2014).

To recap, whether an individual has engaged in conventional treatment for their trauma-related condition or not, some remain triggered by stimuli perceived as dangerous for many years after the traumatic event has occurred (Solomon & Heide, 2005). Adding mind-body treatments to Western psychology talk therapies may be another approach to help ameliorate trauma symptomology, particularly when treatment gains appear to have stalled or are slower than expected (van der Kolk, 2014).

Traditional Body-Based Healing Practices

This section explores traditional body-based healing practices employed by Native and Indigenous communities, including Māori body-based therapies in NZ. Although research has long established the connection between mind, body and the natural environment with overall improved health and well-being outcomes, the Western model of health and wellbeing

remains mainly focused on treating symptoms, not the whole person (Marques et al., 2021.) Traditional body-based healing practises are relevant to this thesis as Native and Indigenous populations are at significant risk of experiencing multiple forms of trauma and health conditions. Compared to the other groups, they are disproportionate and often associated with historical trauma experiences (Gameon & Skewes, 2020). Western interventions that directly or indirectly address historical, interpersonal trauma with Indigenous people remain very limited. Gone (2013) argued that there has been growing interest in how to treat trauma experienced by Native and Indigenous peoples. Much of this work has focussed on utilising resources from affected communities, traditional healing processes and age-old artefacts that honour Native communities' values and knowledge. These artefacts and processes acknowledge experiences of historical hardship and different health-related epistemological perspectives (Smith et al., 2019). In a systematic review by Gameon and Skewes (2020) of traditional healing interventions used by Indigenous populations, 15 studies were identified representing 10 interventions used to treat historical (n = 3), interpersonal (n = 3), and early childhood (n = 4) trauma in the United States and Canada. The researchers in this study collaborated with Indigenous communities to incorporate cultural values and knowledge into their research design and assessment of trauma interventions. The researchers were motivated by culturally relevant intervention content and study designs that might improve the fit, acceptability, and effectiveness of trauma treatment for Native peoples. Whilst positive outcomes were found in terms of trauma symptom reduction, methodological issues including study design and research methods limited the validity of these conclusions. Gameon and Skewes (2020) concluded that changes to trauma intervention research were needed to expand access to effective trauma-informed care and reduce the burden of trauma and related symptoms in Native communities. According to Kira (2010), treatments recognised through this lens are best conceptualised via an assessment process that adopts a cross-cultural lens,

which considers the impact of complex and cumulative traumas experienced by Indigenous peoples and minority populations (Kira, 2010). Therapies, as well as assessments that hold this premise, include the impacts of colonisation and the inequities experienced by Indigenous peoples. These processes and constructs illuminate the importance of drawing on culture-specific worldviews and keeping these worldviews at the forefront of the therapeutic approach (Bennett et al., 2016).

That said, most evidence-based interventions for trauma-related conditions are designed to treat single trauma events and, as such, have their limitations in terms of the impact of cumulative trauma dynamics, collective identity and culture-specific traumas (Ungar, 2013). Individuals who have experienced traumas of this nature would be better served, according to Kira (2010), via the use of multisystemic, multimodal, multicomponent flexible models in treatment that are more ecologically valid and culturally relevant (Rothschild, 2017). Treatments of this nature from a te ao Māori perspective are intended to restore meaningful engagement with the self and others via means that lessen the pōuritanga (sadness) and restore and maintain a sense of wellness and a feeling of ngākau ora (balance) and equilibrium with the world (Smith et al., 2019).

These approaches for Māori might include romiromi, karakia, mihi, waiata (song), taonga puoro (traditional instruments of the Māori) and purakau (story). The assumption is that physical and psychological well-being (are intrinsically linked and contribute collectively to mauri ora—the balance that maintains an individual's human connection with the te ira tangata and the whenua, the people and the external environment (Lowe & Fraser, 2018; Standing & Kahu, 2019; Smith, 2019).

History of Yoga

Yoga is one mind-body complementary and alternative approach that has been employed not only to treat symptomology of trauma but also several other psychological conditions (Macy et al., 2018). This study explores yoga in the context of Trauma Center Trauma Sensitive Yoga (TCTSY) as an adjunctive treatment intervention for trauma-related conditions (Macy et al., 2018). TCTSY is one specific type of trauma-sensitive yoga, a derivative of yoga, and a mind-body intervention under the umbrella of complementary and alternative healthcare practices (Emerson, 2015).

Yoga, which originated in India, was first encoded and systematised in texts such as the Upanishads, Bhagavad Gita, Patanjali's Yoga Sutras, Swami Vivekananda, and Hatha Yoga Pradipika in the third or fourth century (Shaw & Kaytaz, 2021; Whicher & Carpenter, 2003). It is a practice that constitutes some of the world's earliest influential traditions of spiritual orientations and healing practices, now branded as complementary and alternative, and one that draws on the body's infinite wisdom to heal itself (Shaw & Kaytaz, 2021; Whicher & Carpenter, 2003).

There appears to be no unanimity concerning which yoga practices are the original classical form; however, the essence and practice of yoga can be broken down into four broad categories: breath control (pranayama), the withdrawal of the senses (pratyahara), concentration, and meditation (Whicher & Carpenter, 2003). These classical systems of yoga highlight the importance of connecting and expanding human consciousness, particularly in relation to interoceptive awareness, and the impact of this process on the central nervous system (Neukirch et al., 2019). According to the essays in the Yoga Sutra of Patanjali, the strength and resistance of the central nervous system, to both internal and external forces, correspond directly with the strength of currents or vibrations throughout the body, induced by human consciousness (Yesudian & Haich, 2019). From this perspective, what can be

ascertained from these ancient writings is that when an individual is exposed to unhelpful or damaging internal or external influences, there is a shift in vibration and consciousness, which can adversely cause damage to the central nervous system (Yesudian & Haich, 2019). This explanation points to the value of yoga for trauma-related disorders.

Modern yoga has flourished in the Western world since the 1990s, and current practices are a derivative of traditional forms (Cramer et al., 2016). Yoga has become increasingly popular in Western society; from 2012 to 2016, the number of people practising yoga in the US increased by 50% (Brinsley et al., 2021). Although the popularity of this healing practice has grown exponentially in the Western world, the breadth and depth of philosophy and teachings, fundamental and intrinsic to this method, have not grown at the same rate (Sardar, & Kumar, 2022; Singleton & Byrne, 2008). The principal tenets and practices of yoga have been sieved through and boiled down, and the overall character and contemporary relevance of this form, in terms of its healing properties, elegance, and detail, have been minimised; its basic tenets exchanged for a diluted version that only vaguely represents its original form (Whicher & Carpenter, 2003). According to a United States National Survey published in 2016, yoga use among the United States general population had not only increased markedly, but most yoga users appeared to be younger, well-educated females who are non-Hispanic white (Cramer et al., 2016).

The reported benefits of this practice include improving general health, reducing stress, and disease prevention, with most attendees practising due to musculoskeletal conditions, stress, and disease prevention (Cramer et al., 2016). The practice of yoga has evolved significantly beyond its roots within Dharmic religions to become one of the most widely practised complementary healthcare alternatives in modern medicine (Cramer et al., 2016; Danylchuk, 2019; West et al., 2017).

Yoga is being employed as an adjunctive treatment for many mental health conditions that have historically been treated with conventional talk therapies. The focus of attention in yoga-based therapy for mental health is the illumination of the sensory experience of breathing and physical sensations (van der Kolk et al., 2014). The heightened body awareness developed through yoga in the mental health context can, as mentioned earlier, provide physiological awareness and understanding of physical sensations, such as body tension, a rapid heartbeat, and short, shallow breath. Increased interoceptive awareness can offer insight into an individual's internal milieu. This information, in reference to stress-related disorders specifically, can foster accurate identification of the triggered emotional responses such as fear (van der Kolk et al., 2014). According to van der Kolk et al. (2014), greater awareness of the transitory nature of momentary emotional experiences can lead to changes in perspective on the self and one's ability to cope. Research into yoga as an adjunctive treatment to conventional therapies across a range of mental health disorders has demonstrated effectiveness for conditions such as depression (Cramer et al., 2013), anxiety (Hofmann et al., 2016); PTSD (Cramer et al., 2018), attention deficit hyperactivity disorder (ADHD) (Chimiklis et al., 2018), and schizophrenia (Cramer et al., 2013). When yoga has been employed as an adjunctive therapy alongside treatment as usual for depression, anxiety, PTSD and schizophrenia, the pooled mean effect size was −3.25, indicating statistically significant positive effects (Cabral et al., 2011).

Simon et al. (2021) utilised RCTs to explore the effectiveness of yoga for individuals suffering from generalised anxiety disorder. Although yoga was not considered as effective as cognitive behavioural therapy, yoga demonstrated a positive effect on symptoms experienced by the sample population (Simon et al., 2021).

Trauma-sensitive yoga was initially developed in response to trauma injury and recovery among war veterans (Emerson & Hopper, 2015). Van der Kolk and Emmerson (2014)

founded trauma-sensitive yoga based on trauma recovery theory and their experience in working with trauma-affected populations. Trauma-sensitive yoga is a somatic intervention based on the knowledge and understanding that trauma affects the physiological, emotional, psychological, and social dimensions of the whole person (Emerson & Hopper, 2011; Emerson et al., 2009). Specific elements of trauma-sensitive yoga have been selected to facilitate healing, including breathing, creating shapes or forms, gentle movement, and mindfulness (West et al., 2017). These elements are intended to increase awareness of the body in the here and now, about the self, and its relationship to the environment (Emerson, 2015). Trauma-sensitive yoga has demonstrated a significant reduction in symptoms for those who experience PTSD (Ong, 2021).

PTSD symptom reduction was highlighted in a study by van der Kolk (2014). The inclusion of RCTs in van der Kolk's (2014) study and analysis of pre-treatment, mid-treatment, and post-treatment measures of the DSM-IV PTSD symptomology, affect regulation, and depression set this study apart from other research in the field of trauma-sensitive yoga at the time. Studies exploring trauma-sensitive yoga prior to the van der Kolk (2014) study tended to feature a qualitative research methodology and did not report on effect size. The van der Kolk (2014) study employed a primary outcome measure, the Clinician-Administered PTSD Scale (CAPS), to measure the presence of PTSD symptomology. At the close of the study, 16 of 31 participants (52%) in the yoga group, according to their results on the CAPS, no longer met the criteria for PTSD, while 6 of 29 (21%) in the control group ($n = 60$, $\chi 2_1 = 6.17$, $P = .013$) no longer met criteria for PTSD. Both groups in this study exhibited significant decreases on the CAPS, with the decrease falling in the large effect size range for the yoga group ($d = 1.07$); and the medium to large effect size decrease for the control group ($d = 0.66$). Both the yoga ($b = -9.21$, $t = -2.34$, $P = .02$, $d = -0.37$) and control ($b = -22.12$, $t = -3.39$, $P = .001$, $d = -0.54$) groups demonstrated significant decreases in symptomology from

pretreatment to the mid-treatment assessment. The yoga group exhibited a significant medium effect size linear (d = −0.52) trend. In contrast, the control group exhibited only a significant medium effect size quadratic trend (d = 0.46) but did not exhibit a significant linear trend (d = −0.29). Both groups exhibited significant decreases in PTSD symptoms during the first half of treatment, but what was notable for the yoga group was that these improvements were maintained for a longer period. In contrast, a number of the control group participants relapsed after initial improvement (van der Kolk, 2014).

In a systematic review by Cramer et al. (2018) of seven RCTs (*n* = 284), low-quality evidence for clinically relevant effects of yoga on PTSD symptoms, when compared to no treatment, was found (SMD = − 1.10, 95% CI [− 1.72, − 0.47], p < .001, I2 = 72%; MD = − 13.11, 95% CI [− 17.95, − 8.27]); and limited evidence for comparable effects of yoga and attention control interventions (SMD = − 0.31, 95%CI = [− 0.84, 0.22], p = .25; I2 = 43%) was also demonstrated. Meagre evidence was found for comparable retention of patients in the trial for yoga and no treatment (OR = 0.68, 95%CI [0.06, 7.72]) or attention control interventions (OR = 0.66, 95%CI [0.10, 4.46]) (Cramer et al., 2018). Cramer et al. (2018) reported only a weak recommendation for yoga as an adjunctive intervention for PTSD and there was a recommendation for an increase in high-quality research to confirm or disconfirm findings.

Other benefits of trauma-sensitive yoga identified in recent research have included greater psychological flexibility, acceptance of both negative thoughts and experiences of emotional arousal (Dick et al., 2014), healing of the relationship with the self, and self-compassion (West, 2014). Ong et al. (2019) used a case study research design over eight weeks to explore five participants' recovery from intimate partner violence and trauma. This study highlighted that not only were there physiological benefits while engaged in trauma-sensitive yoga, in terms of improved sleep quality and increased physical strength, but in addition, participants

reported emotional benefits which included an increase in positive feelings, a reduction of negative feelings, an enhanced perception of self and others, an increase in self-care behaviours, and the use of positive coping strategies to relax and self-regulate (Ong et al., 2021).

Although studies have demonstrated improved functioning for trauma-affected individuals, Ong et al. (2021) suggested that there are several issues concerning the research designs in the yoga for trauma field. For example, only in a study by Dick et al. (2014) were the specific mechanisms of trauma-sensitive yoga examined with regard to contribution to reducing symptoms of PTSD. Moreover, most research studies in the field of trauma-sensitive yoga have been conducted over very short periods, between 8-12 weeks (Clark et al., 2014; Dick et al., 2014; Jindani & Khalsa, 2015; van der Kolk, 2014; West et al., 2016), and as such, the longevity of treatment gains remains unknown (Ong, 2021). Methodological issues including sample sizes across studies, statements of effectiveness, and statistical power, as well as other confounding variables within the design of both quantitative and qualitative studies, have also been highlighted as problematic in studies exploring trauma-sensitive yoga as a treatment modality for stress-related disorders (Ong, 2021). To further increase the efficacy of trauma-sensitive yoga, the symptomology experienced by the individual and mechanisms operational in the yoga (and in concert with one another) must be better scrutinised to build legitimacy for this practice (Ong et al., 2021).

Trauma Centre Trauma Sensitive Yoga

Trauma-sensitive yoga comes in many different protocols and varieties, and TCTSY is just one of many trauma-sensitive yoga training programmes developed and studied over recent years. It is a Hatha-based, protocolised yoga intervention that is specifically employed as an adjunct intervention to conventional talk-based therapeutic approaches, such as exposure therapies and cognitive behavioural therapy, to treat trauma-related conditions (Wynn, 2015).

Hatha yoga is a mind-body modality that combines physical, breathing, and relaxation and meditative practices to enhance overall health and well-being (Brosnan et al., 2021; Desikachar et al., 2005). Turner and Emerson (2009) co-founded the TCTSY treatment modality at the Centre for Trauma and Embodiment in the Justice Resource Institute in the United States (Justice Resource Institute, n.d). TCTSY draws on the foundational principles of yoga, embodiment, and somatic healing (Emerson et al., 2009). This therapeutic approach has been developed with a whole-bodied approach to wellness in mind to reunite and re-integrate fragmented portions of the body and self after a traumatic reaction to a traumatic exposure event has occurred (Emerson et al., 2009; Nguyen-Feng et al., 2020).

Turner and Emerson (2009) and Scrine (2021) acknowledged that severe psychological traumatic events, such as physical and sexual abuse, can quite literally immobilise and deactivate an individual's ability to assert self-control and to connect with others authentically. The traumatic experience erodes the individual's opportunity to meaningfully and predictably belong in the world, inside a body that feels familiar and safe (Oosterbroek & Dirk, 2021). As such, one of the foundational goals of the TCTSY protocol is to establish an environment for trauma-affected individuals that is safe, empowering, and compassionate, an environment where individuals can reconnect with the felt sense within their bodies, to increase interoceptive awareness and regain control over their movement, choices, and responses to stress (Oosterbroek & Dirk, 2021). The purpose of TCTSY is to evoke feelings of personal agency and positive self-regard (Oosterbroek & Dirk, 2021). TCTSY is based on contemporary neuroscientific research, which has provided evidence for changes in the brain due to the traumatic event (van der Kolk, 2013). Neuroscience research suggests that significant adaptations in brain function and structure in the areas of the thalamus, prefrontal cortex, and insula are linked to symptoms of trauma-related disorders (Cassiers et al., 2018) as are interruptions along interoceptive pathways in the brain. These interruptions have been

linked to feelings of dissociation and disembodiment and an unreliable sense of self (Oosterbroek & Dirk, 2021). The specialised TCTSY protocol has been designed to meet the particular needs of trauma survivors (Emerson et al., 2009; Kelly et al., 2021). TCTSY includes specific elements that differentiate this intervention from what might be experienced by participants in yoga practice within a general population setting. The language employed by teachers is one of inquiry and invitation, to support choice-making and personal agency. This protocol avoids physical touch in favour of visual and verbal assistance, and illuminates the felt sense (Emerson et al., 2009; Kysar-Moon et al., 2021). It prioritises the inner felt sense instead of the creation of specific physical shapes and forms, which tends to be the goal of yoga practised in the general population (Nolan, 2016). Furthermore, TCTSY emphasises reclaiming and befriending the body via personalised body rhythms and the practice of distress tolerance (Nguyen-Feng et al., 2020). The TCTSY emphasis on subtle exposure to sensation is intended to help individuals familiarise themselves with bodily sensation or a felt sense (Spinazzola et al., 2011). TCTSY has been delivered as a standalone and adjunctive therapeutic intervention in both group and individual settings (Clark et al., 2014; Härle, 2017). This hatha yoga-based programme is facilitated by TCTSY-trained and certified facilitators with mental health backgrounds and an interest in the healing powers of yoga (Oosterbroek & Dirk, 2021).

Recent studies exploring the efficacy of TCTSY have highlighted several benefits (Gladden et al., 2022; Nguyen-Feng et al., 2020). Nguyen-Feng et al. (2020), in a study expanding on the results highlighted by van der Kolk et al. (2014), examined specific treatment moderators relevant to the significant effect size demonstrated in the van der Kolk et al. (2014) study. Nguyen-Feng et al. (2020) noted that the van der Kolk et al. (2014) study failed to describe or delineate the severity of interpersonal trauma exposure among its participants, which mechanisms within the intervention had an impact on outcome in terms of the stated effect

size, and for whom the intervention worked best. Outcomes of the Nguyen-Feng et al. (2020) study suggested that TCTSY was most effective for participants with less adult interpersonal trauma, with effect sizes of 0.39-0.45. In addition, Nguyen-Feng et al. (2020) noted that the effectiveness of the intervention was less predictable among those who had a history of more significant adult-onset interpersonal trauma, based on pre-intervention measures (except for depression), and when used as an adjunct treatment intervention for those with fewer adult interpersonal traumas.

Zaccari et al. (2022) utilised RCTs in a quantitative study that compared cognitive processing therapy and TCTSY for women veterans with PTSD related to military sexual trauma (MST). The results supported the effectiveness of TCTSY in the treatment of PTSD in this population, particularly African American women, and suggested that TCTSY warrants consideration as an adjunctive, precursor, or concurrent treatment to evidence-based psychotherapies (Zaccari et al., 2022). The clinically and statistically significant improvements in PTSD symptom severity seen in the TCTSY group, according to Zaccari et al. (2022), were similar to those described by Kelley et al. (2021), which has added strength to current research on yoga as a clinical intervention for PTSD. Effect sizes observed at each time point (0.90–0.99) in the Zaccari et al. (2022) study were slightly lower than the effect sizes reported in the findings by Kelley et al. (2021) (1.09–1.17), yet still large.

As previously noted, Trauma Center Trauma-Sensitive Yoga (TCTSY) is a comparatively recent development in the field of trauma treatment, with early research highlighting a limited understanding of the mechanisms through which it facilitates change (Wynn, 2015). More recent studies have continued to underscore the need for further investigation, recommending an increase in both the number of studies and the use of more rigorous experimental designs to better identify and understand the active mechanisms within TCTSY (Nguyen-Feng et al., 2019).There are challenges in implementing TCTSY within the ACC framework. These

include the need for providers to meet ACC's registration and professional competency requirements, a limited number of clinicians trained in TSY approaches, and the prioritisation of evidence-based practices within ACC guidelines. Additionally, there are gaps in culturally adapted TSY programmes for Māori, Pasifika, and other diverse communities in New Zealand, which may limit equitable access and cultural safety (Waitangi Tribunal, 2019).

Nonetheless, there is a promising shift in acknowledging that trauma is not solely cognitive but also deeply embodied, and that mind-body approaches like TSY can complement traditional talk-based therapies by supporting holistic recovery (van der Kolk, 2014; Emerson, 2015). Ongoing research, culturally responsive adaptations, and workforce development will be important for safely and ethically integrating trauma-sensitive yoga within ACC-funded trauma treatment pathways.

Practice Considerations

As a practitioner, there are several critical considerations to ensure the safe, effective, and ethical use of mind-body therapies for clients with trauma histories. These considerations have been highlighted in the table below.

Table 2

Consideration	Description
1. Trauma-Informed Approach	Practitioners must understand the impact of trauma on both the brain and body. Regardless of modality, all practices must uphold the principles of safety, trust, choice, collaboration, and empowerment (SAMHSA, 2014). As mind-body therapies may trigger emotional or somatic memories, careful pacing, sensitive language, and awareness of triggers are essential to minimise retraumatisation.
2. Cultural Safety	In the Aotearoa New Zealand context, cultural safety is critical. Practitioners must respect Māori models of wellbeing—wairua (spiritual health), whānau (family), and whakapapa (ancestry)—and adhere to tikanga (cultural protocols) (Durie, 2001). Ongoing cultural competence training and collaboration with cultural advisors are necessary to build trust and ensure culturally responsive practice.
3. Scope of Practice	Practitioners must clearly define and stay within their scope of practice. Mind-body therapies should complement, not replace, evidence-based psychological or medical treatments. Collaboration with other health professionals supports a holistic, coordinated approach (Bishop & Glynn, 1999).
4. Data Protection and Sovereignty	Robust protection of client information is essential. Mind-body work may involve sensitive disclosures, including spiritual or cultural content, which must be protected under the Privacy Act 2020 and principles of Māori data sovereignty (Kukutai & Taylor, 2016; Office of the Privacy Commissioner, 2020). Informed consent must be culturally appropriate, and clients should be clearly informed about how their data will be used and stored.
5. Professional Competence	Practitioners must be adequately trained and, where applicable, registered with appropriate professional bodies. Continued professional development, knowledge of trauma, and supervision are necessary to support ethical and safe practice (Ministry of Health NZ, 2020).
6. Accessibility and Equity	Equitable access should be prioritised by offering affordable services, flexible hours, and accommodating diverse needs such as disabilities, language barriers, and rural access. Practitioners should take proactive steps to reduce inequities and improve access for Māori, Pasifika, and other underserved populations (Waitangi Tribunal, 2019).
7. Ethical Practice	All interventions must be grounded in ethical practice. This includes obtaining informed consent, maintaining professional boundaries, being transparent about risks and limitations, and avoiding any form of exploitation. Practitioners should seek regular, culturally responsive supervision and be open to feedback to ensure ongoing safety and respect (Hudson et al., 2017).

Conventional Western Psychological/Pharmacological Treatments for Trauma

The majority of psychological treatments for trauma-related conditions have focused primarily on the mind, and as such, most treatments are delivered via talk therapy (Watkins et al., 2018). These treatments include exposure therapies such as prolonged exposure (PE), cognitive behavioural therapy (CBT), trauma-focused cognitive behavioural therapy (TF-CBT), and cognitive processing therapy (CPT) (Lewis et al., 2020).

According to the Cochrane Database of Systematic Reviews (accessed 02 December 2024), TF-CBT and EMDR were more effective than waitlist/usual care in reducing clinician-assessed PTSD symptoms. There was evidence that individual TF-CBT, EMDR, and non-TF-CBT are equally effective immediately post-treatment in the treatment of PTSD (Sin et al., 2015). There was some evidence that TF-CBT and EMDR are superior to non-TF-CBT, between one to four months following treatment, and also that individual TF-CBT, EMDR, and non-TF-CBT are more effective than other therapies (Sin et al., 2015).

Systematic reviews and meta-analyses of controlled studies on these psychological approaches to treat trauma-related conditions have noted moderate to strong evidence for the efficacy of talk-based interventions in the form of exposure therapies, especially prolonged exposure (PE) for PTSD (McLean et al., 2022). PE is a manualised treatment that includes four primary components: repeated revisiting of the trauma memories (imaginal exposure), repeated exposure to avoided situations (in vivo exposure), education about common reactions to trauma, and breathing retraining (Mclean & Foa, 2011; Peterson et al., 2023). PE follows a model of crisis intervention, with support, psychoeducation, the development of coping strategies, and acceptance of the traumatic event over time (Hembree et al., 2003; Peterson et al., 2023). RCTs have indicated that PE is effective in reducing an array of PTSD

symptoms experienced by trauma-affected individuals (Mclean & Foa, 2011; Cloitre et al., 2010; Peterson et al., 2023).

CBT, in the context of trauma therapy, is often delivered via individual talk therapy conducted by a psychologist (Beck, 2020). In theory, CBT engages the pre-frontal cortex (Seminowicz et al., 2013) by drawing on current and past information associated with the traumatic exposure event, helping the trauma-affected individuals interpret, process, and make sense of the traumatic event (Ehlers & Clark, 2000; Solomon & Heide, 2005). CBT relies heavily on the trauma-affected individual's awareness and articulation of unhelpful, conscious thoughts about the traumatic event and their present-day experiences, to work toward altering thoughts about the exposure event and the intensity of emotions over time (Kar, 2011). Via CBT, the trauma-affected individual learns to identify triggering stimuli in order to help understand their responses to reminders and cues of the event and, in turn, manage these (Kletter et al., 2021; Solomon & Heide, 2005).

TF-CBT, a derivative of CBT, was first developed in the 1990s by psychiatrist Judith Cohen and psychologists Esther Deblinger and Anthony Mannarino (Cohen et al., 2008). The protocol was initially established to serve children and adolescents who had experienced sexual abuse. However, the use of the protocol has expanded over the years to include not only services for youths but also adults who have experienced many forms of severe trauma or abuse (Cohen et al., 2010; Hoogsteder et al., 2022; Peters et al., 2021). TF-CBT for the younger population includes psychoeducation, practical parenting skills, relaxation, affect identification and regulation, cognitive coping, trauma narration and processing, in vivo mastery, and enhancing the concept of safety, with a focus on future development (Cohen et al., 2010; Hoogsteder et al., 2022). Included in this protocol are conjoint parent and child

sessions to ensure both parties understand the nature of the impact of trauma, and the relevance and application of the therapeutic skills being taught (Cohen et al., 2012).

Cognitive processing therapy (CPT), another empirically validated therapy employed to treat trauma-related conditions, is based on information processing theory (Resick & Schnicke, 1992). The intervention was initially developed by Resick and Schnicke (1992) to treat symptoms of PTSD experienced by victims of sexual assault. This intervention includes psychoeducation, exposure work, and cognitive elements, and places emphasis on reducing not only fear responses but also a plethora of emotional responses, including detachment, anger, guilt, confusion, humiliation, betrayal, and anxiety - emotional responses that have been correlated with PTSD symptomology resulting from sexual trauma (Raines et al., 2024; Resick et al., 1990).

In a meta-analysis exploring the effectiveness of CBT in treating PTSD conducted by Öst et al. (2023), the overarching term CBT has incorporated the treatments PE, CPT, and TF-CBT (all of these derivatives of CBT). PE, CPT, and TF-CBT were all considered adequate in terms of reducing PTSD severity (Öst et al., 2023). The cumulative effect size for these treatments was considerable (1.75) at post-treatment and maintained at follow-up (1.70). This result aligns with the finding of 2.59 by Stewart and Chambless (2009), and the 1.91 reported by Hans and Hiller (2013), albeit with a much larger sample of studies.

Eye movement desensitisation and reprocessing (EMDR), a novel approach, is also noteworthy for treating trauma-related conditions (Shapiro & Brown, 2019). This intervention is based on the notion that symptoms of trauma-related conditions can be relieved by focusing on lateral eye movements orchestrated by the EMDR clinician's finger, while maintaining a mental image of the traumatic experience (Shapiro & Brown, 2019). The first meta-analysis of the efficacy of EMDR was conducted by Davidson and Parker (2001),

and results showed that EMDR was equally effective as other exposure techniques, such as PE. A second meta-analysis by Seidler and Wagner (2006) noted that a specific form of EMDR, coined trauma-centred EMDR, was equally effective as CBT in the treatment of PTSD. In a systematic review by Bisson et al. (2013), EMDR and CBT, when applied to manage trauma symptomology, had very similar effects, in that both treatments had more robust empirical backing when compared to the likes of stress-management programmes. Chen et al. (2014) published a meta-analysis of 26 controlled RCTs which found that EMDR significantly reduces the symptoms of PTSD, depression, and anxiety.

A recent study by Karatzias et al. (2019), showed that CBT, exposure alone (EA), and EMDR have noted effects ranging from g = −0.90 (CBT; k = 27, 95% CI −1.11 to −0.68; moderate quality) to g = −1.26 (EMDR; k = 4, 95% CI −2.01 to −0.51; low quality). CBT and EA demonstrated moderate to significant or large effects on symptoms of negative self-concept, and CBT, EA, and EMDR each had moderate or moderate to significant effects on disturbed relationships (Karatzias et al., 2019).

According to Dunn et al. (2023) on treatment efficacy for complex trauma in youth, the limited number of studies available in this field has made it difficult to make any firm conclusions as to the impact of psychosocial treatments on complex PTSD. This is an area of contemporary clinical research in need of attention. In a systematic review conducted by Karatzias et al. (2019) of 51 RCTs focussing on treatment of symptoms associated with CPTSD, CBT, EA, and EMDR were considered superior to usual care (waiting list, befriending, counselling), with effects ranging from g = − 0.90 (CBT; k = 27, 95% CI −1.11 to −0.68; moderate quality) to g = −1.26 (EMDR; k = 4, 95% CI −2.01 to −0.51). Overall, results indicated that when compared with usual care, CBT, EA, and EMDR perform

relatively equally for symptoms of PTSD and the CPTSD symptoms of negative self-concept and disturbances in relationships (Karatzias et al., 2019).

Whilst several psychological interventions are well supported in terms of treatment efficacy for both PTSD and CPTSD, there are limited pharmacological treatments for the relief of symptomology associated with trauma-related conditions (Kelmendi et al., 2016). Selective serotonin reuptake inhibitors (SSRIs) and selective serotonin/norepinephrine reuptake inhibitors (SNRIs) are recommended as first-line agents according to PTSD clinical practice guidelines (Hoskins et al., 2015; Jeffreys, 2015). There is also a growing interest in second-line pharmaceuticals, atypical antipsychotics, and anticonvulsants that address the core symptoms of reexperiencing, hyperarousal, and avoidance (Berger et al., 2007; Jeffreys, 2015). Antipsychotics and anticonvulsants are frequently used as off-label treatments for PTSD, despite limited data to support their use (Jeffreys, 2015). When paroxetine is used to treat PTSD, the most common side effects include asthenia, sweating, nausea, dry mouth, diarrhoea, decreased appetite, decrease in libido, and genital disorders (Laux, 2021). For sertraline, nausea, headaches, insomnia, dry mouth, ejaculation failure, dizziness, fatigue and diarrhoea are most common (Feduccia et al., 2019).

In summary, this chapter has highlighted that trauma treatment can be viewed from various theoretical perspectives. The therapy approaches selected by different governing bodies, organisations, and service providers are often based on which theories (top-down or bottom-up) are employed to conceptualise trauma-related conditions. The following chapter will be based on literature devoted to CAM, traditional healing, and mind-body therapies, in terms of the factors that have facilitated and constrained access, as well as the adoption and availability of these interventions as treatments for trauma-related conditions.

Chapter Six: Health Sector Factors

CAM, Mind-Body Therapies and Trauma Sensitive Yoga

The following chapter will present existing literature, highlighting health sector factors that have facilitated and constrained access, adoption, and availability of CAM, traditional healing practices, mind-body therapies, and yoga interventions such as TCTSY.

In the context of the current study, health sector factors are overarching influencing constructs that have had a significant bearing on the healthcare behaviours of the population. Health sector factors include governing operational guidelines, belief systems, biases, and particular epistemologies that are exercised in health and healthcare, which have a bearing on the customs and practices of populations working in and engaging with these services (Bishop & Lewith, 2010).

Cartesian Dualism

To begin, the influence of Cartesian dualism on the Western population's subjective view of mind and body cannot be overlooked (Ormond et al., 2020). Cartesian dualism is derived from Rene Descartes's theory of mind and is best understood as a dualistic perspective of the mind and body (Brown & Key, 2020). Descartes' doctrine defends the notion that the mind and the body are substances of two fundamentally distinct kinds. The human person is composed of two separate entities: a mind and a body, each an entity in its own right (Brown & Key, 2020). This construct of the mind being separate from the body (which is a distinctly different way to how, for example, Indigenous populations view human subjectivity) has, since its conception, had a profound impact on Western medicine and healthcare (Ormond et al., 2020). From a metaphysical perspective, Cartesian dualism has had a pervasive influence on the medical paradigm and healthcare services in the Western world, as it is known to inform their understanding (Goldberg, 2002; Jones & Vindigni, 2025). Whilst Cartesian

dualism can be credited with advancing medicine as a scientific field, it can also be charged with constraining the development of a holistic approach to health care, such as those being explored in this study (Correll, 2022). In addition, according to Correll (2022) Cartesian dualism has also had a significant impact on how health is conceptualised as mental illness. The polarising mind-body dualism theory inspired by Descartes, according to Goldberg (2002), was an embellishment and exaggeration of Descartes's original theory, in an effort by scholars to understand the body via scientific study. This embellishment has inspired less engagement and promotion of alternative ontologies and epistemologies that view the human being as a whole. These philosophies encourage a more holistic approach to health and treatment services (Correll, 2022).

Supremacy of the Biomedical Model

The biomedical model, much like Cartesian dualism, has also come under scrutiny in discourse related to limited access to complementary and alternative medicine (CAM) and mind-body therapies (Holst et al., 2022; Valles, 2020). Western populations consider biomedical allopathic healthcare methods as superior to other treatment approaches (Engel, 2012). Biomedicine is a distinctive culture-specific domain that features both specialised and distinct practices based on biomedical knowledge (Checkland et al., 2008; Wainberg et al., 2018). Regarding mental health disorders, biomedicine posits that mental health conditions are, for the most part, brain diseases that require medical diagnosis and predominantly pharmacology as the treating agent (Gergen et al., 1996; Babalolaet et al., 2017). The population's strength and belief in this healthcare ideology have accelerated and maintained the need for biomedicine for mental health conditions. This belief has forged the way for funding and research in biomedicine, the sheer volume of which has directly affected the adoption, promotion, and availability of these interventions to service users (Hollenberg, 2007; Polich et al., 2010).

According to Correll (2022), Western medical systems have adopted Descartes's dualistic philosophy and as such, favour separate assessment and treatment protocols for the body and the mind, all of which are supported by biomedical tenets. The health culture in Western countries supports the notion that biomedicine is superior to other approaches (Galvin, 2020; Good, 1995). In a systematic review conducted by Leach and Veziari (2022) exploring the enablers and barriers to the implementation of complementary medicine in conventional healthcare settings, it was noted that fear was a salient barrier, in that these practices might harm the identity/integrity of conventional medicine. In addition, Leach and Veziari (2022) noted in their study that complementary and alternative healthcare practices were perceived as incompatible with the positivist paradigm, a paradigm inherent in the Western cultural context of healthcare.

Whilst ample funding and resourcing are made available to explore the effects of pharmaceuticals on particular mental health conditions such as PTSD or CPTSD (Kelmendi et al., 2016), research funding continues to be consistently overlooked for the likes of mind-body therapies and other complementary and alternative approaches in terms of their usefulness to treat similar conditions. Sierpina et al. (2007) noted that access to funding for mind-body research is nearly impossible to procure. According to Sierpina et al. (2007), notions that support biomedical approaches at the expense of innovative and new approaches, such as mind-body therapies, are firmly held in attitudes and beliefs held by healthcare organisations. Decisions based on these attitudes and beliefs and biomedical foundational philosophies, including Cartesian dualism, have persisted. Despite increasingly sophisticated and mechanistic explanations of mind-body techniques through known cellular, genomic, functional imaging, neuroimmunological, and endocrinological pathways, these attitudes and beliefs remain.

Direct-to-Consumer Marketing

Direct-to-consumer marketing (DTCM) is a billion-dollar enterprise in the pharmaceutical context, with $4.9 billion in the US alone spent on prescription medications in 2007 (Bradford et al., 2011; Frosch et al., 2010). Science-based biomedicine and DTCM are particularly salient for the US and Aotearoa/NZ, where government policy and legislation have allowed pharmaceutical companies to engage in this type of marketing strategy (DTCM) (Donohue et al., 2007; Zadeh et al., 2019). Critics argue that DTCM has been a barrier to accessing information on other ways of treating health conditions (Wilkes et al., 2000). Wilkes et al. (2000) suggest that when alternative treatments are available, pharmaceutical companies that use DTCM should be required to mention these other treatments by name or at least by class. With the volume of advertisement campaigns, the strength of persuasion in media, and partial and often biased information employed to promote pharmaceutical products, other treatment interventions have little room for promotion (Hill, 2000). According to Waite (2012), the medicalisation of society is in the best financial interest of the pharmaceutical industry, doctors, and the medical profession at large. This interest has made it almost impossible for other epistemological ways of viewing healthcare to be considered by service users. DTCM, according to Waite (2012), influences health consumer behaviour concerning how service users communicate with their General Practitioner (GP) in primary care and how they actively seek medication for their presumed conditions.

The influence of DTCM, according to Zadeh et al. (2019), has been illuminated by legalisation, which has allowed advertisements to be aired that are not independently evaluated for the quality and validity of the scientific statement (Zadeh et al., 2019). As such, unless a complaint is made about misleading messaging and exaggerated statements regarding the benefits of pharmaceuticals, claims about treatment efficacy remain unchallenged (Zadeh et al., 2019). Shultz and Holbrook (2009) and Armstrong (2017) allude

to how vulnerable healthcare consumers are regarding marketing strategies and power - that is, messaging and products. Ensor and Cooper (2004) suggest that healthcare knowledge as a result of DTCM is not in the individual service users' hands, and as such, the service user is vulnerable to powerful health sector beliefs/biases that exist on many organisational levels. According to Armstrong (2017), this puts the service user in a compromising position regarding health and well-being choices and consumption of healthcare information. Gergen et al. (1996) suggest that the perceived supremacy of biomedicine has been shaped to such an extent that these dominant epistemologies are now considered absolutes by government health ministries, tertiary educational organisations invested in medicine, mental health practitioners, and service users alike, leaving little room to reflect on the benefits of alternative ways of treating health conditions.

Unwieldy and Cumbersome Healthcare Systems

For decades, healthcare systems in the Western world have been labelled unwieldy and not fit for purpose (Gauld, 2018). The National Healthcare Service in the United Kingdom is an example of this; patient care is often thwarted by inadequate knowledge sharing and institutional isomorphic processes alongside regulatory, normative, and cultural biases (Currie & Suhomlinova, 2006; Vize, 2022). The NZ healthcare system is no exception to this. This system has also been described as cumbersome, with work processes and patterns, according to Currie and Suhomlinova (2006), that do not adequately accommodate the growing health needs of the diverse population. Although NZ can be credited with being one of the first countries to establish a universal, tax-funded national health service with innovative Māori initiatives, a no-fault accident compensation scheme, and the Pharmaceutical Management Agency, problems with access to health care still dominate this space (Goodyear-Smith &Ashton, 2019). The healthcare system is slow to change and, according to Goodyear-Smith and Ashton (2019), is categorically ill-equipped to deliver

equitable health outcomes to the population it is intended to serve. The work systems (processes, activities, and information technology) situated nationally, intended to care for the population, have become unworkable (Goodyear-Smith &Ashton, 2019).

These systemic failures in the NZ healthcare system have made it exceedingly difficult for CAM to find a place in national healthcare policy, decision-making, and agendas (Park & Canaway, 2019). For CAM to find salient space in the national healthcare context, political, organisational and scientific intent at the policy level must be prioritised and evaluated (Bodeker & Kronenberg, 2002; Park & Canaway, 2019). According to Bodeker and Kronenberg (2002), this would include establishing regulatory and policy guidelines while thoroughly exploring existing social, cultural, and political structures that impact function and sustainability.

In an ideal world of healthcare, interventions and their founding theories would be evaluated at both government and organisational levels for their promise, and harnessed for the benefit of the population.

Leadership, Professional Identities, and Power Differential

The healthcare sector has also been criticised for its resistance to change, particularly regarding the need to preserve specific professional identities and maintain existing power differentials at the expense of innovation (McNeil et al., 2013). McNeil et al. (2013) note that general and persistent barriers to innovation at the organisational governing level include semantic misunderstandings, threats to professional identity, and power differentials among governmental and organisational healthcare officials. Chung et al. (2022) note that many healthcare functionaries have devoted significant learning and time to conventional structural and organisational training, organisational strategies, and science-based models that support biomedical epistemologies and methods. Decisions made by these proponents concerning the

resourcing, research, and funding of interventions are more frequently in support of conventional biomedicine and pharmacological treatments, proponents representative of their conventional healthcare knowledge. Chung et al. (2022), Frizelle (2022) and Leach and Veziari (2022) also suggest that organisational leadership is a constraining factor in developing CAM in healthcare settings. These authors highlight that leaders whose knowledge is founded on conventional epistemologies, organisational strategies and science-based models may limit the possibility of exploring other ways of treating healthcare conditions, that is, ways of healing that may add value to the healthcare service user population.

Policy and Legislation and Complementary and Alternative Medicine

Although the use of alternative interventions in healthcare is increasing globally, policy, legislation, and regulatory systems have not progressed far enough to fully support and integrate CAM practices into mainstream conventional healthcare systems (Park & Canaway, 2019). An integrative, holistic healthcare system would require significant government investment in organisational and regulatory structures, continuing education in the tertiary sector, and agreement among government officials regarding which interventions were to be included in the integrative system. These investments in NZ have yet to be passed (Park & Canaway, 2019). Park and Canaway (2019) note that policy and legislation supporting an integrative healthcare system in NZ, when compared with countries like China, Japan, and the Republic of Korea, have been slow to develop. This languishing approach on the part of the NZ government has constrained service providers' adoption of CAM and limited access to healthcare for service users (Park & Canaway, 2019).

Social Media, Self-Authorship, Film and Promotion of CAM

Historically, the healthcare sector has informed the population about healthcare approaches and their success via ministerial reports and scholarly articles based on rigorous research

(Oakley Browne et al., 2006). More often than not, these include quantitative research studies, and RCTs (Lilienfeld et al., 2018). Although healthcare information is still disseminated to the population through these methods, social media, self-authorship, and film have recently been employed by theorists and advocates to supplement public knowledge with certain approaches (Levine, 1997; Luu et al., 2021; van der Kolk, 2014). Social media, books, and films have been utilised to build knowledge about healthcare approaches, and these have been successful conduits through which specific treatments or medical conditions have gained attention, attention which, for the public, may not have been available had these digital portals not existed (Luu et al., 2021). Social media, self-authorship, and film have been recognised as facilitating factors in the upsurge of interest in the symptomology of specific health conditions, such as trauma, and alternative theories and treatment approaches (Gupta et al., 2013). Social media platforms such as Wikipedia, Twitter, and Instagram, which are considered low-cost marketing tools (Thomases, 2010) have been identified as helpful in assisting researchers in the fields of mental health to facilitate the dissemination of information about, for example, trauma, alongside these new and innovative therapies to treat this condition (Luu et al., 2021). These avenues and platforms have been credited with encouraging and developing trust in particular interventions or theories, which has built public confidence (Hawn, 2009). The digital information environment, more generally, is credited with the ability to influence service user perceptions of treatments strongly; that is, the service users' informational needs (to some degree) are no longer based solely on policymaker publications, scholarly research and pharmaceutical companies advertising campaigns (Benetoli et al., 2018).

Some early adopters of CAM and body-based therapies in the field of mental health have utilised social media, self-authorship, and film, alongside research publications, to further their cause and to promote service user understanding of the field (Levine, 2010; Maté, 2011;

van Der Kolk, 2014). What this appears to have achieved, in terms of the topic under investigation, is accessible information on alternative ways of understanding and treating trauma, information that may not be readily available to professionals and service users through ministerial reports, scholarly journal articles, and medical publications (Patrick et al., 2022).

This chapter has outlined several health sector factors, including Cartesian dualism and biomedicine, that have more broadly constrained CAM, mind-body therapies, and mind-body interventions such as trauma-sensitive yoga. Direct-to-consumer marketing has also been recognised as a constraining factor, given its significant influence on consumer information, knowledge, and understanding of treatments available for mental health conditions. Healthcare systems were defined in the literature as unwieldy and cumbersome and as such, slow to adopt and promote new and innovative treatments in health, such as the ones under examination. According to the literature, part of the challenge in healthcare governance and organisational spaces is the protection of professional identities in these spaces, based on a fear of losing organisational and professional cultural capital. Also, at a governance level, it seems that policy and legislation supporting the field of CAM have not come far enough to fully support and integrate these practices into more mainstream conventional healthcare systems and settings. Although many constraining factors were identified in the literature at the health sector level of the ecological social system, social media, self-authorship, and film were recognised as facilitating factors that have made health care knowledge about CAM more accessible to services uses, when compared to ministerial reports, policy briefs, and scholarly articles so often disseminated to the population to build understanding and knowledge of conditions, their prevalence, and viable treatments.

Chapter Seven: Organisational Factors

CAM, Mind-Body Therapies and Trauma Sensitive Yoga

The following chapter will highlight organisational factors that have facilitated and constrained the use of CAM and mind-body therapies and, as a subset of this, TCTSY to treat trauma-related conditions. The literature in Chapter Seven covers organisational factors more broadly associated with the alternative and complementary practises, as well as literature more directly related to mind-body therapies and the trauma-sensitive yoga protocol, TCTSY.

The current study holds that organisations are socially constructed reflections of particular ideologies, narratives, and practices deeply embedded in a society's longstanding, pervasive actions (Davies et al., 2000). Organisational factors are operational processes, attributes, and/or conditions within organisational systems that affect philosophy, structure, content, collaboration, resourcing, support, and communication (Valaitis et al., 2018). Organisational operational processes, attributes, and/or conditions will be highlighted in the following section in reference to how they have facilitated and constrained the use of CAM, mind-body therapies, and trauma-sensitive yoga.

Quality of Evidence in Research Studies

Although significant research has been conducted on CAM interventions for mental health, the quality of many studies, when reviewed, has been characterised somewhat negatively (Fischer et al., 2014). Globally, rigorously designed research on CAM practices has been limited (Fischer et al., 2014). The scarcity of rigorously designed research has impacted opportunities to build efficacy in CAM and, in turn, has influenced decision-making and funding availability at government and organisational levels (Kantor, 2009).

Jarvis et al. (2015) reported that the National Health Service in the UK has a finite set of resources designated for treatment. Treatments approved for funding are typically supported

by numerous research studies that account for which treatments work, and the moderators and mechanisms that play a role in their effectiveness. More often than not, research studies considered most favourable in building efficacy utilise a rigorous quantitative research design and RCTs, the gold standard measure for treatment effectiveness in the Western world (Cartwright, 2009; Chambless & Ollendick, 2001). Given the shortage of rigorous studies and the absence of RCTs in research on CAM and traditional healing approaches, funding for these interventions remains limited (Fischer et al., 2014; Nortje et al., 2016). This has had a direct flow-on effect regarding the accessibility and availability of these types of interventions (Jarvis et al., 2015).

A well-conducted systematic review, often in conjunction with meta-analyses, is also considered the gold standard for synthesising evidence of treatment outcomes (Veginadu et al., 2022). The quality of systematic reviews and meta-analysis is critical to providing adequate evidence for the effectiveness of treatment, and a fundamental lack of high-quality research designs has been highlighted as a problem in building efficacy for CAM and mind-body therapies (Fischer et al., 2014).

Wahbeh et al. (2014) reviewed studies on meditation, yoga, deep-breathing exercises, guided imagery, hypnotherapy, progressive relaxation, qi gong, tai chi, biofeedback, and acupuncture, as well as several other complementary and alternative approaches to treat PTSD. These authors noted several issues. Wahbeh et al. (2014) stated that studies in the field of CAM often had variable quality, and the principles of rigorous research design were infrequently adhered to. Wahbeh et al. (2014) add that to improve the quality of research in this field, appropriate control in the research design, assessing for expectancy and placebo effects, and the addition of blind research participants and staff, where possible, would be of benefit. In addition, research designs would also benefit from randomised participants, clearly defined populations and appropriate sample sizes (Wahbeh et al., 2014). Furthermore, a

standard rigorous clinical design should be employed that adheres to clearly defined reporting guidelines (Nortje et al., 2016). According to Wahbeh et al. (2014), these remedies would improve the quality of studies and, thus, the quality of evidence that may support the adoption and availability of CAM and mind-body therapies in organisational settings.

According to Cherniack (2016) and Koithan et al. (2012), developing and implementing adequate conceptual frameworks and research designs that truly capture the active ingredients in traditional healing systems and CAM can be challenging. A multifaceted research design would be required to examine the effects and moderators involved in an entire traditional healing system (Cherniack, 2016). Consider a healing system such as Ayurveda, for example (of which yoga is a subgroup). A research design complex enough to capture all the intricate ingredients of the methods and mechanisms in this CAM approach presents challenges regarding research methodology and replication (Cherniack, 2016). Research design of both traditional medicine and CAM is further confounded by the wide variation of forms of traditional healing and CAM practiced. This can be said for the numerous variants of yoga studied to support mental health conditions and the moderators at work within the delivery of these interventions (Emerson, 2019).

According to Cherniack (2016) unless research studies can adequately capture these variations and/or moderators at work in these interventions more succinctly, efficacy for traditional healing practices and CAM may remain compromised and as such, adoption and availability will remain limited. Several other problems in research studies on CAM and traditional healing practices were cited by Cabral et al. (2021) including heterogeneity, publication bias, and, as suggested earlier, too few rigorous randomised control studies. Cramer et al. (2018) also noted that not only do studies in this field appear to be low in quality, but high dropout rates among studies were also considered compromising. The emerging salient theme is the impact on building efficacy in the field.

Specific to research on mind-body therapies to treat trauma, over the past 10 years there has been censure regarding earlier research in the field of trauma-sensitive yoga (Holger et al., 2018). Critics have suggested that earlier studies did little to enhance the credibility of this intervention, based on the lack of validity and significant inadequacies in research design (Spinazzola et al., 2011; West et al., 2017). Holger et al. (2018) note that additional limitations related to the wide variety of yoga styles covered in studies are also problematic and an issue reported across studies. Inadequate control conditions have also been highlighted as a research study design issue. Although many studies (Spinazzola et al., 2011; West et al., 2017) paved the way for what might be considered a new and innovative approach to the treatment of trauma-related conditions, these studies had limited sample sizes, failed to include adequate control conditions, and did not employ a protocolised intervention to support the conclusions purported in findings (Holger et al., 2018).

A significant turning point in terms of testing the efficacy of TCTSY and building momentum regarding the utility of this intervention was attributed to van der Kolk et al. (2014). Van der Kolk et al. (2014) employed a research design that included RCTs. As a result, this research, to some degree, rectified some of the inadequacies highlighted by critics in earlier research. Inadequacies in TCTSY research were further amended by Nguyen-Feng (2020) in a study exploring trauma-sensitive yoga as an adjunctive health treatment for trauma-affected individuals. Research on TCTSY, as suggested earlier, remains in the nascent stages, and organisational and service providers' perspectives on the feasibility and acceptability of this intervention are yet to establish proof of concept (Nguyen-Feng et al., 2019).

To summarise, critics have suggested that the quality of evidence captured in research studies exploring treatment outcomes and the mechanism at work in CAM practices and mind-body therapies has been lacking, and as a result, this has impacted the efficacy building of these

interventions. Further organisational constraints impeding the development of CAM practices are captured in the section below. The following section highlights how resistance by CAM practitioners to secularise, regulate, and standardise practice may also be stifling the growth of mind-body approaches in health.

Secularising and Standardising

According to Suwankhong et al. (2011), a significant challenge to integrating traditional healing practices in national healthcare systems has been a reluctance on behalf of traditional healers to meet national regulatory healthcare standards. There is a lack of professional standardised and regulated practice across CAM and traditional healing (Suwankhong et al., 2011; Williams et al., 2020). According to Willam et al. (2020), governance and oversight of CAM and traditional healing practices in the form of a regulatory body is a crucial step toward integrating these practices with more conventional ways of treating patients in healthcare. To date, a change in national regulatory healthcare standards, professional standardised practice, and oversight has to some degree been rejected by traditional healing practitioners (Ashworth & Cloatre, 2022; Suwankhong et al., 2011). Standardisation and regulation of these practices are seemingly unpopular with practitioners of these particular healthcare modalities (Ashworth & Cloatre, 2022). In a study conducted in Indonesia, the lack of professional standardised practice in CAM and the absence of regulatory bodies for these modalities was one reason for negative attitudes among psychologists concerning CAM (Liem & Newcombe, 2020).

To address this issue, Chung et al. (2022) suggested implementing an umbrella single authority over CAM treatment approaches to health. According to Chung et al. (2022), one authority across all CAM disciplines may help distribute agency, facilitate power sharing, offer a platform for negotiation, and protect practice philosophy. This said, secularising and standardising CAM to overcome epistemological differences has raised concerns among

supporters of CAM (Nahin & Straus, 2001; Verhoef et al., 2005). Practitioners and advocates of these practices fear that regulation and standardisation of these approaches may diminish the inherent value of each intervention, thus reducing therapeutic benefits (Sharp et al., 2018). Sharp et al. (2018) suggest that if the underlying principles of any one approach is secularised/standardised, fragmented, split off, and/or narrowed to fit a pre-existing dominant ontology, then historically speaking, what often remains as previously mentioned is a therapeutic approach that barely resembles its original form, foundational tenets lost in terms of how they were initially proposed (Sharp et al., 2018).

Other issues regarding standardisation and regulation, aside from safety and quality of practice, included the cost of establishing protocols and processes for CAM within a new healthcare framework. The cost of such a merger for practitioners of these healthcare systems was noted as a significant prohibiting factor (Chung et al., 2022; Sharp et al., 2018).

Therapeutic Landscapes not Fit for Purpose

Another organisational barrier mind-body practitioners raise is the scarcity of appropriate therapeutic environments in organisational settings to deliver mind-body therapies (Laws, 2009). Problems with the therapeutic landscapes in institutional medical care settings have been well-documented over the years, with therapeutic and healthcare environments being deemed unfit for purpose (Bell et al., 2018). The term therapeutic landscape was first coined by health geographer Wilbert Gesler in 1992. Gesler's work involved creating specific environments to promote and contribute to a healing sense of place. Bell et al. (2018) suggest that the therapeutic landscape, where the service user receives treatment, must be fit for purpose in terms of its design and the artefacts displayed within the environment. With regard to government-funded organisations, such as hospitals and prisons, the spaces in which service users are expected to recover are often fraught with problems and have little resemblance to a place of healing (Gesler & Curtis, 2017). This raises the question

of who holds the decision-making power regarding therapeutic context and design and further highlights questions about who can influence the development of public therapeutic landscapes (Hoyez, 2017).

Cost

Feasibility and cost of any intervention in healthcare are considered two of the most salient determinants relative to the adoption of any treatment protocol (Kaplan & Porter, 2011). In reference to trauma treatment, several studies have been conducted on the cost/benefits of different Western treatment protocols, with EMDR the front-runner in terms of organisational expenditure (Mavranezouli et al., 2020). Ferry et al. (2015) noted that the economic burden of PTSD for one adult in Northern Ireland over a period of 12 months was approximately £87,000 ($NZ180,150). One facilitating factor in favour of the adoption of CAM and mind-body therapies in organisational settings is their relative cost-effectiveness when compared to more conventional Western healthcare practices. In a review of the cost of CAM by Herman et al. (2005), when compared to healthcare practices as we know them in more conventional settings, some CAM therapies are considered more cost-effective compared to healthcare treatments as usual. The health conditions and CAM interventions reviewed by Herman et al. (2005) that were perceived in this study as cost-effective included acupuncture for migraine, manual therapy for neck pain, spa therapy for Parkinson's, self-administered stress management for cancer patients, pre-and post-operative oral nutritional supplementation for lower gastrointestinal tract surgery, biofeedback for patients with functional disorders, guided imagery, relaxation therapy, and potassium-rich diet for cardiac patients. According to the authors, one of the advantages of performing cost-benefit and cost-utility analyses for treatments is that the outcomes for each condition/intervention can be summarised into a single unit (monetary dollars). Therapies with different health outcomes can be compared and contrasted based on the differences in the summary measures (Herman et al., 2005).

In a more recent study by Kong et al. (2013), CAM was not only considered more cost-effective ($p=0.003$), when compared to allopathic treatments, but CAM carried fewer side effects ($p=0.0001$). Several mind-body clinical studies and narrative reviews in the 1990s also concluded that mind-body therapies were not only producing positive outcomes when compared to treatment as usual, but they had the added benefit of being cost-effective (Hellman et al., 1990). In a later systematic review by Herman et al. (2012) exploring the cost of CAM in integrative care, of the 56 comparisons made in the higher-quality studies, 29% showed health improvements with cost savings for complementary, integrative therapies versus usual care.

In NZ, the ACC funds therapy for survivors of sexual abuse or assault through its Sensitive Claims contract. Anyone who has experienced sexual abuse and has developed a mental injury such as PTSD as a result, may be eligible for fully funded support (ACC, 2024a). Early supports include "Getting Started" and "Early Supports" sessions, which help the person affected by sexual trauma engage with therapy and begin planning their care (ACC, 2024a). If longer-term treatment is needed, individuals can undergo a specialist cover assessment to formally diagnose a mental injury. Once cover is accepted, ACC provides access to ongoing therapy as well as a range of social and vocational supports. These may include mind–body therapies such as mirimiri (traditional Māori massage) and trauma-sensitive yoga, tailored to the person's unique needs. Support can extend over a three-year period (ACC, 2024a). For those experiencing significant functional impairment due to sexual violence, ACC may also provide weekly compensation or lump-sum payments (Community Law, 2024). Overall, ACC's Sensitive Claims services ensure that survivors of sexual violence can access comprehensive, culturally responsive, and long-term recovery support at no cost, this can include mind-body therapies.

Education

According to a study in the United States (US) by Waldstein et al. (2001) the inclusion of mind-body curricular content in university healthcare programmes was a very salient topic of special interest and debate. Over the past 20 years, the inclusion of CAM or mind-body course curricula in tertiary institutions has remained scarce, as has the inclusion and integration of these practices into national healthcare systems (Maizes et al., 2006; Teixeira Medeiros et al., 2019). University training programmes such as clinical psychology training programmes prefer the likes of the boulder model to structure course curricular content (Frank, 1984). The boulder model is a science practitioner model for graduate programs that provide applied psychologists with a foundation in both research and scientific practice. It was initially developed to guide clinical psychology graduate programs accredited by the APA (Frank, 1984). A lack of education in CAM or mind-body course curricula for mental health trainees, according to Maizes et al. (2006), has limited the use of mind-body practices in the field of mental health care. Maizes et al. (2006) note that a concerted effort must be made on the part of universities, psychiatry residency training programs, and other primary care areas to devote significant curricular time to helping trainees learn the science behind mind-body therapies. It is integral if these techniques are to become accepted as legitimate approaches to recovery and healing, as well as regular services found within national care systems. Sierpina et al. (2007) echo this sentiment and suggest that experiential learning in training programmes and exposure to evidence supporting the efficacy of mind-body therapies in schools of medicine and beyond is critical if real access to these services is to be actualised in mainstream conventional healthcare systems.

The University of Auckland in NZ, has recognised a need for education and knowledge regarding the relationship between mind and body. As such, the Medical and Health faculty course curriculum content has been developed to support this notion, namely, the course

Human Mind and Body Relationships (Auckland University, Medical and Health Science, retrieved 23 August 2024).

Training programmes outside the tertiary sector, specifically tailored to CAM practices and mind-body therapies, are being slowly introduced in some areas; however, the type and quality of the training can vary significantly (Williams et al., 2020). Online searches for training produce various study options at any given time throughout the year (van Der Kolk, M.D., n.d.; Somatic Experiencing International, n.d.).

In a study by Oosterbroek and Dirk (2021) course attendees' experiences of the TCTSY training programme highlighted several facilitating and constraining factors. According to participants, travel expenses, alongside course costs, were identified as prohibitive, and the TCTSY training programme was referred to as a training reserved only for the privileged few (Oosterbroek & Dirk, 2021). This sentiment was also highlighted in relation to accessibility for trainees from vulnerable and Indigenous communities, that is, marginalised populations very much in need of diverse options in terms of trauma treatment (Oosterbroek & Dirk, 2021). The cost of attending a TCTSY programme was a constraining factor (Oosterbroek & Dirk, 2021). In addition, because the short 20-hour introductory training course was compulsory in terms of certification in TCTSY, some facilitators found the added cost of attending this short programme was prohibitive and a significant factor that deterred potential trainees from the training pathway (Oosterbroek & Dirk, 2021).

Training curricula and content were highlighted as a key strength of the TCTSY training programme, and as such, a facilitating factor regarding trainee engagement in, and adoption of, this mind-body intervention. According to Oosterbroek and Dirk (2021), TCTSY facilitators who had completed the 20-hour introductory course, as well as the 300-hour training program, highlighted the foundational curricula's ethos and principles as

empowering, particularly in reference to the fundamental TCTSY tenet that a trauma-affected individual must have the ability, throughout therapy, to exercise choice. Participants also spoke positively of the programme's focus on interoceptive awareness, particularly for individuals accustomed to mental and physical dissociation (Oosterbroek & Dirk, 2021). Overall, the trained TCTSY facilitators' remarks supported the TCTSY protocol as an adjunct to other post-trauma treatment talk-based modalities. This programme's ability to increase mindful interoceptive awareness and sustained attention to inner body experience was deemed unique and key to the protocol's success. These evaluations were in line with other findings (Price et al., 2017; Blaustein & Kinniburgh, 2010; Kinniburgh et al., 2005).

Although the curricular content and tenets of the TCTSY programme were considered favourable in the study conducted by Oosterbroek and Dirk (2021), findings did highlight concerns regarding the lack of prerequisites required to attend the training programme. Where most mental health training programmes typically expect an undergraduate university degree in mental health to enter into mental health training programmes, the TCTSY programme was considered somewhat relaxed in this domain. Concerns noted included safety issues in reference to TCTSY-trained facilitators inadvertently re-traumatising trauma-affected individuals, as well as vicarious trauma to the facilitators in reference to the impact of bearing witness to a trauma-affected individual's narrative. Further to this, findings highlighted that TCTSY employs language that can be overly rigid and prescriptive, in an attempt to avoid triggering trauma survivors during the yoga practice. According to findings by Oosterbroek and Dirk (2021), the prescribed language employed in TCTSY did not appear to be supported by empirical evidence, nor did the suggestion that westernised yogic language may be triggering for trauma-affected individuals (Oosterbroek & Dirk, 2021).

Time

Long hours, waitlists, and insufficient time for patient care have long been highlighted as an issue for general practitioners (GPs) across the globe regarding the provision of quality and innovative healthcare treatments (Kay et al., 2008). In a US study conducted by Astin et al. (2005) with a sample of medical students and doctors, insufficient time with patients to competently discuss health conditions through a mind-body/psychosocial lens was reported to be an issue in adopting these approaches in primary care. Sierpina et al. (2007) also noted insufficient GP clinic time as a constraint to prescribing mind-body therapies, a determinant that has been highlighted as a significant barrier to family medicine practitioners supporting these ways of working in healthcare.

Safety and Staff Interest

Feasibility studies play an important role in highlighting the specific elements that impact the development, provision, and maintenance of new therapeutic approaches in mental health (Clark et al., 2014). One such feasibility study on trauma-sensitive yoga was conducted by Clark et al. (2014). The specific components tested, in terms of feasibility, included recruitment, safety and acceptability of the programme by organisational staff, and participant reaction to the intervention. Findings demonstrated the safety and acceptability of trauma-sensitive yoga as a community-based group intervention for survivors of interpersonal violence. In addition, the yoga intervention was considered well attuned to this community agency's financial and physical parameters, and staff were motivated to engage in professional development in trauma-sensitive yoga (Clark et al., 2014).

A second study, exploring the feasibility of trauma-sensitive yoga in service, was conducted in Canada by Cochrane et al. (2019). Cochrane et al. (2019) engaged in, and reported on, an eight-week trauma-sensitive yoga intervention with traumatised inner-city youth to explore whether these individuals perceived any meaningful benefit from the yoga programme. The

researchers were also interested in uncovering motivating factors for attending sessions, barriers to attendance, and how the pilot programme could be improved (Cochrane, 2019). Although youth in this sample reported meaningful benefits from the programme in the areas of mindfulness awareness, mental and physical health, and structure and routine, barriers included the distraction of background noise while in session, the small size of the practice room, and the dosage of treatment (once per week over eight weeks) being too low (Cochrane et al., 2019).

In summary, the previous chapter highlighted several organisational factors that have facilitated and constrained access to, adoption, and availability of CAM, mind-body therapies, and trauma-sensitive yoga. Research studies on mind-body therapies were highlighted as a significant constraint, with regard to their lack of rigour and inadequate research designs, thus impacting the efficacy of mind-body practices and opportunities for further research and funding. Other constraints included the field's resistance to regulatory overarching bodies and standards of practice, which are typical for most healthcare scopes of practice. The inadequacies of therapeutic spaces in most organisational settings, to engage in mind-body interventions, were also highlighted as an organisational constraint. A significant lack of educational opportunities in the tertiary sector to learn about CAM and the mind-body connection was also noted as unhelpful with regard to the development of this field, as was time to recommend, learn about, and deliver these therapies to service users. In terms of TCTSY, there appeared to be mixed reviews, in terms of facilitating and constraining factors. On the one hand, cost was raised regarding the significant financial investment required from individuals wanting to train in this intervention, while on the other hand curricular content on TCTSY endorsed by the Justice Resource Institute was credited as second to none.

Chapter Eight: Cultural Factors

CAM, Mind-Body Therapies, and Trauma Sensitive Yoga

Culture can be loosely described as a system of collectively held worldviews, values, practices, and assumptions that determine how group members perceive, think, feel, and behave (Spencer-Oatey & Franklin, 2012). The themes and extracts in the following section represent determinants, under the heading of culture, that have facilitated or constrained access, availability, and the adoption of mind-body therapies and TCTSY as adjunctive interventions to treat trauma-related conditions. Cultural factors in the context of this literature review include social, linguistic, and group-specific characteristics, such as colonisation, racism, and stigma that have impacted the adoption, availability, and implementation of CAM, traditional healing, and/or mind-body interventions in the health and mental domains (Rolleston, 2022).

Interest in Traditional Healing Practices

According to McCabe (2008), there has been an upsurge of interest from Indigenous and other populations in Australia, Canada, the United States and NZ in Indigenous mind-body practices, ceremonies, and events to treat not only trauma-related conditions, but other mental and physical health conditions. McCabe (2008) noted this increase in interest as a facilitating factor promoting greater use of embodied cultural practices. One treatment that has increased in popularity in recent years is the Canadian Aboriginal community's use of sweat ceremonies. Sweat ceremonies are mind-body cultural practices performed in a heated, dome-shaped lodge that uses heat and steam to cleanse toxins from the mind, body, and spirit (Marsh et al., 2015). Sweat lodges are now considered commonplace, a legitimate method of achieving, maintaining, and promoting healing and wellness (Marsh et al., 2015). Peoples from outside Indigenous communities are learning about the benefits of mind-body practices,

such as sweat lodges, and, as such, are also engaging in these forms of healing at increasingly higher rates (McCabe, 2008).

Rongoā Māori (a system of Māori healing) based on Māori cultural traditions practised in NZ is another example of a traditional healing approach that has become more popular in recent years (Koea & Mark, 2020; Mark et al., 2017). Currently, the Ministry of Health funds the provision of Rongoā Māori, with a number of providers of this service working independently and alongside primary healthcare services to support and assist Māori whaiora and their whānau (Mark et al., 2017). As interest in these traditional healing practices increases, greater understanding of the benefits of mind-body cultural practices may have an impact on access, availability, and adoption of these practises (Ahuriri-Driscoll et al., 2008).

Anecdotal Evidence Centuries Old

A factor that has facilitated the use of traditional healing and mind-body therapies for Indigenous populations is that these practices have been tried and tested for centuries by a diverse range of cultures across the globe (Barry, 2006). Traditional healing practices known to Indigenous cultures existed long before the arrival of Western health methods of care (Peltzer, 2009). These practices have focused on the wellbeing of the whole person, many of which have been subsumed under the umbrella terms traditional healing and CAM (Peltzer, 2009).

Before the advent of Western healthcare methods and processes, Indigenous peoples looked to the eternal and ubiquitous spirit of their ancestors and community healers to assist with curing ruptures and injuries to the self (Gone, 2016). Rongoā Māori in NZ, and Lakota doctoring in the US are examples of this - examples that remain highly relevant as healthcare services for Māori and Lakota populations today (Gone, 2016; Market al., 2017). Rongoā Māori or traditional Māori healing in NZ, like Lakota doctoring, is a healing system

developed from cultural traditions (Ingram,1989). Rongoā Māori is described as a method for treating the infirmed through practices that embody not only wairuatanga (spirituality) as part of the whole person, but also physical, mental, and social aspects of the individual's health and wellbeing (Mark et al., 2017). Modalities identified under the umbrella term Rongoā Māori include ritenga (customs) and karakia (incantations and rituals involved with healing), rongoā (physical remedies derived from trees, leaves, berries, fruits, bark and moss), mirimiri (body-based therapy), wai (the use of water to heal), and surgical interventions (Jones, 2000). Rongoā healers do not practice uniformly, and, as such, there is considerable diversity in the application of modalities within and across regions, iwi, hapū and whānau (Durie, 2004; Jones, 2000). The use of Rongoā Māori has remained important for Māori, in terms of their health and wellbeing, and is a testament to what works for the Māori when they have incurred an injury or have fallen ill (Mark et al., 2017). Furthermore, Rongoā Māori supports an alternative ontological perceptive to Western understandings of health, a perspective important to this thesis and one that has stood the test of time, based on years of anecdotal evidence (Jones, 2000).

The Whole Person is Critical to Health and Wellbeing

Those who advocate for holism as a way of conceptualising health and healthcare have facilitated and promoted the use of complementary and alternative medicine (CAM), traditional healing methods, and mind-body interventions (Ellerby, 2000; Moodley & Shireen, 2019). Holism represents the idea that the whole being, mind, body, and soul, is more than a sum of its parts (McMillan et al., 2018). As such, when it comes to illness, holism supports the notion that treating the whole person is of greater benefit than treating individual ailments in isolation (McMillan et al., 2018). The principle of holism, as defined by McMillan et al. (2018), directly contrasts the binary tenets embedded in Cartesian dualism, a tenet foundational to the way Western conventional healthcare systems perceive

the human body. From the viewpoint of Cartesian dualism, as previously mentioned, mind and body are separate from one another and, therefore, untreatable as a whole on this basis (Moodley & Shireen, 2019; Trnka & Lorencova, 2022; Valles, 2020). Cartesian dualism compartmentalises mind and body, and, in addition, ignores the impact and essence of spirit as a subjective element of human existence (Trnka & Lorencova, 2022).

Rongoā Māori is a good example of an approach to health that supports the philosophical principles of holism (Mark et al., 2017). Rongoā Māori has situated holism at its centre; that is, this approach to healing conceptualises the human being and their injuries as multifaceted within the Indigenous context, as such, it utilises a whole-bodied approach to assist the individual's return to wellness (Wilson et al., 2019). Holism, as such, is a fundamental underlying principle critically important to Māori healers and healthcare (Mark et al., 2017).

Holism as an epistemological, philosophical viewpoint has been promoted by particular groups, such as those in NZ that promote Rongoā Māori (Mark et al., 2017). Those advocating for Rongoā Māori share similar views with those practising CAM, from the perspective that injury (mental, physical or spiritual) has a multisystemic etiology and impact. Advocacy by way of conceptualising an individual and their personhood, health, and injury through a holistic lens has promoted the use of treatments such as CAM, mind-body therapies, and traditional healing, and, as such, has facilitated the adoption and availability of these ways of practising health care (Wilson et al., 2019).

National Healthcare Policy and Tertiary Curricular Content

Over the past decade, against a backdrop of evolving global challenges, an increase in the use of traditional healing and CAM practices has been evolving (WHO, 2023). Albeit slowly, CAM and traditional healing practices are finding their way into national healthcare policy and tertiary course curricula (Teixeira Medeiros et al., 2019; Park & Canaway, 2019). This

introduction has, in turn, promoted greater understanding of these types of approaches and, as such, has facilitated and promoted greater adoption of these interventions. More specifically, the contribution of traditional healing practices to primary health care and universal health coverage is gradually gaining political recognition (WHO, 2023). A testament to this increase in interest and value in these ways of practising healthcare is the development of national policies about the use of CAM and traditional healing in mainstream healthcare spaces, at the governance, level across the globe (Park & Canaway, 2019). In 2012, of the 194 World Health organisation member states, only fifty-eight states developed healthcare policies reflecting the importance of traditional medicine, whereas in 2018, states that engaged in policy development supporting traditional healing numbered 79 (WHO, 2023). This increase in interest in traditional healing practices has also slowly permeated health curriculum content in the tertiary sector (Bodeker, 2010). There is evidence of a cultural shift toward the promotion of alternative healthcare, such as CAM and traditional healing practices.

According to a systemic review by Redvers and Blondin (2020), the existence of medical environments, practitioners, and facilities piloting or fully integrating traditional (culturally specific) healthcare alongside Western medical care curriculum content under the same roof has more recently gained popularity. One example of the integration of traditional medicines into a medical tertiary residency programme was successfully achieved in 2015 by the University of New Mexico Public Health Department, in the General Preventive Medicine Residency Programme (Kesler et al., 2015). Successful delivery of the two modalities, traditional healing and conventional medicine, was taught side by side utilising a range of training methods including learning directly from traditional healers, and direct participation in healing practices by residents (Kesler et al., 2015). The inclusion of these learning opportunities has resulted in doctors in this particular context being well-trained in approaching patient care specific to the diverse population of New Mexico - doctors that are

reportedly well-equipped with knowledge of culturally based, whole-person-oriented healthcare practices (Kesler et al., 2015).

Lawrence et al. (2021) have also documented how different healthcare systems have been taught in medical training programmes in South Africa. Lawrence et al. (2021) noted problems in that some courses relied heavily on what was described as hidden curricula (lessons learned by students in their interactions with the service providers, as opposed to being taught in lectures in class) to teach the traditional healing components of the curricular. They reported that South African traditional health systems were taught through a hidden curricula lesson format, a method of learning described by students as particularly unhelpful, with regard to gaining competencies in this domain (Laurence et al., 2021). Students highlighted the hidden curricula learning format as a deficit in formal teaching and an issue that contributed to their uncertainty in treating services users that asked for traditional medicine (Laurence et al., 2021). Students noted in the Lawrence et al. (2021) study that their education, and subsequent practice in medicine, could benefit from improved learning opportunities, which involved not only experiences demonstrating the fundamentals of traditional health systems (hidden curricula), but also content-driven lectures on traditional healing. Students in this study also suggested that the promotion of broader structural integration of the two health systems (traditional and conventional medicine), within the medical training programme context, would be of benefit to students and service users alike (Lawrence et al., 2021).

This shift in approach and delivery of healthcare education in the tertiary sector, toward acknowledging Indigenous methods of healthcare and more holistic and mind-body approaches to healing, was also highlighted by Kersey et al. (2018). The authors reflected on a salient interplay of discourse within the tertiary sector in NZ between the delivery and usage of health treatments, and broader social, cultural, economic and environmental factors

that are constraining the teaching of and use of specific treatments (Kersey et al., 2018). The authors described a longstanding neoliberal bias in the tertiary education sector, which has historically focused narrowly on Western health education, ignoring the impacts of wealth distribution and Indigenous stewardship of health policies (Kersey et al., 2018).

Kersey et al. (2018) illuminated that tertiary education programmes in healthcare are responsible for training and adequately preparing health professionals to meet the health needs of the populace. This includes an acknowledgement of social, cultural, economic, and environmental biases in healthcare treatments and an acknowledgement of epistemological viewpoints, models, and modes of healthcare that serve the population (Smith et al., 2022). The authors also noted that the representation of curricula to date, regarding traditional healing models and practices, has been tokenistic at best and openly stifling at worst. This issue was reflected in an article published by Smith et al. (2022), where a wero (challenge) by Indigenous staff at Waikato University in NZ was delivered to their non-Indigenous colleagues, suggesting that the workforce in this tertiary institution go beyond pedagogical comfort zones and well entrenched Western ideologies, to a place where learning and incorporating Indigenous knowledge into their teaching practices and curriculums is commonplace. The request invited staffers to go beyond the incorporation of surface-level Indigenous tokenistic curricula content, reflective of white privilege and fragilities, to a more robust understanding and implementation of culturally aligned models and practices that truly and adequately serve the needs of the Indigenous population according to principles of Te Tiriti o Waitangi (Smith et al., 2022).

The cultural factors highlighted in this section underline that there has indeed been a shift and perhaps an intention by healthcare policymakers and tertiary institutions, in terms of course curricula, to implement traditional healing practices and modes of health and wellbeing that are more culturally aligned and holistically orientated. However, the changes made to date on

delivery have been difficult to implement and as such remain somewhat insufficient. It is the latter that is constraining access, availability, and adoption of these whole-bodied approaches to health and wellbeing.

Traditional Medicine and Stigma

There is a well-entrenched societal bias in Western healthcare systems, in favour of science-based allopathic biomedicine and against medical pluralism or holism (Redvers & Blondin, 2020). Redvers and Blondin (2020) have noted that, as a result of this bias, Indigenous peoples (service users), utilising traditional medicine as part of their healthcare, have been remiss in disclosing their use of traditional medicine or alternative healthcare practices to their Western, more conventional healthcare providers, for fear of the stigma attached to engagement in these practices. Service users noted that finding a safe space to discuss the relevance of these types of interventions to their health and well-being was lacking, as there appeared to be an obvious lack of respect for traditional healing alternatives (Redvers & Blondin, 2020). Terms such as "witch doctors", with regard to traditional healers, were bandied around in primary healthcare spaces, terms according to Redvers and Blondin (2020), that were far too common and a narrative that undermined the utility of shared decision-making methodology (complementary approaches) that may be in the best interest of patients seeking help (Baines, 2012; Redvers & Blondin, 2020). The stigma associated with the use of traditional healing practices has not made for greater access or availability of these interventions in healthcare, in fact, the derogatory terms aligned with these practices has cast traditional healing practices into the shadows, a position that has been difficult to get out from underneath of (Lucana & Elfers, 2020). Lucana and Elfers (2020) noted that there needs to be an end to the characterisation of Western traditions as superior, and the stigmatisation of Indigenous cultural practices, such as those mentioned in previous sections of this thesis. What would be more beneficial to the healthcare service user, in terms of

access to alternative healthcare interventions, is the creation of discerning therapeutic spaces and practices that bridge Indigenous and Western methods of care, and honour ancient assumptions of healing alongside more conventional way of treatment (Mark et al., 2017).

Cultural Misappropriation

Cultural misappropriation has played a role in constraining access to CAM, mind-body therapies, and traditional healing practices (Brown, 2005; Houghton, 2024). Misappropriation, according to Brown (2005) and Houghton (2024) occurs when particular cultural components are isolated from the whole, extracted, and decontextualised from their broader cultural frameworks, typically by cultural outsiders. Misappropriation refers to the unauthorised use of cultural components, practices, or rituals from a specific culture, which can cause significant harm in some cases.

The misappropriation and distortion of traditional healing practices has been a negative outcome that has accompanied the increase in interest in these interventions across the globe (Ijaz et al., 2016), This problem has been fuelled by a request from governing bodies to regulate and standardise traditional healing practices. Secularising these healing processes, according to Ijaz et al. (2016), has opened a door to significant cultural misappropriation for a number of healing modalities, including acupuncture. Acupuncture, an Indigenous East Asian age-old medical practice, is used in healthcare by 80% of nations worldwide (Ijaz et al., 2016). It is now regulated in 29 countries. Acupuncture is a derivative of Chinese medicine, a practice that has long been preserved by family lineages, apprenticeship-style training, and the study of the Chinese medical classics (Ijaz et al., 2016). This practice has been standardised, institutionalised, and bio-medicalised in both approach and content, regulatory processes in educational settings so operationalised that it has forced separation of acupuncture from its Chinese medicine roots. This process is a clear example exemplifying cultural misappropriation (Lin et al., 2022; Wolpe, 1985).

A second example of cultural misappropriation of traditional healing can be seen in reference to the Amazonian Indigenous peoples and ayahuasca (a psychoactive tea or brew) used for ritual and healing purposes since pre-Columbian times (Tupper, 2009; Tupper, 2016). Ayahuasca is used in Amazonian shamanic practices (Tupper, 2009; Tupper, 2016). Aspiring ayahuasqueros undertake an extended and difficult period of training that can take decades to a lifetime to complete. For many Indigenous peoples of the Amazon, ayahuasca is integral to ritual practices, myths, cosmologies, art and music, and most other aspects of cultural life (Tupper, 2009; Tupper, 2016). However, ayahuasca is now used outside its native Amazonian habitat in dozens of countries around the world, including Asia, South America, North America, Europe, Australia and Aotearoa New Zealand. The media has circulated reports of the extraordinary experiences and benefits of ayahuasca use, making this brew an attractive curiosity in some Western social settings. The use of ayahuasca, by populations by those other than Amazonian Indigenous peoples, has been challenged, and legal battles over the religious use of ayahuasca have spanned decades. The globalisation of ayahuasca, and particularly a cross-cultural version of this brew, has raised issues regarding the cultural appropriation of traditional Indigenous knowledge and spiritual practices (Tupper, 2009; Tupper, 2016). The distribution of ayahuasca under a range of brand names highlights the inappropriate distribution of this substance for material reward (namely financial gain), which according to Tupper (2009; 2016) fails to acknowledge legal sovereignty over intellectual property. Māori culture, identity, and healthcare practices in NZ, according to Lai (2010), have also become marginalised and misappropriated by Pākehā in this context.

Rongoā Māori is another salient example of a practice that is becoming increasingly commercialised and, as such, marginalised due to increased interest from particular parties - parties interested in commercialising Indigenous knowledge (Mark et al., 2019). According to Mark et al. (2019), this has resulted in a range of abuses, including misuse, misrepresentation,

and misunderstanding of Māori Indigenous knowledge. Mark et al. (2019) noted that recently (for ease of classification and categorisation), Rongoā Māori has been subsumed under the umbrella term CAM. Mark et al. (2019) highlight that locating or situating these healing processes in such a way dislocates Rongoā Māori from its place as a culturally appropriate healing treatment for Māori. It also demeans the cultural integrity of this approach to Māori health (Mark et al., 2019). Subsuming Rongoā Māori under the term CAM also reduces Rongoā Māori to a healthcare intervention that is a commodity for social and economic trade, as opposed to a culturally appropriate way of life for Māori (Wikaire, 2020). Although, for the most part, there is a desire for Rongoā Māori to be more fully integrated into the national healthcare system, cultural misappropriation and a lack of systemic support, coupled with the prioritisation of Western medicine in these spaces, has made this transition difficult (Wikaire, 2020).

Challenges noted to date have included threats to rongoā credibility and the risk of mātauranga appropriation (Mark et al., 2019). Already identified in the current NZ healthcare system, when discussing kaupapa Māori practices of health care, has been denial or omission of wairuatanga in health, which is critical to Rongoā Māori health practices (Cram et al., 2003). In addition, according to Timmermans (2003) and Kukutai & Cormack (2020) the patenting of traditional Indigenous practices by colonisers, without consent from or compensation to the original bearers and holders of these practices, has also become a significant problem.

According to the United Nations, prevention of misappropriation is a recommendation and fundamental principle supported by this organisation, a tenet that highlights the need for greater understanding of cultural misappropriation and an equity-driven regulatory approach, in the context of health care worldwide (WHO et al., 2013). Without greater understanding of cultural misappropriation and its impacts, these cultural assaults to Native communities will

continue to increase, as will further marginalisation of traditional healing practices (which include mind-body interventions) worldwide.

Colonisation, Trauma and the Whole Person

A facilitating factor increasing understanding of trauma as a whole-bodied/whole-person intergenerational experience has been the promotion of terms such as historical trauma (Hartmann & Gone, 2014; Menzies, 2019). Historical trauma, as a term, better explains the significant impacts of colonisation, in reference to trauma and its effects on the whole person, their personhood, and collective identity. More recently, Indigenous cultures from around the world who have experienced the significant impacts of colonisation have challenged the psychiatric construct of trauma and the diagnostic classification of mental health conditions, such as PTSD, in favour of terms such as historical trauma (Hartmann & Gone, 2016; Menzies, 2019). To fully appreciate the impacts of historical trauma in light of colonisation, and to develop appropriate and effective treatments, Hartmann and Gone (2016) and Menzies (2019) suggested that broader definitions that encompass and illustrate the persistent temporal racial abuse and inequities that affect generations of people must be utilised, and previous reductionistic conceptualisation of these events must be challenged. PTSD, as conceptualised in the DSM (APA, 2013), with its focus on trauma memory and avoidance behaviours, minimises the far-reaching impacts of events experienced by Indigenous peoples, and the ongoing and far-reaching effects of the collective traumatic response (Hartmann & Gone, 2014; Kirmayer et al., 2014; Menzies, 2019).

Mind-Body Therapies within a Cultural Framework

According to Barudin (2021), mind-body therapies such as trauma-informed yoga practices can be culturally adapted to better suit the needs of Indigenous populations. Barudin (2021) reorganised and shaped a trauma-informed yoga programme for Indigenous adolescent girls aged 13–17 from rural and remote Inuit communities in Quebec, Canada. All the girls were

under the care of youth protection services in a residential facility. The yoga sessions incorporated a blended model of cultural teachings, group dialogue, and trauma-informed yoga, which involved group talk therapy and cultural teachings alongside gentle progressions of physical (yoga) postures and poses, guided meditation, breathwork, centring practices, and beadwork. The 60-minute sessions were intended as a strengths-based community strategy to promote relational healing, cultural connectedness, safety, and resilience. Young (2014) also explored the relevance and appropriateness of yoga as a healing intervention for African American women who have experienced sexual trauma. The study suggests that this mind-body approach could be culturally syntonic.

To summarise, it is recognised that there is an upsurge of interest in the use of traditional healing approaches, some of which fall under the purview of CAM and mind-body therapies, and some which do not. There is centuries-old anecdotal evidence that traditional healing and whole-bodied approaches to healthcare work (WHO, 2019). Regardless of whether these approaches have been unpacked and understood through a Western scientific lens, the anecdotal evidence for their success remains true (Mark et al., 2019). Indigenous cultures and First Nations peoples have held onto a holistic perspective to healthcare in the face of Cartesian dualism and biomedicine and, as a result, ontologies and epistemologies regarding the mind-body connection, metaphysical, and spiritual health are increasingly reshaping the understanding of health (Mark et al., 2017). This reality has been recognised by the WHO (2019). The contribution of traditional healing practices and CAM into tertiary institutions, health care, and universal health coverage, albeit slow, is taking place, and has more recently been understood through the lens of integration for the benefit of all (Park & Canaway, 2019). That said, the constraining factors that have been highlighted in the literature include the impact of stigma with regard to engaging in traditional medicine and the high possibility

of cultural misappropriation when traditional medicine is integrated into more Westernised conventional healthcare frameworks (Mark et al., 2019).

Chapter Nine: Individual Factors

CAM, Mind-Body Therapies and Trauma Sensitive Yoga

Individual healthcare decisions at the micro level are influenced by a number of factors, including but not limited to worldviews, cultures, religions, norms, lifestyles, personal beliefs and ethics, as well as acceptability, availability, affordability and appropriateness of the services available (Dawkins et al., 2021; Levesque et al., 2013). In the context of this literature review, individual factors include practitioner and service user thoughts and behaviours that directly impact engagement or, in the case of mental health practitioners, the adoption of CAM, traditional healing and/or mind-body interventions. The following section will highlight individual factors that have had a bearing on access, availability and adoption of CAM, traditional medicine and mind-body therapies to treat trauma-related conditions.

Interest in CAM use

There is increasing evidence that a greater proportion of the Western population across the globe is using CAM services. A study by Reid et al. (2016) referencing the Australian population supports this premise, as does a study by Liu et al. (2021) in the Aotearoa NZ context. Lui et al. (2021) noted that public interest in and use of CAM has increased over the past few decades. CAM is now considered an effective complement to other more conventional allopathic healthcare practices. Since the early 2000s, CAM in NZ has been slowly gaining service user and political recognition. In response to a request by the Ministry of Health in 2001 the Ministerial Advisory Committee on Complementary and Alternative Health (MACCAH) provided information and advice on the regulation of these practices, consumer information needs, research, and integration of CAM into the healthcare context in NZ. Documentation noted by this advisory committee during the early 2000s highlighted that CAM therapies were used by 67% of patients at medical practices, 38% of emergency

department presenters and by 49% of cancer patients (Liu et al., 2021). In NZ, according to Liu et al. (2021), there has been and still is growing awareness and use of holistic treatments that come under the banner of CAM, and this includes mind-body therapies to treat trauma-related conditions (Liu et al., 2021).

Demographics and Attitudes Toward CAM

According to McFarland et al. (2002) and more recently Lee et al. (2022), certain groups and demographics are prominent in terms of the use of CAM, traditional medicine and mind-body therapies. This notion is supported by studies situated in the US, Canada and NZ (Bishop & Lewith, 2010; McFarland et al., 2002). In both Canada and the United States for example, CAM use appears higher in western regions than in other areas and in Canada, and the western provinces are much more likely than those in the east to engage in CAM. In addition, lifestyles and values associated with vegetarianism and spirituality are also have been predictive of a preference for CAM use (Cramer et al., 2018; McFarland et al., 2002). According to McFarland et al. (2002), members of racial or ethnic minority groups appear less likely to use CAM than people of Caucasian descent. Elevated income is also a strong predictor of CAM use. Bishop and Lewith (2010) suggest that demographics have a significant bearing on CAM use; this study also highlighting that service users of CAM are more likely to be female, middle-aged and educated. CAM users also tend to have more than one medical condition and are more likely than non-users to have specific health conditions. CAM users in a study by Bishop and Lewith (2010) also rate their general health as poor.

According to a study by Pledger et al. (2010), CAM users in NZ were more likely to be well-educated, female, middle-aged, wealthy and of European descent. According to these authors, CAM users in NZ reported health conditions that were seemingly difficult to treat. Pledger et al. (2010) also noted that CAM users in the NZ context are more likely to utilise health services and seek health information. To recap, particular demographic factors and

characteristics are directly related to the utility of CAM. A more recent study by Lee et al. (2021) supports the view that to date there is a lack of comprehensive, nationally representative data in NZ on prevalence and patterns of use of CAM, including its use in relation to conventional medicine(s) in New Zealand.

In terms of demographics and practitioner endorsement of CAM, in a study by Wilson et al. (2011) in Indonesia and Australia, age was highlighted as a constraining factor with regard to the adoption of CAM (Wilson et al., 2011). Older participants in this study noted that the time taken to upskill in these new modalities and the cost involved in doing so was prohibitive. Professional development in CAM was considered a poor financial choice when compared to the benefits of improving knowledge and understanding of mental health in terms of biomedical approaches, epidemiology, and pharmacology; that is, topics that may not have been adequately covered in this population's postgraduate tertiary training programmes.

Preferences according to gender have played a role in the likelihood of doctors using mind-body practices and recommending them to their patients. According to a US study by Sierpina et al. (2007), attitudes and beliefs of female GPs regarding the health benefits of mind-body interventions have facilitated greater engagement in these types of therapies. Female doctors, according to the authors, were significantly more likely to use mind-body medicine in their own self-care and the care of their patients than were their male counterparts (89% vs 67%). Female doctors also had significantly higher beliefs about the benefits of mind-body techniques on health disorders than male doctors in several of the conditions examined in the study, including headache, irritable bowel syndrome, and anxiety (fear), which is the foundational issue of conditions such as PTSD. In a more recent study by Stainton et al. (2025) twenty-six health science staff and students completed an online questionnaire to explore attitudes, knowledge and perceived benefits of mind-body therapies

as a community-based alternative modality to medication. Findings from this study suggest that this population were aware of the physical benefits of mind-body practices, particularly yoga, but they lacked awareness of the social, emotional, and spiritual benefits mind-body therapies might provide. Although 42% of participants would recommend mind-body practices as a social prescribing asset, the opposite was true for yoga. This finding according to the authors was potentially due to poor knowledge or personal engagement with yoga. The authors recommended implementing educational strategies to increase knowledge of mind-body practices and yoga with health staff which may in turn have an impact on availability and access for service users. Attitude, in the context of this study, refers to a set of emotions, beliefs, and behaviours toward a particular object, person, or event. Professional and service user attitudes toward CAM, traditional healing and mind-body therapies are important factors to consider concerning adopting and engaging in the therapies under investigation in this study. Trends in attitudes toward treatment approaches can have both direct and indirect implications for the selection of interventions by service users and healthcare professionals and the adoption of CAM skills by practitioners in any given population at any given time (Mojtabai, 2007). Monitoring trends in public and professional attitudes and beliefs about particular services and treatment protocols has implications for service use, engagement, design and public health campaigns. A perceived lack of effectiveness of mental health services such as the ones under investigation in this study can be a major obstacle to treatment access and availability for treatment-seeking service users.

With regard to healthcare practitioners' attitudes toward CAM, it seems attitudes have changed over the past 20 years from a somewhat neutral attitude toward CAM practices to one of positivity. In a study conducted in the early 2000s, psychologists reported that they were impartial towards CAM use, an attitude, according to Bassman & Uellendahl (2003), that in part contributed to the infrequent adoption and integration of these modalities into

psychological clinical practice. Bassman and Uellendahl (2003) noted that unclear guidelines and regulations regarding the use of CAM set out by the APA also contributed to a lack of interest in upskilling in CAM practices to treat mental health. In addition, there appeared to be little direction as to how CAM was to be situated within psychology at the time. Almost a decade later, in a similar study by Wilson et al. (2013) of psychologists in Australia, a positive attitude towards CAM was found to significantly contribute to the adoption and integration of CAM into clinical practice. Findings in this study suggested that psychologists held not only favourable attitudes towards CAM but were more likely to recommend the use of CAM to clients. Psychologists were also open to completing referrals so their clients could connect with CAM practitioners as an adjunct to treatment as usual (Wilson et al., 2013). In a study by Kong et al. (2013), which included a sample of 238 medical practitioners, 66% stated that they believed in CAM and a proportion of the sample considered CAM better than allopathic treatment ($p=0.0001$) for psychological disorders (27%). Many participants in the study reported that integrative medicine was more effective than allopathic treatment alone ($p=0.0001$). In a more recent US study Chatterjee (2023) exploring service user experiences in primary care with regard to GP attitudes and CAM use, participants reported discomfort confiding in their GPs about their CAM use. This study also noted that service users struggled to find practitioners entirely supportive of CAM therapies and practices.

According to a study by James et al. (2018), even in places like Sub-Saharan Africa, where CAM use is more prevalent than in Western countries, participants reported struggles disclosing their CAM use to their more conventional healthcare providers. Reasons for non-disclosure included a fear of receiving improper care, encountering the healthcare providers' negative attitude toward their choices and a lack of understanding of CAM on the part of their healthcare providers.

Sharp et al. (2018) reported that GPs in the UK have mixed attitudes towards CAM. Some believe that the term CAM is too ambiguous, and that the spectrum of approaches encompassed under this one label is too broad. In addition, Sharp et al. (2018) noted that although GPs support some CAM practices such as chiropractic and osteopathy, other practices such as reiki were considered less helpful. In terms of yoga, the sample in this particular study did not consider yoga as a practice that should be classified under the banner of CAM (Sharp et al., 2018).

GPs in primary care are often the first point of contact when a person is experiencing problems with their mental health (Thorsen, 2017). GPs are also the gatekeepers of secondary services in terms of the referral process within the broader healthcare context. As such, the attitudes and beliefs held by GPs regarding CAM have directly affected the number and quality of referrals CAM services receive. Lewith (2001) noted that physicians are hearing positive reports from their patients about CAM, that said, according to the authors, physicians attributed these positive outcomes to a placebo effect, as opposed to the effects of the mechanisms at work in the specific CAM modalities their patients were engaging in. Physicians also reported that time spent in CAM practices by the service user (CAM appointments often much longer than those offered by a GP) was also responsible for the perceived benefits achieved through CAM (Lewith et al., 2001).

Western medicine for trainee nurses according to Groft and Kalischuk (2005) is presupposed on ‘truth’ and is considered the touchstone against which all new types of medical experiences (traditional, complementary and alternative, mind-body practices) are compared. Healthcare options and choices are influenced by health care workers’ perceptions of care practices, how much they understand them and how well they can articulate the mechanisms at work in these interventions to their patients. According to Groft and Kalischuk (2005), student nurses found it difficult to grasp the phenomenological concept of mind-body

therapies because it is less concrete than other therapeutic interventions based on a scientific premise. Groft and Kalischuk (2005) suggested that more evidence regarding the success of mechanisms at work in the interventions might yield an increase in the use of mind-body therapies. The exploration of mind-body therapies in nursing training might challenge the epistemology perspectives these healthcare trainees have internalised from the medical educational institutions and the learning environments they had been exposed to, and their own lived experiences of conventional Western cultural healthcare. Via engagement in mind-body experiential learning, health professionals might be afforded anecdotal proof for and/or against interventions that may differ from their preconceived ideas of what works. This learning, in turn, may facilitate dialogue with patients about alternative mind-body practices and may, in turn, challenge the foundations on which their healthcare knowledge is based.

In NZ, according to a review by Liu et al. (2021), of the eleven studies reviewed, which included 2060 healthcare professionals (general practitioners, nurses, midwives, pharmacists, physiotherapists, medical specialists) healthcare professionals in NZ were generally positive regarding CAM use. That said, concerns were raised by some professionals about the lack of scientific evidence, regulation, safety, and the financial costs of CAM. A need for evidence-based CAM practice and stronger CAM regulation was also highlighted by this sample as a constraint in terms of the use these modalities. Findings in this study indicated that 82.3% of the sample referred patients to CAM practitioners and approximately 25% of GPs practised CAM. Of the types of CAM available or known to GPs, this study suggested that this group considered acupuncture as the most helpful, commonly practised and referred to of the different modalities. Up to 58% of GPs and Plunket nurses in the sample were interested in further education on CAM, and up to 66.7% of GPs in the sample were in favour of the idea that CAM should be included in the medical curriculum.

Health Professionals Lived Experience

The personal use of CAM practices has not only promoted positive attitudes toward CAM, and it has promoted referrals to these practices among health professionals. Studies suggest that a lived experience of the use of CAM among health professionals has had an impact on the likelihood of professionals referring to CAM practitioners. Among Indonesian clinical psychologists, Liem and Newcombe (2021) found that although limited knowledge about CAM remained a defining feature among the sample, positive attitudes toward referring to CAM was prevalent among the sample who used CAM themselves. Alongside this was a real interest in integrating CAM into clinical practice. Many clinical psychologists in the sample reported that they or a family member had experienced positive outcomes in terms of their personal engagement with CAM practices. Participants with positive experiences of CAM demonstrated positive beliefs and attitudes about CAM practices. Psychologists in the sample who did not necessarily understand or practice these modalities were reportedly open to referring clients to CAM practitioners as an alternative or complementary way of treating mental health issues based on their own personal lived experience of these practices (Liem, 2019). In a sample of 172 nurses, 77 doctors, 30 pharmacists, and 83 other healthcare providers conducted in Trinidad-Tobago (Bahall & Legall, 2017), the prevalence of CAM use among the sample was 92.4% for nurses, 64.9% for doctors, 83.3% for pharmacists, and 77.1% for other health care providers. Healthcare providers in this sample also expressed an interest in being educated in the CAM field. Of the doctors and pharmacists in the sample over 50 % of each group agreed that an integrated therapeutic approach in healthcare was superior to conventional medicine alone. In addition, it is important to note that in this study, less than 10% of the sample reported that conventional medicine should be used as the only method of treatment.

Healthcare Provider Knowledge

Literature suggests that knowledge of CAM among health professionals has both facilitated and constrained the adoption of and referrals to CAM practitioners. Liem (2019) discovered that in Indonesia, knowledge of CAM has had a bearing on the attitude of psychologists towards these practices. In turn, this has influenced the adoption of these practices not only for personal use but also for recommendations, the strength of referral, and adoption of these ways of working with clients in psychological settings.

In the USA, the Blueprint of the Health Service Psychology Education Collaborative outlined knowledge, recommendations and expectations that mental health professionals be familiar with CAM modalities given the recent upsurge in interest in services from service users (Barnett & Shale, 2012). Suggestions indicated that mental health professionals upskill in terms of their knowledge of CAM, client culture regarding these practices and treatment preferences. Despite these recommendations, to date there remains no specific regulatory standard from APA or for clinical psychologists in the USA to gain knowledge and to upskill in this field (Barnett & Shale, 2012).

In an Australian study by Wilkinson and Simpson (2002), 74% of nurses in the sample were reported as having knowledge of and personally engaging in CAM use in the 12 months period prior to the study. The types of CAMs used by this population were comparable to those used by the general population including aromatherapy, massage, relaxation, meditation, chiropractic and herbal therapy. Aromatherapy, relaxation, and massage were the most popular therapies among this group. In a study by Bahall and Legall et al. (2017) also targeting a sample of healthcare providers (n = 362) the majority (50–75%) reported fair knowledge of herbal, spiritual, alternative, and mind-body types of CAM.

In a more recent systematic review by Mensah and Anderson (2015), articles were selected and examined that referred to barriers and facilitators of the use of mind-body therapies by healthcare providers and clinicians. Findings from this systematic review revealed that research validating the effectiveness of healthcare providers' use of mind-body therapies to care for themselves is emerging. That said, there is little focus on barriers and facilitators that healthcare providers encounter with these mind-body practices. This raises the question according to the authors of the feasibility and sustainability of these interventions.

As CAM knowledge and interest has increased, CAM treatments according to Liem (2019) have been more frequently integrated into conventional psychological health services. According to Liem (2019), in spaces where integration has been implemented, service users have said that physicians (who had managed to combine CAM into their practice) were more sympathetic in their communications with patients when compared to those physicians who employed conventional healthcare alone. Service users also stated that knowledge about CAM practices held by psychologists was value-added in terms of their care and competency in CAM practices complementing and building on an already established skill set in mental health treatment and delivery. Participants in the Liem (2019) study also highlighted that CAM practices in psychological services were the way of the future, a skill set slowly building in popularity and demand among service users. The authors also noted that dialogue regarding integrating CAM practices into a psychologist's skill sets was not only being espoused by psychologists working face-to-face with clients but also by executive members of psychology associations in the context of formal events. Conversations and discourse regarding adjunctive treatments for sufferers of mental health conditions within these broader contexts were perceived as supportive of CAM in terms of complementary medicine being integrated alongside what has been described in this study as more conventional Western psychological approaches.

Cost to the Professional

Although there has recently been a shift in interest and use of CAM, mental health professionals have warned that there is a significant cost they must bear if they were to upskill or train in these ways of working (Wynn, 2015). Furthermore, according to Wynn (2015), there is a real lack of confidence and aptitude concerning skill acquisition in this professional domain, a factor also reported as a significant barrier to learning about these mental health interventions. This issue, according to Wynn (2015), is further exacerbated by the overwhelming number of professional development options available to mental health professionals to study as part of their post-tertiary skill development. The question for mental health professionals is where they should best direct and allocate their time and money.

Cost of CAM was also highlighted in reference to burden of payment for these services from the perspective of the service user. In the US, the cost of CAM health products, acupuncture, chiropractic, yoga and meditation, was considered by users as relatively costly and a contributing factor to a significant financial burden for service users in healthcare. This issue has impeded CAM use (Chatterjee, 2023). Chatterjee (2023) suggested that service users stop attending CAM treatments due to unrealistic pricing and monetary concerns. Although participants in the Chatterjee (2023) study expressed a desire and willingness to use healing strategies beyond what is considered conventional medicine, the price of these interventions posed a significant challenge to their utilisation. When service users are spending what they consider a disproportionate amount on any health care service, they expect prompt results and real value for money. According to Chatterjee (2023), this type of service user behaviour is rooted in a broader Western societal expectation of receiving immediate returns on any investment.

TCTSY Interreligious and Intercultural Factors:

High rates of trauma among Indigenous peoples and an ever-growing amount of displaced people (refugees) who have experienced the effects of war trauma have according to Kirmayer (2007) called for new and innovative therapeutic interventions and greater consideration of what does and does not work with regard to healing for these populations (Kirmayer, 2007). Kirmayer (2007) highlights a need for new methods to help those who have experienced psychological trauma, in order to offer sufficient psychological support to overrepresented groups. Kirmayer (2007) espouses the ever-expanding literature now available on universal bodily responses of trauma (Annamalai, 2014; Droaÿek, 2007; van Stegeren et al., 2007; van der Kolk, 2015) and the importance of utilising (alongside more conventional approaches) complementary mind-body treatments such as yoga to cross the bounds of culture, religion and language (West et al., 2017). TCTSY, according to Emerson & Hopper (2011) is an appropriate and useful therapeutic choice to help heal trauma, particularly that experienced by the refugee population. TCTSY is an intervention aimed at healing the body but not talking but increasing interoceptive awareness. As such, it is an approach that can be used in both interreligious and intercultural settings (Emerson & Hopper, 2011). Droåÿek (2007) has highlighted the benefits of employing TCTSY not only in reference to symptoms such as re-experiencing, hyperarousal, poor sleep, poor concentration, and irritability but also in reference to managing internal experiences of distress that are amplified in social situations. Droåÿek (2007) denotes that engagement in traditional healing methods such as yoga is a critical step toward increasing opportunities for people to heal outside conventional approaches to treatment for trauma. With its emphasis on the mental, emotional, intellectual and spiritual aspects of healing and its various levels and approaches to relaxation, interoception and strength, yoga can heal body and soul. That said, yoga according to Vallath et al. (2010) should be employed as a complementary therapy and

should be implemented with caution and sensitivity with strict protocols and guidelines such as that espoused under the banner of TCTSY (Emerson & Hopper., 2011).

Shortage of facilitators:

As mentioned earlier, TCTSY is one of many trauma-sensitive yoga protocols practised across the globe. Although it was developed in the US in the early to mid-2000s. In NZ, TCTSY remains a relatively new approach to treating trauma-related conditions and was only given approval by the Accident Compensation Corporation under the Integrated Services for Sensitive Claims contract in 2017 (H. Parry, personal communication, May 11, 2022). In the ACC context, TCTSY was employed as an adjunct therapy to more conventional talk therapy with those who had suffered a mental injury as a result of sexual abuse. In NZ TCTSY facilitators available to run these programmes remain scarce with only 18 students from New Zealand completing the TCTSY programme to date and 11 of which are currently certified (K. Swartz, personal communication, 14 November 2023). It is unlikely that TCTSY as a service is readily available in most communities in NZ as facilitators of this intervention at this time are considered few and far between.

In summary, this second section of the literature review has highlighted a range of factors globally that have facilitated or constrained the availability, access and adoption of CAM/traditional healing, mind-body practices more generally, and trauma-sensitive yoga and TCTSY to treat trauma-related conditions. This literature review highlights that there are a great number of studies highlighting what these factors are around the globe. That said, little is known about what promotes or constrains the use and adoption of mind-body therapies in NZ. As such, this study aims to explore what these factors are, which has led to the following research question - the current research study ex[plores what facilitates or constrains access to, adoption and availability of mind-body complementary and alternative approaches and TCTSY as adjunct interventions to treat trauma-related conditions in NZ.

Chapter Ten: Research Design

This chapter presents the research design, methods and methodologies used in the current study. Included is an overview and explanation of the research methods employed and a rationale for this chosen approach. The specific methods used in recruiting and interviewing participants is presented first, followed by ethical considerations across the breadth of the study. The chapter will conclude with the processes employed to analyse the data.

An overview and guiding principles of the current study:

This study has been designed as qualitative interview-based research, and as such, is based on access to participant storying of the focal topic. As such, to begin it is important to highlight that narrative psychology and analysis of storying is fundamental to the current study. Narrative psychology assumes that human beings are storied beings. That is, people make sense of the world by narrating their experiences (Murray, 2003, 2018). The stories people produce are a combination of their own insights and broader meaning structures or narratives in society.

Narrative psychology is a valuable framework for qualitative interview-based research because it focuses on how individuals make sense of their experiences through storytelling (Murray, 2003, 2018). Narrative psychology supports a more empowering research relationship by treating participants as experts on their own experiences, respecting their voice and agency (Smith, 2012). In cross-cultural or Indigenous contexts, this approach helps honour cultural knowledge systems and allows worldviews to emerge authentically through participants' own stories (Smith, 2012). Overall, narrative psychology enriches interview-based research by capturing the complexity, cultural meaning, and human depth of participants' lived experiences. According to Murray (2003,2018) human beings are natural storytellers, that is we exchange stories as part of our everyday social interaction. With regard

to storytelling, building insights and understanding broader meaning structures, Murray (2003,2018) suggests there are different levels of analysis that people engage in throughout the human exchange of storying. At the personal level, human beings organise their own stories based on their own perceptions and evaluations of the social milieu and behaviour within the environments in which people exist. That is, as singular entities people story their own lives and the experiences going on around them based on their own meaning making in reference to personal beliefs systems, opinions and the attitudes they hold at any given time. At the interpersonal level according to Murray (2003,2018), interpersonal processes are factored into meaning-making within each given situation. For example, in the context of qualitative interview-based research (interviewee/participant) impression management may be a process that shapes the narrative, as might an active agenda held and exercised by either party. Other processes that are intertwined/embedded in the conversational narratives and analysis of story might include specific personal characteristics of each person such as personality. These interpersonal processes (and others), alongside the content of each narrative, shape and influence meaning-making for each party. A third level of analysis that influences meaning-making within narrative is 'position' according to Murray (2003,2018). Murray (2003,2018) suggests there is a positional level of analysis that factors into and influences the meaning made and exchanged as stories are told. Again, when considering qualitative research, particularly interview-based qualitative research, the social position of the interviewer and participant has a bearing on the stories told and the analysis of these stories by either party. The questions posed, and responses offered, are shaped by the perceived social position of each party.

With narrative psychology in mind, I engaged participants in conversations via one-on-one interviews. As a way of generating participant accounts, qualitative interviewing is based on the premise that to understand people and the worlds in which they live, we engage in

conversation. Brinkmann et al. (2018), like Murray (2003,2018), believe that storytelling (conversation) is one of the most basic modes of human interaction, a behaviour vital to understanding and to learning about another's experience. This study has employed qualitative interviewing as a way of understanding the participants perspectives regarding the topic under investigation. I have considered language in this study as informed by constructionism. Simply put, the product of inquiry (data) gathered via the interviewing process, built connection, understanding and meaning making and from this, the creation of a social reality for myself as the interviewer and the participants interviewed evolved (Foster & Bochner, 2008; Harel & Papert,1991).

Although our reality was socially constructed throughout the interview, I am aware that individuals engage with the world subjectively. My subjective experience of the interview and that of the participants is difficult to identify and cannot truly be knowable. That said truth was not completely ignored based on the argument of subjectivity, but rather I adopted a critical realist position. That is, I assumed a constructionist epistemology while holding a realist ontology (Harel & Papert, 1991; Healy & Perry, 2000).

While this study is aimed at gaining a deeper understanding of the participants' views via the interview process, there is no strict attempt by me to design a study from which the findings of the sample can be generalised to a larger population (Brinkmann., 2013). This study is intended to stimulate an inclusive and dynamic dialogue between me and the audience regarding the topic of interest. The reader is asked to consider the information revealed in this thesis through the lens of a multilayered narrative inquiry, representative of a bricolage paradigm where a variety of theoretical influences, cognitive processes and human experiences on the part of the participants and myself have been weaved together and assembled in the space between the subject-object divide (Yardley, 2008). That is, that the knowledge in this thesis as suggested earlier is shaped by the subjective experience of those

involved and the objective reality of the world under investigation a philosophical position that dates back to the early 1900s (Caird, 1909).

Sampling Method:

To define the sample universe for this study a sampling method was selected based on the field of interest and who might be most likely to contribute data in terms of relevance and depth of knowledge. While exploring the literature relevant to the study I recognised that the topic under investigation in the NZ setting was in its nascent stages regarding education, practice, research and development (Lui et al., 2021). As such I realised early in the project that the number of participants that could narrate their lived experiences as professionals working in the field of trauma, mind-body therapies and/or trauma sensitive yoga, was somewhat limited.

As such a purposive sampling method was selected. Purposive sampling is a form of non-probability sampling whereby the participants for the research are deliberately and conveniently chosen. More often than not these samples are relatively small, as is the case in this study (Nyimbili & Nyimbili, 2024). The threat of bias on my behalf in the case of purposive sampling and this study should be considered irrelevant as participants were recruited and selected specifically based on the assumption that they could illuminate information regarding the phenomenon being studied. Hammarberg et al. (2016) suggested that purposive sampling methods are reliant on my early suppositions in reference to which members of a population will be most useful to the findings of the research. As such my assumptions when considering populations that might be useful to the study have had a significant influence on the data collected and the overall findings.

The small sample selected in this instance comprised of three groups of professionals from the health and education sectors. This sample is reflective of a particular subset of the

population interested in the topic under investigation in NZ, a sample which I believed might be well informed in the field under investigation. As such, the limited number of participants selected for this study served primarily as a very specific and well attuned source of narratives regarding the topic of this research. The homogenous purposive sample that underpins the present research (Nyimbili & Nyimbili, 2024) encompassed participants who shared similar traits and characteristics. They either had an interest in the field of trauma and mind-body therapies and/or trauma sensitive yoga. Participants were also people who had current work experience in the field of trauma treatment and /or education. Regarding purposive sampling, my judgment to select an appropriate and useful sample has been critical to the outcome of the study (Rai & Thapa, 2015). As such, the selection inclusion and exclusion criteria in terms of recruitment was thoughtfully and carefully considered.

Participants and Recruitment Process:

The sample for the study comprised of 10 females and two males ranging in age from 23 years to 57 years. One participant identified as Māori, nine as NZ European, one as American, and one as Scottish. The study included registered psychologists, TCTSY facilitators, and educators who were employed in applied psychology programmes in tertiary institutions across NZ. All participants had been working in their respective roles for over five years. These individuals were geographically dispersed throughout NZ.

Three groups of four people were recruited for the study. The groups consisted of four registered psychologists, four TCTSY facilitators, and four tertiary educators. The groups were evenly balanced in number to ensure a range of theoretical and conceptual perspectives and ways of treating trauma related conditions were included in the study. The sample included practitioners and educators that professionally oriented toward both bottom-up and top-down theorical perspectives and interventions about trauma related conditions (Foa et

al.,1989; Grabbe & Miller-Karas, 2018). Top-down processing refers to processing information (with respect to this study trauma) using cognition (thinking), which engages the brain and more specifically the prefrontal cortex. Examples of interventions for trauma treatment include cognitive behavioural therapy and prolonged exposure, both of which predominantly involve talk therapy. Bottom-up processing refers to techniques and interventions that initiate sensations and movements of the body. Sensory information is experienced by the trauma affected individual via the external environment. According to these methods, sensory receptors via sensation initiation let the brain know that the trauma affected person is safe. These processes do not engage the prefrontal cortex. Bottom-up methods employ the wisdom of the body to access the trauma that is held in bodily systems such as fascia or connective tissue. Via bottom-up techniques the trauma affected individual does not have to evoke conscious memory of traumatic experience to process and heal trauma (van der Kolk, 2014). Examples of bottom-up approaches include yoga (Emmerson & Hopper, 2011), arts therapy (Talwar, 2007) and somatic experiencing (Payne et al., 2015).

Purposive Sample:		
Group One	Group Two	Group Three
Registered Psychologists	Trauma Center Trauma Sensitive Yoga Facilitators	Tertiary Educators
Four participants selected	Four participants selected	Four participants selected

Table 1: Purposive sample: Groups for the current study are identified based on work roles and numbers per group.

NOTE: To ensure participant anonymity with regard to the small number of participants in the study no further demographic details will be made available.

With bottom-up and top-down processing methods in mind, the registered psychologists as a group were selected for the study based on the rationale that this group of professionals had been trained in "what works" regarding evidence-based top-down interventions to treat trauma related conditions. TCTSY facilitators were selected as they were a group of specialists in their field, practising/facilitating a mind-body therapy that was explicitly protocolised to treat trauma-related conditions from a bottom-up perspective. The tertiary educators were selected based on their understanding of course curricula in applied psychology programmes and their lived experience of university psychology culture in the tertiary sector. Tertiary educators were included in the sample, specifically focusing on the intersection between clinical training environments and the delivery of treatment by the healthcare workforce. I have assumed, as a result of engagement with literature across the study, that the psychology training environment is a central component to understanding why different therapies are adopted or endorsed over others within the healthcare setting (Nelson & Steele, 2008).

The inclusion criteria differed for each group. The psychologists recruited for the study needed to be fully registered and to have some interest in mind-body interventions for treating trauma-related conditions. The TCTSY facilitators needed to have completed the 20-hour introductory and 300-hour TCTSY training programmes at Justice Resource Institute and to be currently providing the TCTSY service in NZ. The tertiary educators in the study needed to have some interest in mind-body interventions to treat trauma-related conditions, to be employed at a tertiary institution in NZ and were teaching at the postgraduate level in an applied psychology programme. A more general criterion for selection for all participants was that they must reside in NZ at the time of recruitment.

The recruitment process for the current study began via word-of-mouth using a snowballing technique (Parker et al., 2019). I shared my interest in the phenomenon under investigation with work and study colleagues, and interest and attention in the study grew from there. Peers suggested names of individuals who might be interested in the topic. I followed up by connecting with prospective participants via email, using addresses provided by colleagues from work and study.

My initial email to potential participants included a short paragraph introducing myself and the reason for my contact. Attached to the initial email was a participant information sheet (Appendix A), which included the purpose of the research, the broad aims of the project, what participants would be committing to in terms of their involvement, potential foreseeable risks, rights as participants in this study, how data would be managed and stored, and who else was engaged in the research in terms of supervisors. The email concluded with an invitation to be involved in the study. A consent form (Appendix B) was also attached to this email, along with an email address for potential participants to contact one of the project supervisors to ask further questions before committing to the study.

Although confidentiality was covered in the information sheet and consent form sent to participants in the initial email, this topic was discussed in greater depth with potential participants via email prior to their commitment to the study. The fundamental tenet of respect for autonomy underpins the notion of confidentiality. The term confidentiality emphasises that any information that reveals the identity of participants collected during the research process will not be disclosed without their permission (Wiles et al., 2008). In the case of this study, I was aware that the recruitment process had begun via word-of-mouth and as such the need for absolute discretion was critical. As such, very careful consideration was given to the use of data obtained from particular individuals' narratives, chiefly the TCTSY group, due to the limited number and potential identification of these facilitators in NZ.

Participants from all three groups were informed that identification would be anonymised wherever possible throughout the study. The reason this point was emphasised was twofold – first, to create an environment during the interviews where participants felt they could engage in full, frank, and open dialogue with me, and secondly, to ultimately avoid any undesirable consequences for any individual or organisation that had engaged in the study. Potential participants were informed that this would be achieved by way of pseudonyms. The identification of a pseudonym by each participant was broached early in the research process and prior to the interviews. Allen and Wiles (2016) suggested the selection of a name by research participants is rarely arbitrary. Instead, research participants often take the time to consider and select a name that best represents an aspect of themselves or something important to them. I witnessed this careful consideration in this study.

In addition to discussing confidentiality prior to the interviews, participants were informed via email that the interviews would be conducted via Zoom. I considered Zoom to be the most appropriate method of data collection at the time, as it would ensure that the allocated timelines for this study would be met. This decision was based on recent issues encountered by researchers when COVID-19 regulations were enforced and travel restrictions were implemented (Oliffe et al., 2021).

There are both benefits and challenges associated with using Zoom as a data collection method in qualitative research (Oliffe et al., 2021). In terms of challenges, a weak or interrupted internet connection may affect the discussion, which often requires the researcher to stop the recording and resume the interview at a later time. Verbal and non-verbal communication adjustments are also made when using Zoom. Zoom tends to change the feeling of "being there"; that is, the interview is often felt differently by interviewee and interviewer and as such, this can alter the dynamic or style of the conversation (Oliffe et al., 2021). There are also particular skills employed when using Zoom to collect data via

interviewing that do not need to be considered when interviewing someone face-to-face. These skills include knowing when a person has finished speaking and when it is your turn to speak. This can add another layer of complexity when using this particular type of communication platform. In addition, a computer screen from a visual perspective only offers a limited scope of action, and as such, few opportunities to use non-verbal skills (Oliffe et al., 2021). Simply put, instinctive communication can deteriorate the discussion due to the limits of verbal and non-verbal communication via Zoom and as such, meaning-making and understanding on the part of both the interviewer and interviewee can be lost or misinterpreted at times (Greeff, 2020). The benefits of employing Zoom as a mode of collecting data include time and cost saving in terms of mitigating the need to travel. This method of data collection can also facilitate the ability to record the sessions directly onto a password-protected computer, which is both safe, convenient and time-effective (Oliffe et al., 2021). The recording of the interview via Zoom also allowed me to focus on the interview content, process and verbal prompts. It enabled an opportunity to generate a verbatim transcript of the interview. A verbatim transcript holds greater validity for qualitative research and its outcomes (Jamshed, 2014).

The Interviewing Process:

Wengraf (2001) suggested that the degree to which interview questions in this mode of research are structured has a significant impact on the information shared by participants during the interview. Considerations relevant to the domain of interviewing included how to pose the research question and interview questions effectively, the number of questions to use, the type of language to employ, and how the interview elements might align with the overarching conceptual framework of the study. The interview questions and final interview guide were derived from a number of sources of information and inspiration (Appendix C), which included existing theory and literature on the topic of interest and my personal

experiences of healthcare and treatment provision, trauma and the use of mind-body therapies. Although this is not an ethnographic project, from the perspective of the researcher as bricoleur (Denzin, 1994; Yardley, 2008), multiple experiences, cognitive networks, information processes and creative leaps played a role in the choice and development of the interview guide. Simply put, I melded methods, methodologies, theories, life experiences and philosophical positions together in a creative manner to bring the interview guide to life.

The interview guide was based on a semi-structured format, intended to provide access to each participant's unique experience of the phenomenon under investigation. Accordingly, the questions in the guide were also intended to provide opportunities for both parties in the interview to contribute to the discussion, generating more nuanced responses that might illuminate a greater understanding of the research question (Brinkmann & Kvale, 2018). The lightly structured guide represented a schematic range of questions that I considered important to explore in reference to the research question. The questions in the interview guide were developed in a way that I believed might offer structure, while evoking a detailed and personal account of the participant's life worlds of the phenomena under investigation.

A semi-structured interview approach was selected for additional reasons, including that, when compared to questionnaires, an interview offers an opportunity for two-way communication and a comprehensive discussion on the topic of interest (Horton et al., 2004; Husband, 2020). As such, the interviewee can ask questions and clarify answers, both of which may elucidate unintentional but relevant knowledge and experience pertinent to the research question. It was hoped that the interviews might resemble a semi-formal conversation between two people on the topic of interest in an atmosphere of safety which might promote the sharing of rich and plentiful thoughts, ideas and opinions relevant to the topic of interest.

The interview guide was based on systems theory as a conceptual framework, a theory compatible with my methodological orientation towards narrative inquiry, and the emphasis placed on levels of narration from the person to the group and the system. Systems theory refers to the study of society as a complex arrangement of elements, including individuals and their beliefs as they relate to a whole, the whole being organisations, institutions and a country or global entity (Friedman & Allen, 2011). Bronfenbrenner's systems theory (Bronfenbrenner, 1977) has guided the broad design of this study. The advantage of systems theory as a research paradigm is that it provides a transdisciplinary, concurrent, critical, and normative exploration of the relationships between systems (Bronfenbrenner, 1977; Laszlo & Krippner, 1998). In the context of this study, the individual is considered a part or element within a broader cultural system, governed by specific rules and ways of being and knowing. Culture is influenced by organisational systems, which is often determined by larger overarching social, legal and political entities. What all systems have in common is the way they are organised in terms of characteristics, structures and functions (Anderson et al., 2003; ; Bronfenbrenner, 1977; Luhmann, 1995; Parsons,1972; Patrício et al., 2020). I believe that there was a range of factors across the ecological social system that may have a bearing on the facilitation and constraint of the phenomenon under investigation in terms of access, availability and adoption. The use of systems theory as a broad conceptual framework was not only considered valuable to explain these factors in context (health, organisational, cultural and individual factors), but it was considered a beneficial lens through which to elucidate and understand these factors in terms of their impact on behaviour and how each component influences the other in a non-linear way (Bates & Bacon, 1972).

The interviews were conducted by the primary researcher over two months in mid-2022. Throughout the interviews, I both elicited information, opinions, and ideas and listened to what the participants themselves had to say about their lived worlds related to the topic under

investigation. The narrative and knowledge construed and constructed as a result of this inter-action generating meaning and a social reality on part of both parties across the length and breadth of the interview process (Brinkmann & Kvale, 2018).

During the period leading up to starting each interview, processes were intentionally put in place to promote greater certainty, predictability and safety for the research participants (Carter et al., 2021). These processes were also put in place to promote kindness and convey respect in terms of the participants' contributions to the study (manaakitanga) (Pere & Barnes, 2009). These processes included contacting the supervisor 15 minutes prior to starting an interview to ensure they were on hand to help manage or mitigate any unforeseen circumstances, asking the participants how they would like to start the interview (karakia, prayer), a period of introductions and whanaungatanga, and rereading of the information sheet and consent form to ensure a thorough understanding of the research project and its purpose was assured prior engaging in the actual interview questions. Each participant was also informed that they could stop the interview at any time. They were also made aware that they could withdraw from the study entirely at any time up until the thesis was submitted.

Each interview began with questions about the participant's current role and work environment, as well as their theoretical understanding of "top-down and bottom-up" approaches to treating trauma. The participants were also asked about what training experiences they had encountered that informed their understanding of how trauma is treated. Pawson (1996) and MacFarlane and O'Reilly-de Brún (2012) describe this type of interviewing as theory-driven interviewing. In theory-driven interviewing the researcher, at the beginning of the interview, teaches the interviewee the theory-language of the study alongside the conceptual framework in which the research question has evolved. Simply put, the researcher identifies for the interviewee the language embedded in the study and asks the interviewee to provide 'answers' considering the theory-language provided. The language

chosen in this research was reflective of the knowledge and experiences that the sample would be familiar with, that is, the language of the academic and/or practical disciplines that I believed the sample might have previously engaged with in training or their respective work environments. From this point, I manoeuvred around and within the interview guide searching for, as Kvale (1996) and Murray (2003, 2018) would describe as nuggets of essential meaning from the knowledge/information arriving from both parties in the conversation.

The questions that followed the opening of the interview inquired about the participants' lived experiences and their beliefs regarding what had facilitated and/or constrained access to, availability and adoption of complementary and alternative mind-body therapies and TCTSY as adjunct interventions to treat trauma-related conditions in NZ.

I budgeted time at the end of the interview to summarise the content, answer any questions, and check if the interviewees had anything more they would like to add. The processes conducted at the close of the interview included an invitation to add any other pertinent information, to ask any questions and to close the interview safely, whether that be through prayer, karakia or another process. Each participant was asked if they had chosen a pseudonym to anonymise their involvement in the study, and it was reiterated that this pseudonym would be employed as an identifying marker of their data from this point onward.

The recordings were filed in a password-protected folder on the password-protected computer and were subsequently sent to and transcribed by a transcription service. The transcription service provider signed a confidentiality agreement covering the disclosure, use and return of the information/recordings (see Appendix D).

Data Analysis:

RTA was chosen as the method of data analysis for this study. It is, among other things, considered a theoretically flexible and easily accessible interpretive approach to qualitative analysis (Braun & Clarke, 2006; Braun & Clarke, 2021). This process of data analysis requires the researcher to identify and analyse patterns and themes in a specific data set via a six-phase process. It is a method that straddles three main continua along which qualitative research can be located: inductive versus deductive, experiential versus critical orientation and essential versus constructionist theoretical perspectives.

This research study utilised both an inductive and deductive qualitative research design. The study is considered inductive in that the analysis process was grounded in the data from the participants; however, it is also deductive in that the data were viewed through a systems theory lens (Braun & Clark, 2006). The study is experiential in orientation in that the data prioritises the examination of how the phenomenon under investigation is experienced by each of the participants, which included on my part exploring the meaning of and meaningfulness of the ascribed language employed by the participants regarding the questions put to them regarding the topic of interest. This also required a genuine appreciation of the thoughts, feelings and experiences of the participants as interviewer and reader/witness of the transcribed material (Braun and Clarke, 2014; Byrne, 2022). As mentioned earlier, this study reflects a constructionist epistemic position, where collaboration with the participant, through the interview material, leads to connection, understanding, and meaning-making. From these, a social reality has been developed and captured in this thesis.

I followed the RTA six-phase process suggested by Braun and Clarke (2013) and Braun and Clarke (2021), which highlights a set of guidelines, as opposed to rules, that are applied in a flexible manner to fit the data set and research questions. The six phases were: familiarisation with the data, generating initial codes, generating themes, reviewing potential themes,

defining and naming themes and producing the final report. As suggested by Braun and Clarke (2006), these phases did not take place in a linear, logical sequence. The analysis process being far from mechanical required a great deal of attention, reflection, curiosity and patience. The process involved attending to, retreating and returning to the data to develop a detailed understanding of the participants' accounts of the phenomenon of interest. From my perspective this provided repeated opportunities for rich and complex analysis of the data (Braun & Clark, 2013). I explored the transcribed data during parts of the analysis process from both a semantic perspective, that is that data was viewed through an obvious and surface level lens, as well as a latent perspective, where at times I looked more deeply at implicit and underlying meanings that formed the language chosen by the participants. Simply put, often in the first instance of reading the transcriptions, I took the participants' statements at face value in terms of their meaning and understanding, but across the iterative and synergistic process of analysis the language offered by the participants was explored for deeper interpretations that might imply or intend something more nuanced. It is these more nuanced and deeper interpretations that for the most part have shaped the semantic content in the findings. As such, as in RTA and in this study, I am an active and influential participant in the interpretive process.

Familiarisation with the data began at the interview stage. This is where consideration was given to prospective ideas the participants were raising in reference to the questions they were being asked, and the development of different aspects of the discussion. After each interview, I listened to the recordings and took some notes to begin the process of familiarisation with the data. Following this, the recordings were sent to the transcription service. On their return, each transcript was read through independently to ascertain distinctive themes across the data set.

Following familiarisation with the data set, I began generating and assigning codes. The development of codes were the product of numerous flexible and fluid processes and diverse tasks that took place simultaneously across the analysis process. As is from a bricolage theoretical perspective, I combined my imagination with theories, skills, knowledge and tools on hand (in my repertoire) and artifacts available to me including discourses, people (supervisors) and knowledge to complete the coding and theme development task set out by RTA (Braun & Clarke, 2006; Rogers, 2012). I moved from transcript to transcript and on the one hand bracketed ideas that appeared to stand in isolation, and on the other collated themes that appeared to resonate with one another as part of a cluster. This was an iterative process, and one that required re-reading and comparing text from participant to participant to identify meaning in terms of nuanced similarities and differences. Codes were continually edited, developed and reworded so they accurately represented the blocks of text under each code. At this stage in the analysis process there was no limit to how many codes a transcript or a piece of data had.

During the next two phases of analysis, that is searching for themes and reviewing themes, I looked for similarities across the codes and began the process of grouping codes according to apparent overarching themes in terms of semantic overlap. The themes were conceptualised as patterns of shared meaning underpinned by a central organising theme Following this the themes were further organised according to the systems framework, loosely based on organisational, cultural and individual factors that facilitated and/or constrained mind-body therapies and TCTSY as an adjunct intervention for the treatment of trauma-related conditions. The themes were clustered like this to elucidate answers to research questions and assist with the organisation and structure of the overall findings and discussion sections of the thesis.

In terms of defining and naming the final themes, they were further defined during the writing process under more specific headings to more accurately reflect their meaning. Even at this late stage in the analysis process, in a number of instances this required revisiting the original recordings and transcripts to clarify language and check the cohesion and coherence of the themes. Inductive reasoning was employed to help make sense of the information in the data set (Wiltshire & Ronkainen, 2021).

The report writing phase began with the selection of a number of quotes headed under the themes that best represented or augmented a particular factor pertinent to the research question. The meaning-making exemplified by the quotes and language I employed as bricoleur was formed from a plurality of sources. The language and structure of the findings was intended to help make sense of the data for the reader while paying close attention to the participant's intended meaning, an accurate account of the intended meaning by the participant in the report phase of the RTA process of critical importance in terms of the valid representation of information.The various conceptual frameworks of the systems approach and related areas have much to offer for the construction of a holistic methodology for perceptual inquiry

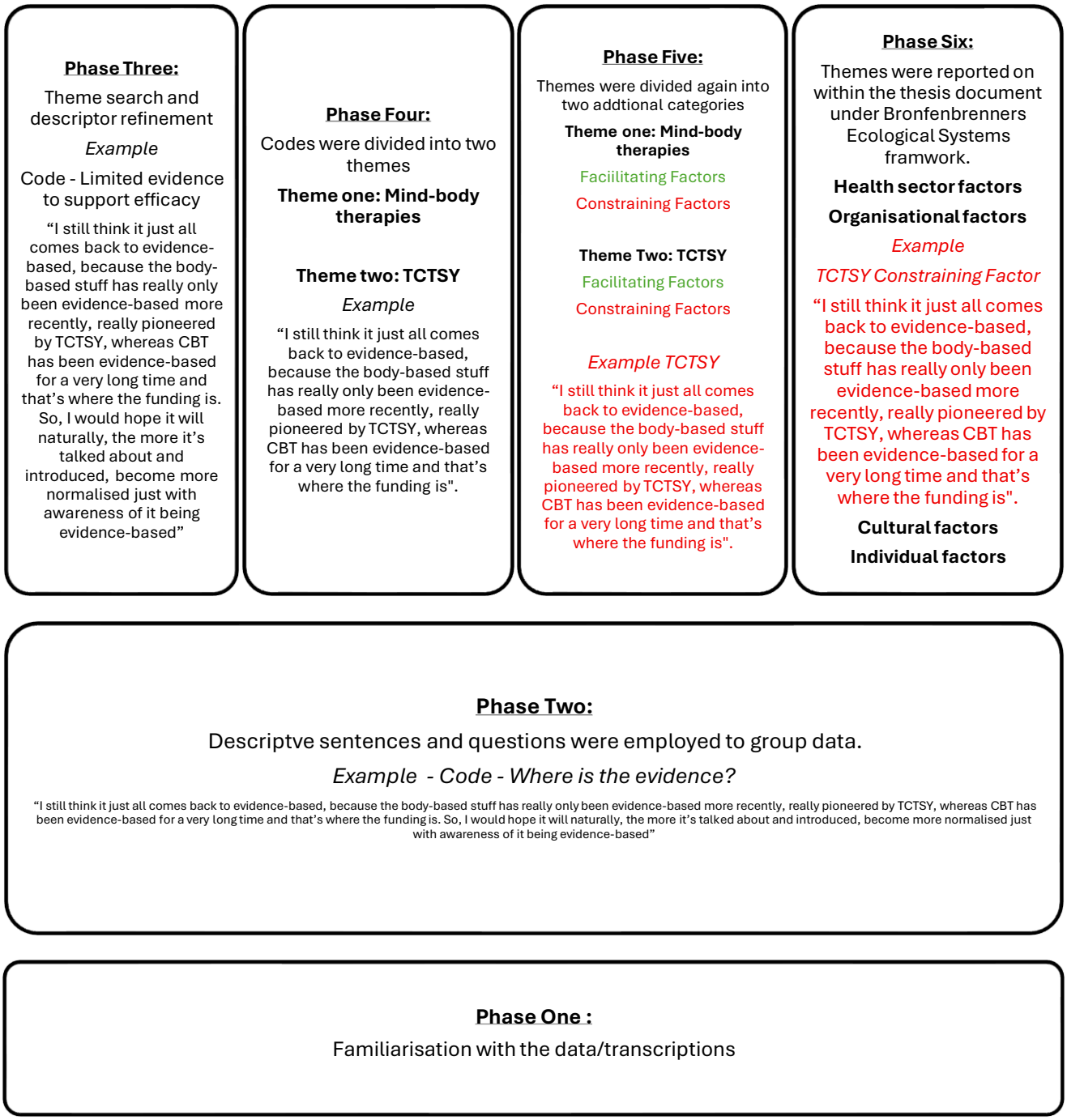

Figure 2: An illustrative example of my coding process according to Braun and Clarke's (2006) Reflective Thematic Analysis framework. This illustration also illuminates the types of codes and categories developed. (Note: Illustration created by the author).

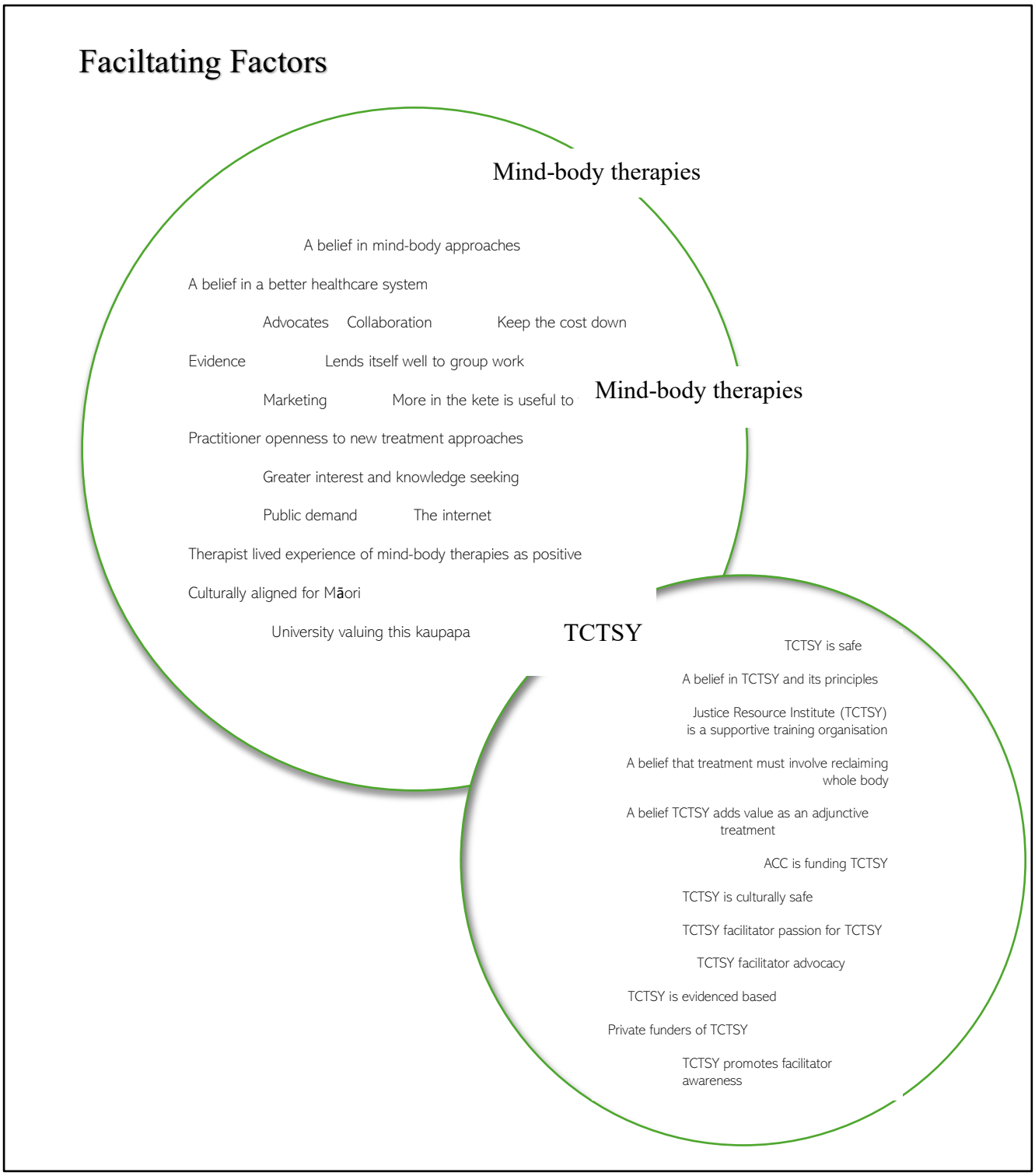

Figure 3: The themes identified in the data as facilitating factors, some of which were elaborated on throughout the findings and discussion. (Note: Illustration created by the author).

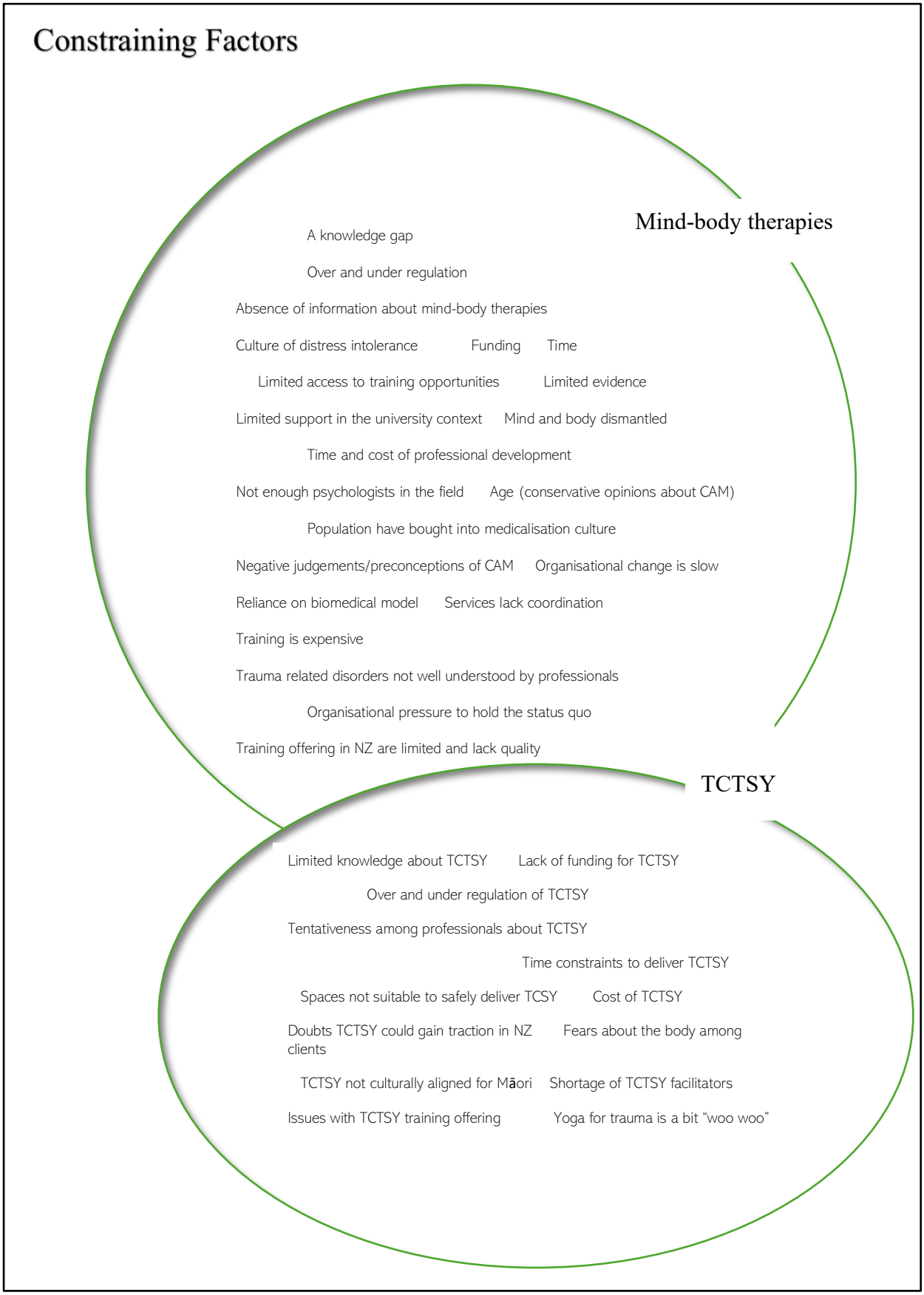

Figure 4: The themes identified in the data as constraining factors, some of which were elaborated on throughout the findings and discussion. (Note: Illustration created by the author).

Ethical Considerations:

The following ethical considerations guided my research in terms of design and practice. This research was conducted in accordance with the guidelines set out in the Massey University Code of Ethical Conduct for Research, Teaching, and Evaluations Involving Human Participants. The ethics application was determined to be a low-risk application and was registered as such with the Massey University Human Ethics Committee Human Ethics Notification 4000024336 (Massey University, 2021).

In terms of confidentiality the participants were informed that their data would be anonymised with the use of pseudonyms for personally identifiable data (Itzik & Walsh, 2023). Given there were only eight TCTSY registered facilitators in NZ at the time the data was gathered for the study, guaranteeing anonymity was not possible. To mitigate this issue as much as possible, alongside the pseudonym, it was explained that any identifiable information, for example place of work or geographical location, would be excluded from any outputs from the study to reduce the risk of identification. All participants were made aware that their data would be stored on a password protected personal computer. When not in use this was stored in a locked, password protected filing cabinet. All materials related to the study will be disposed by the author after five years

Cultural oversight was critical in this study as I identify as Pākehā, and Māori participants were recruited as part of the project. I am acutely aware that Māori have been involved in research conducted by non-Māori in the past, and that the outcomes of some research have historically been detrimental to Māori in a number of ways (West-McGruer, 2020). As such, the importance of cultural oversight was deemed critical in reference to my ethnicity and limited knowledge of te ao Māori, cultural competency and the need to challenge any western ideological biases or blind spots regarding my Pākehā upbringing. The cultural advisors invited onto the project provided oversight and ensured that concepts and/or theories from

mātauranga Māori were captured with cultural accuracy. Cultural consultation also ensured I was better attuned to the process throughout the project in terms of respecting ethical guidelines for Māori research. These guidelines were based on Hudson (2010) and were represented via my commitment to kia tūpato (approaching the study with care) kia ata-whakaaro (analysing data with precision) and ensuring the interpretations of the transcribed materials were accurately completed. With regards to kia ata-korero (being open to robust discussion) I also invested in discussions about te ao Māori conceptualisations (with colleagues and cultural supervisors) even when those discussions were experienced as uncertain. This proved particularly important for one participant where the use of te reo Māori was interspersed with English throughout the interview. Cultural consultation also ensured that I was, according to Hudson (20210), kia ata-whiriwhiri, that is, carefully and consciously determining decision making across each step of the research process by checking in with those who have knowledge well beyond my current level of cultural competence.

This chapter has located this study as a qualitative interview research design couched in a systems theory framework. The study has been situated theoretically as a constructionist piece informed by narrative psychology, which has employed both inductive and deductive processes to make meaning of the data set. The methods used in recruiting and interviewing participants was elucidated as were the ethical considerations across the breadth of the study. Reflective thematic analysis was highlighted as the method of data analysis employed to generate the findings. These findings are presented in the following chapter.

Chapter Eleven: Findings

The findings presented in this chapter foreground factors in NZ that facilitate and/or constrain access, availability and adoption of mind-body complementary and alternative approaches (and TCTSY) as adjunct interventions to treat trauma-related conditions. The exemplars from the interviews and my points of interpretation have been accommodated under the headings and nested eco system levels: health sector factors, organisational factors, cultural factors, and individual factors. These headings have been selected to organise the materials into an orderly arrangement and to ensure each cluster of factors is conceptualised under an umbrella term to assist with the interpretation and understanding of what has influenced the place of mind-body therapies in the provision of mental healthcare. Although these nested levels interact and are interrelated, each level has a place and role in reference to the topic under investigation. In short, the following analysis under specific nested levels and headings illuminates the different factors within the social eco-system that have impacted access, adoption and availability of mind-body therapies in the NZ mental healthcare system (Astin et al., 2005; Dossett et al., 2020; Emerson, 2015).

Health Sector Factors:

The following themes are health sector factors identified in the data as pertinent to the topic being examined. Two themes under the heading health sector factors were identified: Cartesian dualism and Investment in Pharmacology.

Theme – Cartesian dualism

One artefact highlighted by participants in this study well supported by norms and values in the field of psychology was Cartesian dualism and, relatedly, the classification systems DSM 5 and ICD 11. Positive attitudes by mental health professionals regarding the use of these classification systems were highlighted by participants as a constraining factor with regard to

the use of mind-body therapies to treat mental health conditions such as PTSD. The Diagnostic and Statistical Manual (DSM), originally developed in the United States, is considered the most used mental health classification indices and guiding taxonomy by psychologists/psychiatrists in NZ (Mellsop et al.,2007). As such, this manual serves as the foundation of mental health assessment and treatment across the healthcare sector throughout the country (Oakley Browne et al., 2006). With over 300 separate mental health disorders recorded, this tool is viewed by most as the ultimate authority in mental health diagnoses (Andreasen, 2007).

Over two-thirds of participants in this research reported that mental health service users in NZ, were over-reliant on the DSM and the medical epistemological framework surrounding this classification system, a system supported by the philosophical tenets of Cartesian dualism. The DSM, according to Lafrance (2013), has assumed an implicit paradigm that has historically been difficult to challenge due to its perceived diagnostic reliability, enduring terms, and interrelated denotations. As such, the DSM supports and maintains an existing narrative that essentially reproduces the position espoused by Cartesian dualism purported by Rene Descartes, a philosophy that separates mind from body at the expense of other ways of viewing human subjectivity (Wilson, 1976). According to the participants this philosophical perspective is embedded within the fabric of NZ society in terms of the way the population views mental health. Participants indicated that viewing mental health issues through this classification system had a significant impact on the endorsement of treatment protocols that are aligned with the DSM ontological viewpoint at the expense of other ways of understanding and viewing mental health, ways that are supported by complementary and alternative medicine protocols.

According to Nathan, this dualistic focus on treating the mind in isolation from the whole body has impacted access to, availability and adoption of mind-body therapies:

> *One* [issue]*, and probably the biggest one conceptually is the DSM which separates the body and the mind. Like you have dissociative disorders, for example, and somatoform disorders, so these two things don't go together in any kind of other reality than the DSM, so there's this kind of separation of the body and the mind in the DSM and so it becomes quite tricky to get people to think about body and mind [as connected]. – Nathan*

Nathan refers directly to the population's unequivocal belief in Cartesian dualism. He highlights how difficult it is for people to view mental health issues outside of this biomedically framed reality, a reality-supported by classification systems such as the DSM. Nathan uses the example of two health complaints, dissociative disorders and somatoform disorders to exemplify this critical perspective. Dissociative disorders are considered a disconnect between an individual's sensory experience (physical), thoughts (mind), sense of self (attitude). Somatoform disorders, as the language suggests, are felt primarily as bodily symptoms and can cause excessive and disproportionate amounts of distress (American Psychiatric Association., 2013). Although the first disorder appears on face value more mind orientated and the second physiological, both conditions are conceptualised in the DSM 5 as psychological syndromes (disorders of the mind with a psychological aetiology). Both conditions may well according to Nathan, have their origins and, therefore, treatment implications in both the mind and body.

In the following extract Nathan explores further such ideas around the complexities of mind and body dualisms for health. He uses a bodily metaphor to highlight the way in which the biomedical view, a view which supports biological science has compartmentalised mental

health conditions into specific pathophysiological processes. He proposes that this particular mindset is somewhat reductionistic and constitutes a barrier to viewing mental health as a biologically whole-bodied multisystemic issue:

> *I mean, the model here that we adopt in the main for health is very biomedical, you fall over, and you land on your arm, and you break it and so you go in and have your arm fixed. We're not interested in any kind of thing other than your arm; we'll x-ray your arm; we won't x-ray you. So, we come from, we have, a very dominant biomedical approach here –*
>
> Nathan

According to Nathan, the hegemony of a biomedical perspective within the health system has had a significant bearing on the explanation, evaluation, and treatment of mental illness in NZ, at the expense of other ways of conceptualising mental health conditions.

Theme – Investment in Pharmacology

Tony also suggests that biomedicine (which supports the Cartesian dualism and its focus on treating the mind with medication) is a powerful force in mental health service provision in NZ:

> …[biomedicine], *it's quite rooted in the whole system … You've got politics, where you've got certain organisations that are quite powerful, and they don't want to give up their power, so you end up with this kind of battle. So, here in New Zealand you've sort of got two schools that pretty much sit on top, well you've got three you might say, you've got the psychiatrists that sit at the very top, they're like god, gods and goddesses, not many goddesses but mostly gods, and they're just biomedical right?*

> *Pretty much, throw drugs at the problem. And then you've got within the psychotherapy/psychological fields you've got psychoanalysis approaches and you've got CBT!* – Tony

Tony is highlighting the power dynamics and dominant approaches within NZ's mental health system. He points out that biomedicine—especially psychiatry—holds a very powerful position, often relying mainly on medication to treat mental health issues. He suggests this dominance is tied to political influence and reluctance from powerful groups to share control. Meanwhile, within psychotherapy, there are mainly two major schools of thought: psychoanalysis and cognitive behavioural therapy (CBT). Overall, Tony is emphasizing how entrenched biomedical approaches are and how the mental health field is divided among competing perspectives with varying influence (Came, 2014). Tony's response speaks to the long history of gilding by the proponents of biomedicine, such as psychiatry, with respect to the power this field and its proponents have reigned over the architecture of the mental health system and along with this the way they have shaped the population's values and understanding of mental health more generally. Gulding from this perspective refers to how psychiatry can *overlay* its authority and scientific legitimacy on mental health issues, which can obscure alternative understandings or critical perspectives. It's a critique of how mental health knowledge and power are packaged and presented to maintain dominance (Stevenson & Cutcliffe, 2006).

Tony refers to how psychiatry - via its actors, processes and institutions - has adopted and maintained a conceptual narrative of power and truth with regard to healthcare, which has been integrated into the psychiatric universe. He illuminates how this 'truth' is considered by the population who is seeking healthcare for mental health issues. He purports that

psychiatrists' conceptualisation of mental health issues is endorsed as an unadulterated gospel.

> *If you're a GP the only tool you really have is drugs and so you just throw drugs at the problem, and then of course that might manage the symptoms for a little while.* - Tony

Tony is critiquing the limited approach that GPs often have toward mental health treatment. He suggests that because GPs primarily rely on prescribing medication, their main strategy tends to be simply "throwing drugs at the problem." While this may temporarily manage symptoms, it overlooks deeper, underlying issues and more holistic or therapeutic interventions. Essentially, Tony is highlighting the limitations of a biomedical, medication-focused model in addressing complex mental health needs (Abt et al., n.d).

The general population's shared trust and belief in the role of biomedicine was also raised by Petra. In the following extract Petra highlights that for the those who completely endorse biomedicine in the mental health sector, the choice to utilise pharmacotherapy as a first line of defence is a somewhat parsimonious approach to treating mental health concerns on the part of those prescribing medications:

> *Money and belief…when you're in a biomedical model your belief is that you provide some tablets and that's a very cheap way of dealing with an issue, you know*? – Petra

Going further, Petra suggests that the use of pharmaceuticals in the NZ context is a somewhat "cheap" and overzealous approach to treating mental health conditions by prescribing physicians:

> *I'm going to blame biomedicine. Yeah, I'm going to blame the fact that we think we can diagnose, dissect, label, yep, that's where I put the blame, and there's even, with depression, there's clients that come to you and say "oh I'm going to go to the GP and get some antidepressants" and you go "and what have you tried first" and they go "I'm not trying anything first" and I'm going ok, ok, could we try some things first and then see? Um, so, it's not to say that there isn't a time and place for medication, but it just seems to be the go-to, you know. We're quick fix, go-to. Very much been fed the American model pharmacology wise, and you know, 15 minutes will get you diagnosed with depression from a GP* – Petra

What Petra is referring to here has been named the pharmaceuticalisation of society (Williams et al., 2011). This is the idea that there is a pill for every ill. Pharmaceuticalisation involves the corralling and forging of the human condition, in terms of capabilities and capacities, into opportunities for pharmaceutical intervention. The term pharmaceuticalisation of society was introduced as an extension of the 'medicalisation of society' whereby health complaints and other aspects of the healthy human condition are reframed as requiring pharmacological management. The endorsement, production and use of pharmaceuticals have been created, according to Goodman and Walsh (1993) and Hodgetts et al (2016) a whole range of dynamic and complex heterogeneous socio-technical processes, including institutions, organisations, actors, and artefacts on the part of those companies and practitioners promoting this medicalised model. Since its introduction in the early 19th century, the biomedical industry has been built to a substantive degree, around the development of pharmaceutical products centred on chemistry-based technology embodied in a pill. Foundational to the pharmaceuticalisation of society are commercial, clinical and

geographical expansions into more and more domains of illness and everyday life (Hodgetts et al., 2016).

Petra's statement suggests that this model, originally founded in America, is overused, is easy to apply and has been endorsed by members of the general population as a legitimate first line of defence to treat the likes of PTSD at the expense of other ways of treating mental health. Petra proposes that people affected by mental health conditions in NZ, believe that getting a rapid solution, regardless of the possible long or short-term effects, is the key to mental wellness. She asserts that the population have been ill-informed and, to some degree, indoctrinated with a cure at the expense of an alternative narrative or way of getting well. She indicates that large numbers of people stick with what they are taught, with what they know or think they know is true.

As a mental health professional Ruby explains that she personally has experienced tension regarding the number of patients she has encountered who were prescribed pharmaceuticals for their mental health condition. These are people who in her experience, have very little understanding of alternative ways of treating mental health problems, particularly in reference to a more integrated whole-bodied approaches to treatment:

> *I guess what I have struggled with over the past 35 years is I saw a lot of mental health overmedicated people and no holistic view* – Ruby

Ruby and Petra's statements not only call attention to the NZ society's endorsement of pharmaceuticals, but their sentiments also highlight the substantive influence of pharmaceuticals at the expense of utilising other mental health treatment interventions. Over-medication, according to these participants, is a serious concern, a concern which is shared by the World Health Organisation (WHO) (Dagli &

Sharma., 2014). According to the WHO polypharmacy has contributed to millions of hospitalisations due to adverse reactions to medications. In addition in terms of cost, the WHO has also notes that globally overmedication is responsible for billions of dollars of unnecessary health expenses (Dagli & Sharma., 2014).

In the following extract Tony draws on a common pharma trope that captures what he asserts is the dominant belief held by the general population in NZ with reference to pharmaceuticals and mental health treatment:

> *I think the vast majority* [general public] *are just pill for every ill unfortunately.* – Tony

Tony suggests that the NZ population has broadly endorsed the pharmaceutical industry and its commercial orientation. Tony highlights the idea that the public often become consumers of medications, placing them somewhat at the mercy of government policies and pharmaceutical company endorsements regarding controlled medicines. This reflects wider critiques of over-medicalisation, where mental health conditions are increasingly framed in biomedical terms, leading to heavy reliance on pharmaceuticals as primary treatment options (Moncrieff, 2025; Royal Australian and New Zealand College of Psychiatrists, 2023). Such trends raise concerns about the potential for overdiagnosis and overtreatment, with medication sometimes managing symptoms temporarily without addressing underlying social or psychological factors (O'Sullivan, 2025; Russell, 2023). Critics argue that this pharmaceuticalisation risks obscuring more holistic or socially informed approaches to mental health, limiting individuals' access to diverse forms of care and reinforcing the dominance of biomedical models (Wes Streeting, 2025).

To recap the previous section, participants in the study consider frameworks such as the biomedical model and related artefacts such as Cartesian dualism and the DSM 5. I have also shared how the participants feel about associated processes, such as the pharmaceuticalisation of our society, in terms of how these artefacts have influenced the norms and values of the population in relation to healthcare. More specifically, my focus here is on how these influences impact how we understand mental health conditions, which is in turn relates to how mental health is treated in NZ today. Substantive emphasis by some of the participants is placed on the negative impacts of pharmaceuticals on society and the issue that there appears to be limited room in health practice for the consideration of any alternative means of conceptualising or treating mental health other than the status quo, that is "a pill for every ill'. According to Williams and Gabe et al. (2011) and Elbe et al. (2015), although this may well be the case, historically, pharmaceuticalisation has played an essential role in the alleviation of human suffering and the extension of life itself. Hawkins et al. (2022) added that public attitudes, knowledge, beliefs, and behaviours towards the use of specific medications have not changed over decades, which points to the value that the public has consistently placed on pharmaceutical treatments over time.

Participants in the current study, as you will read below, note that it seems very unlikely that mind-body therapies and the likes of TCTSY as adjunctive additions for the treatment of trauma-related conditions could find space enough to find support in the public and/or professional healthcare foreground to the extent that these treatments have some traction or legitimacy. There are large overarching organisational factors that are shaping the endorsement of pharmaceutical treatments. According to participants, these specific organisational factors and others have played a significant role in constraining mind and body therapies as alternatives to medications. It is to participant accounts of these organisational factors that I now turn.

Organisational Factors:

The section below introduces a series of thematic sub-sections that highlight organisational factors that participants believe have impacted and influenced access, adoption and availability of mind-body therapies in the mental healthcare context in NZ. The first organisational facilitating factor reported by numerous participants refers to ACC's inclusion of mind-body therapies in their suit of services under the sensitive claims contract.

Theme - Accident Compensation Corporation

As suggested earlier in NZ, the ACC provides a Sensitive Claims pathway to support people who have experienced sexual abuse or sexual assault. This pathway funds treatment for mental injuries such as post-traumatic stress disorder, anxiety, or depression resulting from sexual violence (ACC, 2024a).

The excerpts below suggest that ACC has played a pivotal role in the availability of mind-body therapies to treat sexual trauma. Amy shares her appreciation for ACC's openness and willingness to fund TCTSY. She describes ACC as supportive and responsive in approving referrals for both group and one-on-one sessions. Amy's response suggests she views ACC as progressive and enabling around mind–body therapeutic options.

> *I'm really happy about ACC, you know, having that openness and having it (TCTSY) allowed in a few years ago. And they're (ACC) really good, they're really good with approving these(TCTSY) referrals that come through, even for one on one, you know* – Amy

In some respects, ACC can be considered a progressive organisation, particularly through the sensitive claims' pathway. This organisations funding framework, culturally responsiveness, trauma-informed, and survivor-centred services have been

purported as innovative. These innovations include practices such as mirimiri (traditional Māori massage) and trauma-sensitive yoga as mentioned above, approaches representing a more holistic approach than purely biomedical models (ACC, 2023). ACC also allows sexual trauma affected individuals to access early therapy supports without needing their claim formally accepted, which helps remove barriers to timely care (ACC, 2024a). Furthermore, ACC's willingness to support mind–body therapies and group-based healing reflects a flexible and innovative perspective on trauma recovery (ACC, 2023; Community Law, 2024). The development of an Innovation Fund to trial new treatment models is another progressive step, promoting fresh approaches to care (ACC, n.d.).

Below Georgia explains that ACC has been able to deliver trauma-sensitive yoga groups and embodied self-care retreats to survivors of sexual violence a result of funding for approximately six years. This reflects that mind–body therapies are not just available but have become an established, ongoing part of organisational practice under ACC contracts, indicating that these therapies appear to be valued and perhaps even sustainable.

> *... we facilitate trauma sensitive yoga groups, and embodied self-care retreats with survivors of sexual violence under the ACC contract. So, I think we've been facilitating those offerings now for 6 years maybe?* - Georgia

Ruby also alludes to ACC's facilitation of mind-body services to treat trauma related conditions as a result of sexual abuse. Ruby compares ACC favourably to other organisations, suggesting ACC has more effectively embraced or implemented mind–body approaches for trauma recovery than other agencies or funding streams.

> *I think ACC have taken it on better* (than other organisations) – Ruby

Although many participants described ACC as innovative and somewhat supportive of mind-body practices to treat mental injuries , several participants highlighted critical gaps in ACC's practical delivery and communication of mind–body therapies within the sensitive claims pathway. Eunice described how a lack of understanding about TCTSY at the case manager level can hinder client access, reflecting insufficient knowledge or training among frontline ACC staff.

> *I can only really speak for ACC because that's who I've dealt with mainly, and I think what has hindered* (access) *is ignorance of not knowing what it is* (TCTSY)… *at the front level, at a case manager level* – Eunice

> *I mean even ACC, honestly, I don't even think they know what trauma sensitive yoga is* - Ruby

Ruby echoed these concerns, expressing doubt that ACC as an organisation truly understands what trauma-sensitive yoga is, which may according to Ruby undermine consistent acceptance or promotion of such therapies.

In the excerpt below Georgia points to further issues with transparency, explaining that mind–body therapists are not visible on ACC's websites or directories, meaning clients — and even some therapists — are unaware of what services are available or funded. She describes this as a systemic information breakdown that prevents people from fully accessing therapeutic options under ACC's coverage. Collectively, these participants suggested there is a significant disconnect between ACC's progressive policy framework, which supports mind–body and holistic therapies on paper, and its actual implementation and communication practices in the field.

> *ACC for example don't make anything transparent, they won't even put us* (mind-body therapists) *on a website, they don't – so clients who are accessing ACC services don't even know what's available to them and often therapists don't either, which I'm not sure why, um there's just, the system is broken in some areas and that's definitely one of them, it's just information that isn't being filtered through* - Georgia

Sexual assault survivors accessing therapy through the ACC pathway and their advocates have according to Community Law (2024) described ACC's bureaucracy, paperwork, and assessment processes as overwhelming and even retraumatising Long wait times for specialist assessments and approvals may further disrupt access to timely care. Additionally, while ACC covers mental injuries, it still requires a formal diagnosis to progress a claim, which can feel restrictive for people seeking more informal or community-based recovery options (Community Law, 2024). Overall, while ACC demonstrates progressive intentions and frameworks, there remain practical challenges in implementation that affect survivors' experiences of support.

In summary, the participants above are acknowledging that ACC's Sensitive Claims pathway has supported and legitimised mind–body therapies (like TCTSY and embodied self-care), giving survivors more holistic, trauma-informed recovery options. They describe ACC as relatively progressive, responsive, and open to these kinds of healing practices. That said, participants also described significant barriers within ACC's sensitive slaims pathway, highlighting that despite progressive policies supporting mind–body therapies, there is poor awareness and communication among ACC staff and limited transparency about available

services. This disconnect prevents may impact accessing mind–body therapies like trauma-sensitive yoga, creating gaps between policy intentions and practical delivery.

Another organisational theme with that the participants believed was a constraining factor of mind-body therapies to treat trauma related conditions refers to the impacts of direct-to-consumer marketing.

Theme - Direct-to-consumer marketing

In the United States and New Zealand, since the early 1980s, there has been tremendous growth in the marketing of prescription drugs directly to the general public (Every-Palmer et al., 2014; Zadeh et al., 2019). This practice is called direct-to-consumer marketing. The power of direct-to-consumer marketing (Hollon, 1999) in terms of cultivating public support for the use of different medications has been highlighted by Tony in the previous section as a significant contributor to the population's over-reliance on biomedicine and, more particularly, pharmacology for the treatment of mental health conditions. Tony suggests that at both the political and organisational levels, the 'pill for every ill' messaging in NZ, has taken hold. Direct-to-consumer marketing is a practice, in his view, that distributes inflated misinformation to the general public regarding the benefits of pharmacology:

> *…there are of course only two countries in the world that allow direct to consumer advertising of pharmaceuticals and that's New Zealand and the United States. So, New Zealanders are getting exposed to so much propaganda from the pharmaceutical industry* – Tony

Tony intimates in the statement above that, unlike the rest of the world, alongside the US population, New Zealanders have been misled or coerced into trusting the benefits of pharmaceutical use. Tony's language and the use of the word

"propaganda" is semantically synonymous with messages posited in literature by van der Geest et al. (1996), van der Geest and Hardon (2006), Hodgetts et al. (2011, 2017) and Whyte et al. (2002) which suggested that advertising in this context is counter information. Counterinformation forestalls or blocks by virtue in this case the product-to-consumer marketing approach. Direct-to-consumer marketing has ensured that pharmaceutical use has become annexed to the population's hopes, imaginings and desires for health and well-being., an idea captured by Every-Palmer et al. (2014). Every-Palmer et al. (2014) suggested that direct to consumer marketing of pharmaceuticals promotes a treatment approach that has become popular to such a degree that its reputation well exceeds the medicinal purpose or functions of the advertised products. According to Tony, the peddling of pills and potions is referred to in direct-to-consumer marketing discourse as a practice that promotes medications as the holy grail of treatments to relieve mental suffering. As such over-reliance on medication is now well embedded in the NZ population's morality, healthcare routines, and relationships of care and healing (Hodgetts et al., 2011, 2017).

In the extract below, Tony implies that GPs, in his opinion, benefit from the promotion of direct-to-consumer marketing and then the 'sale' of pharmacology as a cure for all. He also proposes that dominant and prevailing messaging regarding the benefits of pharmacology has deprived the public of alternative ways of treating mental health conditions, with regard to holistic approaches to treatment that are relevant to this study:

> … *and they* [GP's] *are not going to bite the hand that feeds them, so they're going to keep toeing the line. People reading the mainstream media*

are going to keep reading this stuff, they're not going to get a holistic understanding there – Tony

In a study conducted in both Belgium and NZ in the late 2000s (exploring attitudes of patients, doctors and pharmacists) unlike what Tony is suggesting, it was noted that attitudes from health professionals toward direct-to-consumer advertising were relatively negative and, as such not in support of this form of information dispersion to the public (Dens et al., 2008). Liu (2021) also suggested that healthcare professionals are generally reluctant to over-prescribe medications, a finding seemingly counter to Tony's assertions. In addition, Lui et al. (2021) found that NZ healthcare professionals, including GPs, were responsive and positive regarding the use of CAM.

Tony's assertion intimates that GPs, in the main, are involved in a conspiracy or collaboration with the likes of 'Big Pharma', and they are well rewarded for their efforts. He suggests that the financial rewards for GPs are significant enough for these professionals to remain complicit with trading pharmaceuticals and the information supporting these treatment approaches at the expense of other ways of treating mind/body distress.

In addition, Tony suggests in the extract below that the debunked medicalised chemical imbalance theory of mental illness based on the biomedical model (Geiger, 2023) alongside the pervasive dissemination of medications by the pharmaceutical industry (Lacasse & Leo., 2015) remains alive and well in NZ:

So, it's like oh I'm having some intense psychological experiences, I must have a mental illness or something wrong with my brain, I need to go get a

pill that's going to solve the chemical imbalance" right? I think that's what most people believe, which is totally debunked…most people have been conditioned to see it that way…the GP is conditioned to see it that way too …you know that expression "if the only tool you have is a hammer, then everything looks like a nail - Tony

According to Tony, GPs are not only complicit in promoting a somewhat short-sighted and theoretically compromised treatment approach, but they are constricted in their practices by what he suggests is an educationally circumscribed medical background. Tony appears to be highlighting that GPs are limited in their educational breadth with regard to promoting and practising other ways of treating mental health conditions. Tony's position, as it reads in the above extract, is only partly supported by the findings of the literature on this topic in the NZ context.

According to a NZ study by Upsdell (2011) and more recently by Lui et al. (2021), GPs are, as suggested earlier, are in favour of using CAM approaches to treat mental health conditions. Upsdell (2011) investigated the use of CAM with a sample of GPs in the Auckland area, noted engagement with CAM practices as very much a part of their medical repertoire with patients. The GPs in this study (Upsdell, 2011) which was conducted more than 10 years ago, reported that GPs used CAM because, among other things, they had a desire to maintain a patient-centred approach and wanted to provide what evidence-based information they could on CAM treatment approaches.

More generally Tony's statements highlight his dissatisfaction with the medical profession's ability to treat mental health conditions adequately. Alongside this, Tony demonstrates in these extracts a general distaste for the medical professions

and overall support for the use of pharmaceuticals as a first line of defence to ameliorate symptoms of mental health syndromes. Moreover, Tony's extracts are suggestive of a position that is somewhat anti-medicine (Hussain et al., 2018). That is, his vernacular throughout the interview could be described as somewhat combative, overly critical of the current dominant biomedical position adopted by mainstream healthcare entities and skewed toward censoring opposing views to his own.

Theme - Systemic change is difficult and slow

Historically speaking, systemic change in healthcare in NZ and around the world has been difficult and slow (Goodyear-Smith & Ashton., 2019). Proposals for health policy reform are almost always heavily altered and disagreed upon in these large institutional settings and trade-offs are considered implicit in policy implementation and process (Cribb, 2017). Much of what is described under the theme Systemic change is difficult and slow can be viewed through the lens of Kurt Lewin's (Cummings et al., 2016) theory on organisational change. Lewin's theory of change highlights the principle that change occurs at any given time due to driving and restraining forces, which are fundamental to the process of change. Lewin notes that all human behaviour makes up the dynamic balance of forces involved in change, forces that move in one of two directions. They are either driving forces that move people toward change or resisting forces that prevent them from making it. Lewin illustrates his theory of change management via the analogy of an ice cube – to make a change, the entity must first unfreeze (that is, let go of the original structure), reconfigure (establish a new shape and form) and then refreeze (endorse and enforce the new processes and ideals). The final product or entity exhibits some artefacts from before but has a new and somewhat different

arrangement. Participants in this study captured some of these artefacts in terms of the topic under investigation below.

In terms of forces reflective of resistance and counteraction regarding the current status of mental health reform in NZ, Ruby reported that a group of psychology health professionals had opted out of mainstream regulatory psychological board memberships in exchange for a new regulatory health council:

> *I joined up with the Māori Government, the Whakaminenga Health Council. I had this huge sense of relief, freedom, space, I don't feel like there's a sword hanging over my head. And so, when you talk about what can government do, it's, I'm flummoxed, it's like even the psych board don't get what we're talking about* - Ruby

The Wakaminenga Health Council is a Hauora community-based network of qualified health practitioners who share similar values and commitments regarding healthcare. This council or governing body asserts sole authority over every health professional affiliated with its membership (Wakaminenga Health Council, n.d). The Wakaminenga Health Council purports that membership is a real opportunity to establish a new approach to healthcare, with a focus on establishing new ways of delivering healthcare, bearing in mind what had not gone well under previous regulatory systems. This council may be more supportive of a holistic and collective approach to healthcare, an approach Ruby intimates, that might be more beneficial and congruent for Māori (Brown & Bryder., 2023).

In the extract below, Tamarere highlights the significant effect Western leadership has had on institutional change in healthcare and education institutions in NZ. He

points to resistance from education institutions to innovate in ways that would advance mental health for the NZ population. He offers ideas as to how this could be achieved in the tertiary sector, an institution notorious for organisational lethargy and resistance to transformation (Kersey et al., 2018):

> *I think the hindering is just the very Western leadership, but I can only speak from psychology, I know counselling has its own approach and is much more diverse…I really think we're struggling to go in new directions with the outdated international clinical leaders that come into our country, so we can't drive what we know we need to be doing* - Tamarere

> *So, one of the things could be about diversifying placements, so we're looking at a kaupapa Māori psychology stream at the moment and one of the big things, because I'm on the (anonymised) project which is called (anonymised), and we're developing a curriculum around kaupapa Māori psychology, and one of the things that we're finding from our interviews is the importance of being placed in different organisations that expose you to different contexts and different approaches* - Tamarere

On the other hand, Nathan, in the extract below, appears more optimistic about systemic change in healthcare in NZ in the tertiary sector:

> …S*o, you either change it through education or people coming out and having different ways of conceiving mental health, so not being taught that much dominant biomedicine but more holistic types of models of health and mental health. Then, year after year after year, these people begin to filter up and take over sort of higher roles and then begin to change whole systems.* – Nathan

Nathan highlights that change in the way we educate and treat health issues may, in fact, be achievable, albeit slowly (Riley et al., 2016). He explains that a shift to teaching integrative care might be doable in universities, an approach to learning that has already been achieved by other institutions in the tertiary sector across the globe (Frenk et al., 2010). Nathan suggests that a systemic transition in mental health care in the tertiary space may help shape the way the public views treatment for mental health syndromes. Nathan illuminates the idea that the adoption of mind-body therapies in mainstream health would be more likely to come to fruition when individuals who have been educated in holistic type models of mental health care make their way out of the tertiary sector into employment (Mahapatra et al., 2017). As individuals filter through to healthcare roles (more especially roles of influence) from programmes and courses endorsing integrative healthcare (which honour the mind-body relationship), change can happen. That is, treatment focused on the whole person in health care is more likely. The collective knowledge, expertise and experience of alternative practices that these individuals bring with them may, in Nathan's opinion, act as a springboard for change across the whole health sector.

Simply put, what Nathan is suggesting in this extract is that organisational change can happen when professional connections from grass roots movements are forged alongside influential people positioned higher up the political/organisational hierarchy. He also suggests that organisational and systemic change from the top down is often a faster or more effective way of creating change. Nathan also cautions that inevitably (in his experience) institutional differences of opinion and competing agendas invariably effect and slow down the change process (Saltman, 2018):

> *…. you can of course change the system from the top coming down, this feels in some ways like that's the quickest way to do it but it's who do you influence? You know, how do you get into the department of health and say, "actually this is not working? I think you get clashes between different worlds?* - Nathan

In reference to this topic, Tamarere adds that generating momentum for new and innovative mental health treatments without the right people at the helm in mainstream healthcare organisational settings is difficult and challenging:

> *…there's no real purposeful seeding of the kaupapa* [mind-body therapies for trauma treatment], *there's just odd seeds coming out like people like you and people who think "oh this shits cool, we like this" and it's like that's such a small group but it's got to be from a higher level and spread out or a grass roots movement from people who are respected, passionate, and good at promoting what they do.* – Tamarere

Tamarere illuminates that for mind-body therapies to be adopted into the mainstream mental health care systems, "purposeful seeding of the kaupapa" would need to materialise in two distinct ways. From both official channels and grassroots movements. In addition, the information being disseminated would best be delivered by reputable sources in the field. This would include professions whose members are well-versed in the promotion of new and somewhat alternative approaches to mental health treatments. Holland (2022) acknowledged that this notion and highlights the importance of branding and promotion in the delivery and conceptualisation of mental healthcare approaches with respect to implementing, shaping and maintaining alternative views and/or interests in the field. Holland (2022) argued that the influence of language and images in promoting understanding of mental health and care.

Furthermore, Holland highlighted the notion of rightful and authoritative producers of mental health knowledge and the current subject position the consumer is invited to inhabit. Above, Tamarere suggests that the producer of new perspectives on mental health would require not only sound language and imagery to shift the way the population views treatment. They would also require skills in advocacy to shift the status quo, that is, according to Holland (2022) the unquestioned truth of mental illness or mental disorder as constructed in the discourse of psychiatry.

While Tamarere and Nathan have highlighted that systemic change in healthcare in NZ is difficult and slow, participant Casey in the extract below offers a very real example (in the context of TCTSY) of how a mind-body therapy to treat trauma-related conditions in NZ can in fact find legitimacy via partitioner (grassroots) advocacy:

> *If you are a psychologist or a mental health practitioner advocate for it and ask for it. That's why it's [TCTSY] in ACC. It was asked for, kind of demanded in a lot of ways. So, if we as mental health practitioners continue to put that pressure on, it's us being active citizens and saying this is the thing that we want and why we want it. And so that we can kind of continue to do that. So, advocacy is a big part* – Casey

Casey highlights that TCTSY has been afforded access to government / organisational support and funding under the ACC Integrated Services for Sensitive Claims contract. Casey reports that persistent advocacy on behalf of the TCTSY community in NZ, has been an effective strategy to effect change at an organisational level, a shift in treatment provision that may bode well for service users in terms of treatment choices going into the future (Emerson et al., 2015).

Amy also reports on the openness and willingness of ACC as an organisational entity to support the TCTSY protocol as an adjunctive treatment for trauma-affected persons who have experienced sexual assault:

> *I'm really happy about ACC, you know, having that openness and having it* [TCTSY] *allowed in a few years ago. And they're really good with approving these referrals that come through, even for one on one, you know. So that's a good starting point* – Amy

Amy expresses her appreciation for this organisation's responsiveness to the collective demands of the NZ TCTSY communities. She notes that engagement with ACC, from an administrative perspective, has historically been positive, particularly in reference to supporting referrals for clients who wish to participate in TCTSY (Integrated Services for Sensitive Claims Operational Guidelines, 2023; Visser and Associates, n.d.).

The extracts above underscore how organisational, systemic processes and entrenched ways of viewing mental health have made it difficult for healthcare practitioners who advocate for mind-body therapies to engage in and promote new or innovative treatment options in the current healthcare space. The extracts suggest that changing existing ontologies, navigating complex relationships, and challenging deeply embedded values and beliefs about service provision at an organisational level have made it difficult to open up the space for mind-body therapies in mainstream healthcare settings (Holland, 2022). That said, one exception to this has been TCTSY, a mind-body intervention currently funded by ACC as part of the service delivery suite under the Integrated Service for Sensitive Claims Contract. Albeit difficult and slow to break ground, this somatic treatment for trauma is receiving funding via a significant healthcare contract, a feat ultimately achieved by the trauma-sensitive yoga movement in NZ (ACC, Integrated Services for Sensitive Claims Operational Guidelines, 2023).

Theme - Regulation and standardisation:

As previously discussed, the regulation and standardisation of clinical psychology, counselling, and psychotherapy are managed by designated professional bodies, ensuring public safety and accountability in practice (Rubin et al., 2007). These organising entities and related initiatives are focused on regulating competency standards for each scope of practice alongside ethical codes of professional conduct. Several participants raised the issue of regulation and standardisation of mind-body therapies in the mental healthcare context in New Zealand. This issue was discussed as an influential factor that, according to the extracts below, both facilitated and constrained the adoption, availability and practice of these interventions. The extracts presented in this section suggest that the regulation and standardisation of mind-body interventions was a contentious issue. The opinions and values shared by participants on this matter (of those who raised it) were diverse.

In the extract below, Casey supports the regulation and standardisation of TCTSY practice from the perspective that, in her opinion, regulatory bodies play an important role not only in terms of public protection but also with respect to setting standards of healthcare behaviour. This is a position that has historically been supported by the World Health Organisation (Marquez, 2001; World Health Organisation., 2019):

> *Think the main issues are a lack of standardisation and regulation* [for mind-body interventions] *makes it so that there's no quality control, there's no kind of checks and balances – are people trained?* - Casey

Casey highlights that in the absence of regulatory standards for mind-body interventions, (Eisenberg et al., 2002; Hollenberg & Muzzin, 2010; Saks, 2014). there are concerns relating to training, ethical practise and quality control that directly relate to public safety. In addition,

in the extract below she notes a real need for support for practitioners to help navigate problems of professional and ethical concern:

> *…when we have that lack of training or not a regulated training or a standardised training that meets a certain criteria or meets a certain standard, we don't know if everyone's* [people with mental health conditions] *getting the support that they need. When it comes to something like trauma, I think we know enough now at this point in time that there does need to be a certain criteria for training. To know that things are being* appropriately *and ethically handled within one's scope of practice …*A*s psychologists you have your code of ethics, the board, the associations that regulate. To not have that [these mechanisms] means there is no scope of practice, like your own moral compass is basically how you guide and how you lead, so I think that's a big mistake that we need to address* - Casey

Casey expresses concern that a practitioner's own moral compass is not enough to ensure that practice is delivered in an ethical, safe, and sound manner. As such, a code of ethics is warranted to oversee the TCTSY profession in NZ, a mandate that is expected in other mental health care professions, with standards of practice identified and maintained via a regulatory body (https://www.psychology.org.nz/).

In the following extract, participant Eunice shares a somewhat different opinion to that of Casey. Although Eunice supports high-quality training for practitioners who wish to facilitate TCTSY, she is adamant that the regulation of TCTSY is risky:

> *I think there's always a risk of where, you know, I would hate to see this [TCTSY} regulated…, but I think it's really important to have solid qualifications with some research behind them…*- Eunice

Eunice's reservations, which in part were echoed by Casey, demonstrate concerns that TCTSY could become overly prescriptive if it were to be standardised. A move to an overly prescriptive standardised model , according to these two participants, may damage the integrity of the practice as the Justice Research Institute and its founders originally intended (https://jri.org/). As Brunsson et al. (2012) asserted what often comes with the process of standardisation and regulation is a situation whereby the standard, initiative or rule transforms over time into a directive, which is then subsumed into norms and practices of the work group going forward. The issue for the working group (the practitioner) and the service user is that in the 'translation' process from practice to standard achievement, mechanisms and outcomes are changed from how they were originally determined. According to Sun (2014), this exact scenario has taken place with respect to the Buddhist practice of mindfulness after it was adopted into a Western healthcare paradigm. Sun (2014) suggested that the contemporary understanding of mindfulness has not only over simplified but divorced from its origins. This notion corresponds well with Eunice's perspective and Casey's perspective below, that is, the mechanisms change as a result of the regulatory and standardisation process, the new iteration over time bearing little resemblance to the original practice.

> *Like if it becomes too regulated and too prescribed by someone who hasn't experienced it or hasn't trained in it, is that going to change the offering itself? So, if government just decides to write this policy having never have*

experienced it [TCTSY] *or done training in it, it's like that's not going to work either.* - Casey

Casey's concerns regarding standardisation and regulation were highlighted in reference to diluting the authenticity and integrity of the practice:

…I also get nervous and worried about over standardisation or regulation and it kind of taking away the essence of why it works – Casey

In the extract below Tamarere discusses a similar issue regarding the impact of manualisation of mental health treatments. Tamarere suggests that although operationalised and manualised interventions can be more easily applied and empirically validated, for example, the CBT approach to treat symptomology (Lewis et al., 2020) for the likes of manualising treatments that have their origins in traditional healing methods, he uses mindfulness to illustrate this point, much can be lost (Ishikawa, 2018; Sun, 2014).

...the hard thing is, and keeping in mind the kōrero [talk] around mindfulness as well, once something is manualised you usually lose the essence of it… Yeah, it just drops out and it becomes a series of key components but not really with the ahua [shape, form, quality] *with the glue that binds it together, you know?* – Tamarere

There is an assumption regarding evidence based psychological treatments that manual-based treatment protocols are more effective than non-manualised treatments (Schnyer & Allen, 2002; Truijens et al., 2019). What Tamarere is referring to in this extract is the misappropriation of healing practices via the alteration and adulteration of the original and unique ontological and epistemological tenets (Harawira.,1999). Tamarere is also drawing attention to the

significant influence of the Western mineralisation process of treatments with regard to the functional and conceptual guiding principles of traditional healing practices. Harawira (1999) noted how European colonialism and Western conceptualisations of healing and knowledge appropriated from other cultures have repeatedly come with misinterpretations and distortions. Harawira (1999) used the example of shamanic and Māori healing and medicinal knowledge and how this has been altered via colonisation processes such as manualisation. The original healing practice, as a result of manualisation, according to this author, is reshaped to conform with dominant ontologies and ways of seeing the world that fit with Western conceptual frameworks, an example in terms of mindfulness that is exemplified by Schmidt (2011).

Casey, on the other hand, in the extract below, supports the idea of protocalised (manualised and standardised) mind-body treatments and cautions against mental healthcare providers practising a version of trauma-sensitive yoga without appropriate education from the training organisation Justice Resource Institute (Justice Resource Institute, n.d). She highlights the importance of practitioners being held to a certain standard of practice when delivering TCTSY to avoid the adulteration of this protocalised treatment and the possibility of malpractice. She alludes to the importance of maintaining a good reputation for TCTSY in terms of ongoing efficacy for this new innovative practice in the NZ context:

> *…I really want to stress the "if this is interesting to you then get trained, get trained, get trained, get trained" so that as you represent trauma informed yoga, you're holding, even though we're not regulated, your holding us* [facilitators of this practise] *to a certain standard. Keep that*

> *quality high so that ACC can show other organisations "actually this works, here's the numbers, here's what's happening," so that it's not just like "oh here's all the cases where it didn't work because of lack of training and experience* - Casey

What Casey is suggesting is that regulation and training by organisational bodies such as The Justice Resource Institute, with its nuanced understanding of complementary therapies such as TCTSY, are both important and useful to maintain practitioner competency and to regulate and oversee psychological/healthcare practice.

To recap, according to the extracts above regulation, standardisation and manualisation may facilitate and/or constrain the access, availability, and adoption of mind-body therapies to treat psychological conditions. As is the case in NZ, and across the globe, this is a contentious issue among practitioners of CAM and traditional healing. These practitioners have different lived experiences in the world, more generally and of healthcare delivery and, as such, each individual and community might maintain unique perspectives and worldviews on this topic (Liu et al., 2021).

Theme - Funding and evidence-based research:

In NZ mental health services are funded based on data reported to the Programme for Integration of Mental Health Data, that is, a data collection depository driven by the Ministry of Health. The Programme for Integration of Mental Health Data dates back to 1 July 2008 (https://www.tewhatuora.govt.nz/). It is intended to offer a clear picture of mental health service provision and mental health service user activity to increase and implement quality service provision to mental health service users across the country (Cunningham et al., 2019).

The funding of mental health services is partially based on reports drawn from this data. That said, in some instances, new innovative healthcare treatments are given funding, and often, decisions regarding the allocation of resources to these innovative approaches are based on existing research that highlights the outcomes of these approaches, which in turn supports the efficacy of the practice (Hughes & Reiri, 2019).

Sophia discusses the funding of TCTSY in reference to evidence-based research. She discusses the fact that interventions such as CBT are well funded as a result of data extrapolated from the likes of the Programme for Integration of Mental Health Data. She alludes to the importance of research to support the funding of interventions such as TCTSY. Sophia notes that years of well-evidenced research promote and legitimise the efficacy of interventions, and as such treatment approaches that have this backing are more likely to be funded:

> *I still think it just all comes back to evidence-based because the mind-body stuff has really only been evidence-based more recently, really pioneered by TCTSY, whereas CBT has been evidence-based for a very long time, and that's where the funding is. So, I would hope it will naturally, the more it's talked about and introduced, become more normalised just with awareness of it being evidence-based* – Sophia

Specifically in reference to funding of TCTSY, the root of this issue, according to Sophia, is the scarcity of research published on intervention to date. The obvious lack of empirical data to support efficacy when compared with the significant amount of research on treatments such as CBT to treat trauma-related conditions is a major constraint to access, availability and adoption of these practices (Ennis et al., 2021; Kuhfuß et al., 2021)

In the extract below, Nathan points to the influence of WEIRD, which is the impact of Western, educated, industrialised, rich and democratic influences, and the significant role this has played in reference to funded, published research and the availability of mind-body therapies. There is a growing body of research to suggest that populations around the globe vary substantially along several important psychological dimensions and that people from societies characterised as WEIRD tend to overvalue individualism, independence, analysis and impersonal interactions (Schultz et al., 2018). In the context of research studies and psychology's WEIRD leadership, quantitative randomised control trial research studies are more prevalent than qualitative research studies. Qualitative research studies are more frequently utilised in the context of mind-body therapy research. Quantitative research inspires funding and policy change in healthcare organisational arenas. While mind–body therapies such as yoga and mindfulness have gained popularity as treatments for trauma and mental health conditions, several scholars caution that the existing research often lacks rigorous methodology. Goldbeck and Melchior (2018) highlight variability in study designs and emphasize the need for larger, well-controlled trials to establish clearer evidence. Similarly, Cramer, Lauche, and Dobos (2014) point to heterogeneity in intervention protocols and inconsistent outcome measures as significant limitations in the literature. Cherkin et al. (2016) discuss challenges unique to mind–body research, including placebo effects and difficulties in blinding participants. A comprehensive Cochrane review by Ospina et al. (2007) acknowledges that high-quality evidence for mindfulness meditation programs remains limited. Additionally, Büssing et al. (2012) underscore methodological gaps and problems that complicate the interpretation of mind–body therapy outcomes. Together, these critiques suggest that while promising, mind–body research requires more rigorous study designs and standardized protocols to validate its effectiveness. If viewed through this lens, a field established under the umbrella of WEIRD, helps explain why mind-body therapies (with

their focus on qualitative research studies) has struggled to legitimise and build treatment efficacy.

> *Mental Health organisations have historically relied on empirically validated studies to support decision-making in terms of best practice guidelines for the treatment of mental health conditions*- Nathan

> *… that very basic issue that mind-body therapies have really not had their focus on evidence-based treatments that they can then go "well look at us, look as us over here, we've got all this data here, why you don't give that a try? So yeah, it's tough.* – Nathan

Nathan suggests that to bring attention to and create support for the adoption of mind-body therapies with regard to funding, a significant shift to quantitative research designs is imperative in the mind-body field, as is increasing the number of studies published, to make the case for adoption in service provision.

Below, Nathan makes the point, that policymakers typically fund CBT treatments which have proven results according to a significant amount of research. More often than not these studies have employed RCTs as a part of the quantitative research design (Knapp & Wong, 2020):

> *… randomised control trials, they speak, you know, CBT has become so pertinent because there's just so much data on it now, everyone's done CBT and randomised control trials on CBT, everyone sort of knows. So, you know, you can't argue against that, so you pit that up against something that doesn't have any research efficacy, even though clinically it might be much, much better, you don't have a leg to stand on as a policy*

> *maker who is then saying "let's change a whole service to treat these individuals with this particular thing or these particular things, it's just… you can't, you're not going to get a leg in there* – Nathan

Evidence-based research, in principle, employs the use of prior research in a systematic way to inform and validate new research studies in what is suggested as an efficient and accessible manner. Evidence-based research in the field of psychology is considered the most fundamental approach to legitimising interventions, an approach necessary to minimise what is construed by Robinson et al. (2021) as irrelevant studies that might be "unscientific, wasteful and unethical". Without the backing of empirically validated studies, new therapies, such as the ones under investigation in the current study have found it difficult to find a place in the world of interventions for mental health.

Participant Phoebe highlights the following issues experienced by researchers investigating approaches in the mind-body field. She points to an issue regarding the use of traditional quantitative research designs to measure treatment effect sizes, moderators and mechanisms at work in mind-body therapies:

> *…so, we've been constrained, somewhat, by the traditional quantitative methods of evidence, meaning that some of the subtleties of what can happen with a range of different types of [somatic] interventions hasn't been able to be captured, so therefore they're not kind of considered to have evidence behind them* – Phoebe

Phoebe highlights a common critique in mind–body research regarding the limitations of traditional quantitative methods. These methods, such as RCTs

prioritize measurable and standardised outcomes, which often fail to capture the subtle, complex, and subjective effects produced by somatic interventions (Goldbeck & Melchior, 2018; Büssing et al., 2012). This methodological constraint can result in important benefits being overlooked or undervalued, as such effects do not fit neatly within conventional evidence hierarchies (Cramer, Lauche, & Dobos, 2014; Ospina et al., 2007). Cherkin et al. (2016) further note challenges unique to mind–body research, including difficulties with placebo controls and blinding, which complicate rigorous evaluation. Consequently, there is a growing recognition that mind–body therapies require more diverse and flexible research designs to fully validate their effectiveness and capture their holistic impact

Phoebe intimates that mind–body approaches to therapy, particularly the multiple interacting variables at work in such interventions, are difficult to isolate, analyse, and measure. She suggests that traditional research designs tend to be reductive when applied to mind–body approaches, potentially oversimplifying their complex nature (Wimsatt, 1976). This critique is supported by more recent scholarship highlighting how the multifaceted and context-dependent aspects of mind–body and behavioural interventions challenge conventional research methods and call for more holistic, flexible designs (Stange & Ferrer, 2009; Borrelli & Lee, 2020). Phoebe notes that because quantitative methods have long been regarded as the gold standard for establishing treatment efficacy, the difficulty of measuring the complex variables involved in complementary and alternative mind–body therapies has limited their ability to gain legitimacy. This methodological challenge has, in turn, constrained the wider adoption of such interventions.

Casey amplifies her point by drawing attention to the fundamental underlying principle that typically accompanies conventional scientific research methods: if a therapeutic mechanism in psychology cannot be measured, then that mechanism lacks credibility.

> *…technical courses or papers, the vast emphasis is on top-down, or talk therapy, or cognitive approaches and I'm wondering if it's more because the body is just so mysterious, like it's such a mystery on how all of this connects and communicates and how it happens. Because we can't tangibly see that discharge of arousal or the discharge of the built-up energy or the pent-up energy, then all of a sudden it doesn't exist* - Casey

Pheobe points to top-down psychology training and course curricula that emphasise CBT and how this curricula content has found its way into programmes because the variables at work are able to be measured and legitimised via the application of conventional research methods and design (House, 2016). Pheobe is referring to what has been coined the audit culture (House, 2016); that is, research based on mechanistic thinking and the evaluation of knowledge based on commodified epistemologies and specific research design methods, that have been and still are pre-ordained by pre-conceived ontologies, directives and scientific outcomes.

Casey highlights how the mechanisms at work in somatic interventions (TCTSY) would be difficult to audit via these ontologies and directives, as would be the case for approaches such as reiki, shamanic rituals, Rongoa Māori and mirirmiri. She alludes an example in reference to the variable 'discharge of arousal' (Duros & Crowley, 2014). She reports that this might be a mechanism present in mind-body therapy and notes how measuring this "mysterious element" (if it were to be

researched) might simply be too difficult to capture via basic conventional quantitative research methods.

Ruby alludes to the influence of the positivist science movement. She highlights this movement's impact on psychological research more generally in reference to longstanding biases toward specifically quantitative designs, to legitimise and build efficacy for treatments (Leitan & Murray, 2014). Ruby's statement suggests that the field of mind-body therapies has more often than not adopted a qualitative approach to research to explore the mechanisms at work in these modalities, legitimacy of mind-body therapies stifled in terms of its contribution to psychology as a result:

> *I think part of the problem is this positivist science, evidence-based practice, the non-legitimacy of qualitative techniques. I just think, even you would notice through Covid, like everything they threw at us was evidence based. The problem is if you can't see it and you can't measure it, it doesn't exist* – Ruby

Ruby's comments echo viewpoints purported by Wittgenstein (Maraun, 1998) and are supported by contemporary scholars such as Greenhalgh et al (2014), Pope and Mays (2020), and Barry and Stevenson (2019), who critique the dominance of positivist science and the marginalisation of qualitative methods in psychology and healthcare. These authors emphasize the fundamental philosophical challenges of measurement in complex human experiences and argue for broader methodological pluralism beyond traditional evidence-based practice. According to Wittgenstein (Maraun,1998) when language is etched out of one reality and forced into another metaphysical environment, where the familiar and somewhat necessary landmarks and contextual clues are dispelled and/or removed, the process and purpose of

measurement tends not to make sense. The actions and elements performed in psychology from this perspective are not, in fact, solely constrained to frameworks purported by positivist science. Effective assessment and treatment employ both scientific-based applications and creative intuitive practice (Arnd-Caddigan, 2021; Cox,1988; Pysklywec, 2008). It can be said that psychology is both science and art. Those practising psychology draw on self-awareness and self-consciousness; they are context-sensitive beings who are inescapably interacting and affecting those whom they interact with (Tolman, 1992). Much of this interaction is not measurable and arguably draws on well-honed senses and intuition (Epstein, 2010). Ruby is criticising positivist psychology for its rigid focus on what can be objectively measured and quantified, often dismissing or overlooking experiences and phenomena that are difficult to capture with traditional scientific tools. She suggests that this strict reliance on measurable evidence leads to a narrow understanding of health and treatment, where anything that cannot be seen or measured is effectively ignored or deemed non-existent. This reflects a broader critique of positivism's limitations in addressing the complexities of human experience, particularly in areas like mental health and mind-body therapies.

In summary, mind-body research in NZ, has some way to go regarding being prioritised in the tertiary sector in course curricula and/or being given funding allocation in mainstream healthcare organisations. Without the support of research studies that demonstrate the value of these therapies with regard to treatment gains (more specifically, quantitative research), securing space will continue to be challenging, as will building efficacy and legitimacy for these types of approaches.

Theme – Education and knowledge:

The availability or lack thereof of training opportunities, education and knowledge on the topic of mind-body practises to treat mental health in NZ, appeared to be of significant interest to the participants in the study. Lack of access to quality training was illuminated as a significant issue. The inadequacies of curricular design, sequencing and implementation of course content on integrative care services (at the tertiary level) were illuminated as a noteworthy constraint in the context of this study, as was a real shortage of mind-body short course training opportunities in NZ.

Tony highlights the scarcity of university programmes and courses in NZ, for mind-body therapies:

> *…Somatics, I haven't heard a thing and I've been talking to so many people and I haven't heard anything about somatic approaches being offered in the tertiary system. There might be the odd one somewhere, but I haven't found it yet.* – Tony

In this extract, Tony suggests that he has made a point of asking about the availability of course content in the tertiary sector, courses that reflect a somatic approach to symptom relief from psychological issues. He adds he is yet to find these courses however the literature would suggest otherwise.

In the extract below, Georgia echoes that there is an absence of mind-body course circular content in healthcare and social science programmes in the tertiary sector. She also points out the significant presence of CBT taught in schools of psychology. She highlights how discourse that supports the delivery of CBT in these programmes is a mainstay in these settings and a difficult entity to shift. CBT has long been

considered the gold standard in psychological treatment, based on the notion that it is not only the most researched form of psychotherapy but is rivalled by no other form of therapy in terms of its systematic superiority and efficacy) (Ennis et al., 2021; Lepping et al., 2017). The theoretical models of change on which CBT is founded, are well evidenced and in line with current hegemonic paradigms for treating issues of the human mind and unhelpful behaviour (David et al., 2018). Georgia notes that CBT is ever present while the course curriculum content on mind-body therapies does not exist in the psychology course programming.

> *I mean I never learnt anything mind-body in my training. I'm not sure if you have - I mean it was all just about top-down cognitive yeah.*– Georgia

Monique notes that in schools of psychology, in an already overwhelmed training curriculum there is limited space for the likes of mind-body interventions.

> *… the biggest issue we always have is that we would love to add 200 other things to the programme and to our undergraduate curriculum, but you know, students are already stressed to the max having to already do eight papers and we can't really fit a lot else in, so it's always that balance of what can we remove to add, and always the idea is that we are providing a grounding or basis that people[students] can then work up from* - Monique.

Monique highlights this as a barrier to students accessing information on mind-body interventions. She states that although the addition of curricula content that canvases alternative treatment approaches is desirable in schools of psychology, further extension of an already over-burdened curriculum would do little more than add to the pressure already experienced by psychology students, who she believes, are already working at capacity.

Furthermore, Monique notes that the addition of alternative treatment approaches to the psychology curriculum at postgraduate level in psychology would also involve removing content in an established curriculum that is currently considered foundational knowledge to the role of psychologists. This content includes CBT.

According to Monique, balancing what is considered a solid and well-rounded professional base for students and implementing innovative and new curricula is challenging. The challenge is not solely related to curriculum design; the addition of mind-body content may also be a prohibitive factor in relation to scientist-practitioner model or the boulder model, a model most university programmes offering clinical psychology training currently adhere to (Pachana et al., 2012). Monique implies that a secondary factor concerning the implementation of mind-body curricula at postgraduate level in the school of psychology might be that these types of interventions might be viewed by faculty staff or the institution as not scientific enough to be part of the course curriculum:

> *I definitely can see that there is a gap in that sort of broader culture and the whole-body and that more holistic, it's very science and I think from an academic point of view that psychology fights hard to be a science…so we're in the sciences even though you can do it as an arts degree and they always want to be scientific in the neuroscience, so they push a lot of that cognitive neuro, that's sort of been what has traditionally been happening in psychology because they don't want to be seen as sitting on the couch and interpreting dreams*- Monique

Psychology may not see mind-body therapies as a science, so its addition to course curricula in the tertiary sector may be unfavourable. Psychology has historically struggled to gain legitimacy as a science. This assertion is supported by Lilienfeld

(2010). Although psychology often applies scientific methods to research and draws on outcomes from said research to build efficacy for interventions, the actual act of psychological treatment has been criticised at times as far from a scientific endeavour. Rather, it has been referred to as a relational, humanistic and extremely subjective interaction that, as suggested earlier, relies on a wide variety of variables to achieve a positive outcome (Colman, 2016). It seems that the tertiary sector and WEIRD champion this idea that psychology is a science. Since the early 2000s the notion of psychology as a strictly scientific discipline has been increasingly challenged by the incorporation of mind–body therapies into course curricula, as these therapies have yet to firmly establish themselves within traditional scientific frameworks. Craig (2009) highlights how mind–body approaches reveal complexities in human experience that conventional scientific models struggle to capture. Kabat-Zinn (2003), a pioneer in mindfulness research, emphasizes the difficulty of fitting experiential practices like mindfulness into rigid positivist paradigms and advocates for broader definitions of evidence and efficacy. Similarly, Shapiro et al. (2006) critique the challenges of reconciling subjective, experiential therapies with traditional scientific methods. Lutz et al (2007) further discuss how the experiential nature of contemplative practices complicates their study within conventional neuroscience and psychology. From a qualitative psychology perspective, Smith and Osborn (2008) argue that the meaning-making and contextual focus of these therapies are often sidelined by reductionist, positivist approaches that dominate psychology education and research. Together, these perspectives underscore that mind–body therapies currently occupy a complex position at the intersection of science and art, challenging psychology's conventional scientific identity.

> *I think that's partly why there's this bias towards all of the statistics and the research methods and writing the lab reports and all those things you do in your undergrad, … we're more still focussed on describing disorders and the DSM assessment process and evidence-based treatments and that type of thing, so it* [mind-body therapies] *might pop up somewhere as like in the treatment thing for like 5 minutes here and there, but it's not a big part* - Monique

Monique alludes to the plethora of tasks and texts that students are expected to engage in at the undergraduate level to achieve success in psychology programmes. She highlights the notion, that schools that teach psychological curricula are faithfully wedded to predetermined descriptors (DSM) and assessment techniques, techniques intended to shape how students view psychology, symptoms of a psychological diagnosis and treatment. A set of rules if you will, that arranges psychology as a science. This narrow perspective leaves little room for other ways of understanding personal human distress and treatment. Like a number of participants in this study, Freeman (2024) suggested that we have now arrived at a time where some central features of the contemporary discipline of psychology is being seriously critiqued, dismantled and reimagined to more accurately align with the lived experience of psychological practice. Freeman (2024) added that psychology has desperately needed a lens shift, and with this shift, psychology would be firmly situated in the humanities, a location from the author's perspective that is more likely to be ethically sound footing. A viewpoint that might better serve the needs of those engaged in psychological service.

Tamarere's solution to the absence of mind-body curricula in university psychology settings is to sequence somatic learning theory on these types of interventions earlier in the psychology curriculum:

> *…we have to look at all of the theories earlier on in the undergraduate programme, so having a build-up around the understanding of trauma in the body and things like that maybe earlier, so having a bit of a track of that I suppose* – Tamarere

A cumulative progression and layering of knowledge for students in the mind-body field, according to Tamarere, might assist scaffolding of learning of this content over time, which has the potential to promote further interest, understanding and adoption of these approaches at a later stage in the student's learning journey.

In the excerpt below, Petra is suggesting that clinical programs would benefit from incorporating expert knowledge in mind-body approaches rather than repeatedly focusing on traditional methods like CBT. She advocates for bringing in specialists with a mind-body orientation—ideally from an academic setting—to introduce and experiment with these approaches, allowing students to directly experience and learn from them. This implies a need for diversification and innovation in clinical training to broaden therapeutic options and understanding (Fosha, Siegel, & Solomon, 2009; Kabat-Zinn, 2005; Norcross, 2011; Norcross & Lambert, 2018; Porges, 2011).

> *I actually think what would be really useful would be to bring in some expertise into the clinical programs and have that expertise, you know, instead of just um, bringing in more of the same, CBT and da da da, bring in someone who is mind-body* [oriented] *at a university*

> *standing and do that, you know? Just experiment with that, let students experience it* – Petra

Petra intimates that the status quo in these settings, typically CBT-driven curricula, has a finite shelf life (Kazantzis & Munro, 2011; Norcross & Lambert, 2018). Petra suggests it is time for a change in direction with regard to curriculum content. Petra is promoting the idea that if experts in the field of mind-body therapies were to address students in clinical psychology programmes, for example, the information delivered by these experts might ignite something in the students attending these lectures. Petra is proposing that the student's experience of this new knowledge and alternative way of viewing treatment might promote interest and, as such, the adoption of alternative ways of thinking about and treating psychological distress going forward. Georgia also underscores the same idea:

> *…I think you know, the training in a lot of our institutions is very traditional, so I just think there is a lack of exposure, and unless someone has an interest in doing further training and development in these areas* [somatic approaches] *they* [students] *might not get the educational knowledge around what is possible or available* – Georgia

Georgia also highlights the presence of an outdated tradition in psychology curricula content at an organisational level. She suggests that the consequence of repeatedly providing the same curriculum content and developing outdated knowledge year after year is that it limits student exposure to the potential benefits of alternative mental health treatments. From Georgia's perspective change in the tertiary sector is possible as she references that different approaches to teaching at the tertiary level (which recognise integrative approaches) are in fact, available (Ranjbar et al., 2019):

> *…My view of the clinical programmes is that they're a little more old fashioned somehow, it's like they need you to fit into the biomedicine to get a job and they really want you to get a job. I just get a sense of that, I don't think that they're forward thinking* – Petra

Petra highlights a bias toward more orthodox conventional psychological knowledge and content in the tertiary sector, which is based on a scientific medical ontology. According to Petra, this curriculum is facilitated by tertiary institutions because it offers what may be perceived as a risk-free approach to teaching psychology. Petra is expressing the view that clinical programs are somewhat outdated and traditional. She feels these programs prioritise fitting into the biomedical model primarily to help students secure jobs, rather than encouraging innovation or alternative approaches. Petra suggests that the programmes lack forward-thinking perspectives may be limiting the introduction of mind-body therapies by focusing too narrowly on conventional biomedical frameworks (Barrett et al., 2023).

Georgia and Ruby highlighted a lack of curriculum content in universities on mind-body therapies as a constraint in terms of students in psychology gaining access to these types of therapies to treat mental health issues. Georgia and Ruby noted that even though there appears to be a demand for this new knowledge by students engaged in learning in the field of psychology, it still hasn't appeared in curriculum content :

> *I get students contacting me all the time, and I get to present at conferences and people come up to me and they're like "oh my gosh this is amazing! Wow!" And often they haven't heard of mind-body approaches, and they're*

> *really excited by them, but I don't know if any of them are being taught in the training programmes* [at universities] *in 2022* – Georgia

Ruby also suggests that the university programmes in psychology may be changing as a result of student demand for something new and different:

> "*And it's changing, I feel like the younger people coming through [post graduate psychology] are very much like "well where's the somatics in this?"*- Ruby

The introduction and training of a diverse range of therapeutic approaches, such as mind-body therapies, and the inclusion in the teaching space of a wide variety of mental health professionals were supported by Casey. She intimates that including different therapeutic approaches might help meet the ever-increasing demand for mental health services in NZ (Oakley Brown et al., 2006). The following extract highlights how including small portions of curricula content on adjunctive practices such as mind-body therapies when students are training early in their careers might, to some degree, alleviate and stem current demand for treatment in the mental health system:

> *Like we know that's what we're in* [a crisis]*... So, either the focus needs to be on supporting all modalities and we also need to think about what it looks like to mix up the training for psychologists, mental health practitioners, therapists, to include not only trauma but start the breadcrumbs of mind-body approaches within it* – Casey

An obvious lack of training opportunities in alternative approaches to treat mental health conditions was highlighted by participants. This was not limited to the psychology training

programmes at the university level. Participants also reported a conspicuous absence of mind-body short courses in NZ, more generally regarding professional development opportunities. This issue was noted as particularly salient when contrasted with the availability of similar training opportunities overseas. Wilson et al. (2023 p.2) supported the opinion that several participants shared. The authors suggest in psychological training programmes, there needs to be a "walk backwards into the future" that is they contended that to address many of today's complex healthcare challenges, we need to understand the origins of Western medicine and its ongoing, and largely hidden impact on contemporary health professional teaching and practice universities need to look to the past to understand where health educators can possibly make changes and grow

> *I've never seen anything on sensory-motor or somatic experiences therapy, I'm not a yoga trainer so I probably don't tune in as much for that, but for those things there I've seen very little come through over here, whereas in (country), I lived in (region) for years in (town), and there was stuff, you know, in the (region) or across the water that would come through. So, there's stuff in Australia, Rochelle Sharp who is a sensory-motor trainer, she's done quite a bit of training in Australia, but yeah, we don't see so much here.*– Nathan

Professional development training offerings in mental health in NZ according to Amy, Phoebe and Tony have historically been sparse, especially when contrasted with the diverse range of offerings made available to mental health professionals in Australia:

> *…. Even my supervisor, she's amazing, she goes "ugh, New Zealand" she used to always fly to the states for good psychological trainings or go to Australia and, yeah, I don't know why it's not happening – Amy*

> *I think there's a little bit of uncertainty about where are the good places to go to get training on stuff that actually is going to complement our existing training* – Phoebe

Phoebe also intimated that the quality of training offered in NZ, has also been poor when compared with professional development opportunities from overseas. disheartening. Tony is hopeful that this situation might be remedied in the future:

> *I'm getting so many people* [in mind-body courses he delivers] *from every walk of life… I'm getting clinical psychologists, psychiatrists even, I got shocked when a couple of psychiatrists, social workers, counsellors, life coaches, psychotherapists, you name it, really like from all walks of the whole kind of mental health field are really interested and excited because they can't get it anywhere else, I mean it's sad that they can't get it anywhere else [in Aotearoa New Zealand] and I'm hoping that changes, but the desire is there."* "*…I think it's a combination of seeing what's out there in the rest of the world and looking for it here …* – Tony

Tony notes there is consumer demand for mind-body therapy courses in mental health in NZ, and not being able to access training here is saddening.

Further still, Nathan discusses enabling access to training opportunities in mind-body therapies:

> *I think part of the problem is we just don't get the through put of people, you know? I don't think Peter Levine has ever been here or any from his field, I don't know how many well-known mind-body trauma informed mind-body yoga people have been here. So, that's a problem because people in this part*

> *of the world, as in any part of the world, you know, get their expertise through training* - Nathan

Nathan suggests that experts in the field of mind-body therapies do not seem choosing NZ as a training destination. Without the voice of experts in the field and opportunity and exposure to information from professionals well known in the industry the adoption of these practises by mental health professionals will be limited.

That said, information disseminated by the experts are informing practitioner interest in the field of mind-body therapy to treat mental illness (van der Kolk., 2014; Levine., 1997):

> *Gabe Mate's film that came out, The Wisdom of Trauma, that shifted things…Bessel van der Kolk, Peter Levine, those influences, you know, like if you look at them all you'll get is a whole lot of mind-body stuff, so I think that that influence has added* - Petra

> *I'm drawn to somatic experiencing, Peter Levine's work. I'm doing a course right now with Paris Williams* – Sophia

According to Petra, both in NZ and overseas, the influence of theorists, scholars, and practitioners via social media platforms and film has piqued curiosity regarding these therapies among mental health professionals and service users alike. Their influence and reach in terms of accessibility to information that is suggestive of an alternative etiological basis and treatment approach to the likes of trauma symptoms is making headlines. Particularly with those in the mental health field who are open

to exploring alternative narratives about this disorder and ways of addressing and managing mental health (van der Kolk, 2014; Levine., 1997).

A number of media platforms were named by participants as transformational in terms of their content and contribution to accessing information on treatment approaches that align with a mind-body approach to treatment:

> *Google, friends, therapists …Reddit, Instagram, so many different platforms to access information now* – Georgia

> *Marcia Linehan's dialectical behaviour therapy, at least they're bringing in more of that meditation and more of that Buddhist side of things which is moving more into the yoga approach…Subhadra Evans, she's at Deacon University in Melbourne, she did her PhD and does a lot of research now on yoga* - Monique

Other factors impacting the acquisition of knowledge in mind-body therapies to treat psychological conditions were highlighted by Ruby:

> *I feel they could have more workshops, they could have more of it [mind-body therapies to treat trauma related conditions] in the conferences, they could have advocacy or a bit of pressure on universities and government too, because we should be the experts in these models, there's tonnes of evidence-based practice to say that somatic approaches are the way to go, why aren't they more embedded already? We've had 20 years of research at least* – Ruby

A lack of exposure to the latest research in the field of somatic healing in workshops and conferences nationwide was raised by Ruby as a barrier to adopting these practices in mental health. Ruby reports that research on mind-body therapies for psychological conditions had been around for at least two decades (Astin et al., 2003). However, in her experience information on this topic had not filtered down to psychological conference agendas in the NZ setting. Ruby suggests that to promote the inclusion of mind-body therapies in psychological workshops and national conferences. Lobbying government ministries and universities to fund and include expert presenters in these fields, based on available research outcomes, would be helpful to promote the adoption of these practises by those attending.

An example of a training institute that has in fact done well to promote information and develop high quality and supportive training experience using a mind-body intervention was shared by Eunice:

> *… it's a bit like having your family behind you but it's having a researched and supportive organisation … Jenn Turner and David Emerson [founders of TCTSY- Justice Resource Institute] said "ring me, ring us anytime, any questions" and that's not because it's me it's because that's what they're open to for any of the trainees or the facilitators. So, having support behind the practitioner is really key, like real support* – Eunice

Eunice notes how the Justice Resource Institute and its staff were not only willing and able to support their trainees (during and post training) they were able to offer high-quality training alongside a well thought through curricula. The trainer's availability it appears was a key factor with regard support and adherence to delivering the intervention after their training

period was over. Sophia in the extract below also offered this training organisation high praise:

> *…They've* [Justice Resource Institute] *done a tremendous job at putting together a programme that really gives a solid understanding of trauma and attachment theory and neuroscience, and it helps me with my talk therapy as well and just being able to be a trauma informed practitioner"*- Sophia

Sophia gives credence to the organisation's curricula in the fields of trauma, attachment theory and neuroscience. Her narrative speaks to the notion that the Justice Resource Institute is not only interested in teaching the TCTSY training protocol, but this organisation also strives for their trainees to understand the etiological underpinnings that inform the term trauma from the perspective of this particular treatment approach. Sophia praises the Justice Resource Institute for developing a comprehensive program that provides a strong foundation in trauma, attachment theory, and neuroscience. She highlights that this knowledge not only has enhanced her understanding but has also improved her effectiveness in delivering TCTSY. Overall, Sophia appreciates how the Justice Resource Institute programme has supported her ability to practice as a mind-body therapist. Similarly, Georgia added:

> *It's super accessible because it's all online so I think that, in terms of it being online it's very accessible …*- Georgia

Justice Resource Institute's provision of online access to the 320-hour TCTSY training package had, according to Georgia, facilitated greater access to this intervention for mental health practitioners wanting to train in this modality from Aotearoa, New Zealand.

Although high praise was extended to the Justice Resource Institute for their ongoing support of students and curricula that develops knowledge of the intervention alongside a strong understanding of trauma as a mental health condition, two barriers with regard to the accessibility of training in TCTSY were also reported by Georgia:

> "*People are wanting to access it [TCTSY], it's just about how, and funding, and are there enough practitioners to meet that demand? – Georgia*

Like most psychological training opportunities, TCTSY is expensive and perhaps this is prohibitive for some individuals, particularly private practitioners who are interested in developing a part of their practise more in line with a mind-body therapeutic approach (Crome et al., 2016). This barrier according to Georgia cannot be overlooked. The expense to engage in training is indeed a constraint with regard to the adoption of this practise. A constraint that has cumulative and ongoing impact with regard to the actual number of facilitators formally trained to deliver this modality in Aotearoa New Zealand and the availability of this service to treat trauma affected individuals.

The expense and time involved in attending the TCTSY US training programme in person was according to Georgia exorbitant when contrasted with access and affordability of other trainings that may potentially enhance professional skills sets of mental health practitioners in NZ:

> *…When you transfer the USDs to the NZDs it's [TCTSY] really expensive and again, it's the prioritising for people with their training,*

so what's important, how much does the training cost? And also, how much time, it's quite extensive training so maybe 6 to 9 months- Georgia

The current cost of the TCTSY 20-hour foundational course for 2024 is $673:00 NZD, whilst the 300-hour certification programme is $5,892 NZD. With a price tag for training that exceeds $6,500 NZD to become certified as a facilitator of TCTSY, this training would be prohibitive to most private practitioners (Crome et al., 2016). Given that TCTSY (relatively speaking) is in its nascent stages of development with regard to its implementation as a treatment in government funded organisations such as Te Whatu Ora – opportunities to use a professional development budget in these larger organisations would be scarce.

Theme - Securing a therapeutic space:

In terms of the therapeutic environment, the elements essential to creating a safe space include a location that is not only comfortable, clean, and quiet but also private to ensure that confidentiality is upheld. Another organisational factor constraining the availability of TCTSY was access to appropriate and safe therapeutic settings.

In the extract below, Amy highlights how important privacy and safety are in terms of client engagement and facilitator delivery of trauma-sensitive yoga. TCTSY, according to Amy, requires the client to move their body. This often takes place in a group setting. Without assured privacy in terms of location and the therapeutic setting fear and self-judgement can arise for trauma affected individuals:

…Also self-judgements around body image, you know. I had a client, lovely lady, and she had such a big fear of doing any sort of physical exercise performance in front of others, that was a huge thing for her and at some

> *stage, with her it was a beautiful journey because she slowly let go of that and started doing power walks outside on the beach and it was a big thing for her to, and then even run, and now she's signed up for [...] classes and Pilates even in a group, you know"* – Amy

Both Eunice and Sophia highlight how finding an appropriate practice environment for TCTSY has been challenging:

> *Where the challenges came was from the local facility who didn't have a background in mental health. So again, it was location. One of the criteria that I also had to let go of within this setting was not being able to necessarily have the same officer [prison officer] in this space, I really did want the same officer within the space, I wanted them ideally practicing* [TCTSY] *with us* – Sophia

Mental health practitioners report difficulties accessing appropriate therapeutic spaces that are fit for purpose. Doughty (2018) refers to this as barriers to the therapeutic landscape, that is, a location/environment that, from a layout and geographical perspective, fails to represent principles of holistic health and healing. Doughty (2018) suggests that the therapeutic landscape includes place and space that is fit for purpose, a term operationalised in the study of health processes that facilitate and constrain health and wellbeing.

In summary, organisational constraining factors highlighted in this section included the impact of direct-to-consumer marking of pharmaceuticals and the influence this had on access to information regarding alternative treatment approaches (Hodgetts et al., 2011; Whyte et al.,2002). Other constraining factors noted related to finding a

foothold and voice in large organisations (ministries/universities) funding budgets and policy decisions, new and innovative ways of working therapeutically such as those investigated in the current study must be 'evidence' based (Visser et al., 2017). Without statistical evidence that mind-body works research is in short supply, funding for these types of approaches will remain scarce. Additionally, organisations that service mainstream healthcare are and have historically been notoriously slow to change (Goodyear-Smith & Ashton., 2019). This relates to practitioners tending to hold onto traditions and tried and tested ways of delivering services and tend to be risk-averse to trying new ways of thinking about and delivering services and care. This management ethos leaves little room for the likes of mind-body therapies which explores health via a very different ontological lens than the dominant biomedical model. This same traditional conservative standpoint prevails in schools of psychology in the tertiary sector in the NZ setting, as is the case in several Western tertiary institutions around the world (Kersey et al., 2018). As such, new minds eager to learn in these environments are exposed only to accepted models such as CBT, at the expense of other ways of viewing and treating mental health conditions. In addition, training opportunities in mind-body therapies in NZ, outside the tertiary sector have historically been scarce, and those available are variable to quality learning outcomes.

The organisational factors that have facilitated access, adoption and availability of mind-body therapies and TCTSY were echoed by those in the study that had lived experience of the Justice Resource Institute TCTSY training programme (Emerson, 2014). This research documents that if an organisation is truly focused on delivering a training product with content that reflects and encompasses breadth with regard to mind-body therapeutic techniques and depth in reference to a specific disorder

(trauma), it can be appraised as highly useful in practice. This, in turn, promotes the adoption of this form of intervention.

The health factors and organisational factors described in the previous two sections are also influenced by cultural factors that both facilitate and constrain the use of mind-body therapies as adjunctive interventions to treat trauma-related conditions. The participant's perspectives on what these factors are in the NZ context are captured below.

Cultural Factors:

Captured in the subsections to follow are themes pertaining to the cultural factors that, according to participants, have facilitated and constrained access, adoption and availability of mind-body therapies and TCTSY as adjunct interventions to treat trauma-related conditions. The themes a clustered around issues of holism versus reduction and cultural appropriation.

Theme - Holism and Reductionism

According to Buzzoni et al. (2022), over the past few decades, a noteworthy discussion has ignited in medicine and psychology about combining scientific and humanistic elements of practice together. These discussions relate to ‘integrative approaches’ to service health needs, an approach that may better serve the culturally diverse global population. These services and practices are situated and mediated in the space between an analytic-reductionist position and a normative-holistic position in human healthcare (King et al., 2020). These ways of considering healthcare, on the one hand, support the notion of disease being a mechanical failure of a biological element within the human body, and illness as a human state perceived and managed

by the whole individual in concert with their environment and community (Boorse & Health; 1977).

Tamahere suggests that a holistic perspective to health and well-being makes more sense for Māori than Western approaches such as CBT:

> *I think we might be able to address some of the challenges that come with that dominant model.* [Person's name] *talks about the approach of dividing, separating, and analysing from a Western perspective versus being much more collective and whole and working our way out from a Māori perspective. We would be doing that by starting with someone's tinana (the physical self) and working our way out to the brain, to the front of the brain, and then looking at how someone feels safe and feels connected with themselves. So, that's a much more holistic look [at trauma] from a cultural perspective* - Tamarere

Tamarere reports a degree of optimism with regard to positive change in healthcare and the potential for delivering services to Māori that are more culturally aligned with Māori views of health and wellbeing. Holism challenges the over-endorsement of biomedicine and tenets of reductionism/compartmentalisation that historically have been well embedded in colonised countries and associated healthcare systems (Mark & Chamberlain, 2012). Tamarere notes that if talk therapy is delivered when treating mental health issues (which engages the prefrontal cortex) *after* treating the tinana (the physical body), it is more likely that feelings of connection and safety will be experienced for Māori both physically and mentally. This is an approach in therapy, according to Tamarere, which situates the body and mind together, and for Māori, is a more culturally appropriate and safe way to practice.

Theme - Working alongside Māori

As suggested earlier in this thesis when implementing Western therapies with Māori mental health service users there is real necessity to be mindful in reference to cultural misappropriation (Lai, 2010). Data sovereignty, governance, the intercultural third space, and decolonisation frameworks are also vital theories to consider with regard to access to mind-body therapies for trauma-related conditions for Māori. Upholding Māori data sovereignty ensures respectful and culturally appropriate management of sensitive information, fostering trust (Kukutai & Taylor, 2016; Smith, 2021). The intercultural third space enables collaboration between traditional and Western healing methods, creating culturally responsive care (Bhabha, 1994; Durie, 2004). Decolonisation challenges historic injustices and promotes indigenous self-determination, enhancing cultural safety and resource allocation (Smith, 2012; Reid et al., 2014). Together, these frameworks support trauma treatments that are effective, equitable, and aligned with Aotearoa's diverse communities.

In the current study some participants advocated for the use of mind-body practices with Māori service users based on the argument that mind-body interventions were closely aligned with a holistic perspective to health and, as such, more fitting for Māori. Other participants were mindful of the origins of the mind-body intervention TCSTY with regard to cultural appropriateness when working with Indigenous populations.

In the following extract, Petra discusses the importance of working with models of health and wellbeing that support a whole-bodied approach to wellness when working alongside Māori:

> *I think that memories and body sensations are embedded by culture, and our cultural experiences and how we are culturalised is actually not just within your DNA, but your actual experience. So, whether you were ashamed for being Māori, that's a body felt*

> *experience, that's not just a "oh, someone was racist to me", that's a body felt experience. And so, I think if you miss out on these things* [learning what this experience means] *you are missing out on a lot. You know, you can talk the hind legs off a donkey about how people shouldn't be racist to you but unless you actually get what that actual body impact is, you don't get to healing I don't think* [...] – Petra

She shares the importance of considering the impact of colonisation for Māori in terms of the significance of the embodied effects of trauma and the felt experience of racism. Petra illustrates how healing of the whole body for Māori has historically not been well understood within our health system. As a result, there has been a missed opportunity to practice whole-bodied approaches to healing.

A different perspective was raised by Georgia. Georgia discussed the cultural appropriateness of delivering the mind-body intervention TCTSY when working alongside trauma-affected individuals who identify as Māori. She raised this raised as a concern:

> *TCTSY was developed by a white American guy and a white American woman, so it hasn't actually been created to be culturally safe and appropriate for so many people, and that it is a challenge that facilitators are working with around the globe who are trained in TCTSY/ So how can we make this model that was developed in North America by white people who were given funding, from certain people, more culturally appropriate? Yeah.* – Georgia

Georgia is pointing out that TCTSY was developed by white American practitioners within a North American cultural and funding context, which means it was not specifically designed to be culturally safe or relevant for diverse populations globally. She highlights that this lack of cultural grounding creates challenges for facilitators around the world who are trying to apply the model in different cultural settings. Georgia is essentially questioning how to adapt or evolve TCTSY so that it is more culturally appropriate and responsive to the needs of varied communities beyond its original North American, white-dominated framework.

> *I've tried to consult with like Māori yoga teachers in New Zealand so that we can make our groups more culturally appropriate and sensitive. So we, for example, try and use some te reo for different shapes and we have, when I do one on one work with clients, I have a stack of te reo yoga cards, and so I have tried to incorporate it in those kinds of ways.* - Georgia

In her pursuit to facilitate TCTSY in a culturally safe manner when working alongside Māori, Georgia shares that she uses strategies in practice that she has researched in consultation with Māori communities who engage in yoga to educate herself further and to ensure her TCTSY sessions are more culturally safe and aligned with a Māori world view of health (Barudin, 2021).

A bicultural approach to TCTSY, that includes indigenous perspectives on health and wellbeing, such as Mason Durie's Te Whare Tapa Wha, was endorsed by Sophia:

> *I find it really important as any clinician or professional to offer TCTSY alongside a bicultural approach, particularly within these settings, with*

> *that population because it is inherently holistic and many of these indigenous perspectives and the kaupapa Māori approaches, Te Whare Tapa Wha, they are holistic so they match really well.* – Sophia

Sophia suggests that, in some respects, TCTSY and Te Whare Tapa Wha can be synonymous (Young, 2014). TCTSY and Te Whare Tapa Wha are compatible with holistic worldviews and a whole-bodied approach to health and well-being (King et al., 2018). Mark and Lyons (2010) note that holism can be defined in various ways. While some scholars consider holism to represent inseparable dimensions of mind-body and soul, others believe holism represents these same three dimensions (mind-body and soul) in accordance with the environment. From both perspectives, holistic healthcare broadens the conventional biomedical focus on symptoms and disease to include physiology, psychological and spiritual well-being, interpersonal relations, and environmental influences, which is a multidimensional view of health (Mark & Lyons., 2010).

As suggested by participants, a holistic practitioner focuses on the whole person, that is the interrelationships of the physical, mental, emotional, spiritual and environmental dimensions of the person and their surroundings. A holistic practitioner considers how these elements collectively affect the subject's health and well-being. Some participants situated culture, holism and mind-body practices as having similar tenets. As such, they promoted the use of mind-body interventions when working alongside Māori struggling with mental health issues. Others were more focused on treading lightly with regard to cultural appropriation, and ensuring cultural safety was given the highest priority when engaging with Indigenous populations.

Briefly, the cultural factors noted in these findings (holism vs reductionism and cultural misappropriation) highlight common tensions in healthcare settings in NZ, with regard to service delivery. The topics highlighted by participants are frequently raised and debated in countries with Indigenous populations and more often than not, in the main, these topics remain partially unresolved (Bhattacharjee & Maltby, 2017).

Individual Factors

The themes and extracts included in the following subsections highlight individual factors relevant to the access, adoption, and availability of mind-body practices in NZ. The first theme illuminates how little the NZ public know about mind-body therapies in the context mental health and the impact this has had on the adoption of these types of interventions. The second highlights the fact that interest in somatic therapies to treat mental health conditions is well and truly on the rise among mental health service users and health practitioners alike in the NZ context.

Theme - Mind-body therapies and limited public awareness

In NZ, the group of people involved in delivering mind-body interventions specifically intended to treat mental health conditions can be described as a limited and somewhat diverse group of people who employ a wide range of techniques and practices. Those actually trained in these approaches are very few in number when compared with those engaged in more mainstream therapeutic approaches (Liu et al., 2021). As such, the NZ health service users have very little access to knowledge and interventions in this field, as was suggested by Tony in the extract below:

> *… the first thing is ignorance, just a lack of awareness, that again, not understanding the root of some of these problems to begin with, they don't*

know, most people don't know, you know, when they start a yoga class or they go and spend a little time in nature people go "oh that was so lovely" and they just connect the dots, "actually it's so lovely because I've been missing, it's a real deficit in my life" um, so a lot of people just don't get it.

– Tony

Tony highlights just how little the NZ population knows about mental health and health-related interventions and their moderating properties (Jorm, 2000). He alludes to the idea that the population are ill-informed or has not been given enough of the correct information to truly understand what might be going on for them, if they become mentally unwell. Many sufferers of mental health conditions, according to Tony, are not aware of how a treatment such as mind-body therapies that are focused on supporting the wellness of the whole person (not just the mind) can truly make a difference along their journey to wellness. Tony also points to the idea that once people encounter other ways of healing, they do, in fact, reflect on and understand what is good for them, for example, "yoga" or "nature". However, he also intimates that even though people seeking care recognise a shift in their attitudes, physiological dispositions or outlook after they have had an encounter with yoga or nature, they remain ill-equipped or too narrow-minded to consider the real impacts of preventative medicine in terms of the answer to and longevity of health and wellbeing. Tony suggests that individuals with poor mental health are overly reliant on the biomedical framework when trying to understand the aetiology and treatment of their conditions. The absence of factors such as physical movement and a connection with nature and the natural environment, and how these elements may contribute to personal distress, is far from people's minds when considering mental

ill-health (Van der Kolk, 2014; Pretty et al., 2005; Bragg & Atkins, 2016; Buzzell & Chalquist, 2009; Hartig et al., 2014; Witmer & Sweeney, 1992).).

In the extract below Monique and Sophia also validate the importance and use of yoga in a person's journey toward mental wellness. They also highlight that when contrasted with other more psychological science-based interventions (e.g., CBT), yoga may be perceived within the Western healthcare context as a recreational activity (Cagas et al., 2023). Yoga, from this perspective conjures up images of spandex and Instagram, or an activity endorsed only by those who support a somewhat hippie or alternative lifestyle:

> *I think, but to a much lesser degree now, but there will be that aspect of maybe it's* [yoga] *not really psychology or it's not a science and, you know, they* [the service user] *might misunderstand or think it's just doing a yoga class* – Monique

> *It's still somewhat new* [trauma sensitive yoga*], it's easy to stereotype or judge if you don't know the theoretical understanding around it, and it's easy to label it as something very alternative or even hippie, woo-woo, ha-ha. Um, so it would be undermined as a therapy and judged as more of a spiritual yoga or something that's superficial. – Sophia*

Monique and Sophia highlight that public understandings of yoga are misconceptions that overshadow the therapeutic benefits of the likes of TCTSY with regard to the true nature of this protocol and its health benefits for trauma-affected individuals and what can be achieved by engagement in this intervention (Nolan, 2016)

In the extract below, Casey's statement supports Sophia's assertions regarding the public not knowing what mind-body therapies are intended to achieve in the mental health context:

> *I think people are still like "whaaat? Like I understand psychology,* [but] *what is this thing?" And I think that's where this work that you're doing* [the writer and research] *is just so important to help people understand that it's not this "woo woo" thing* – Casey

Casey suggests that the dissemination of research in this field may be a remedy to public misinformation regarding the science of trauma-sensitive yoga:

> *…clients are aware now and clients are asking for these different modalities and treatments, especially if they've been in the system for like 10 years and they're feeling really stuck and they've noticed no symptom reduction, it's like "what else can I try? I've been sitting talking for 10 years and I'm all talked out* - Georgia

Even though there may be public misconception regarding mind-body modalities, service user awareness of these types of interventions in Aotearoa and worldwide is on the rise. As Dossett et al. (2020) suggest, meditation and other mind-body practices, such as yoga and mindfulness, are growing in popularity in the US, with 14% of the U.S. adult population reporting having used these techniques within the previous year. As a result, some service users even request alternatives to their healthcare treatment plans that include complementary and alternative approaches. In addition, recent statistical data on this very topic in NZ, according to Georgia,

suggests that access to integrative healthcare modalities more generally is also increasing:

> *I found some really amazing stats around people who are accessing treatment for trauma and accessing integrative health modalities, it's like 70% or something now – Georgia*

The factors mentioned above suggest that mind-body therapies, although not well understood by healthcare service users or the public more generally, are now being sought out by service users, and as such, engagement with these modalities appears to be on the rise (Liu et al., 2021). Service users appear to be looking for something different and are open to trying something new, albeit having very little understanding of the mechanisms at work with regard to these treatment protocols.

Theme - Somatic therapies add value

Mind-body practices worldwide are increasingly being used as adjunctive therapies alongside top-down interventions such as CBT and talk-based therapies in the therapeutic setting to treat trauma-related conditions (Kim et al., 2013). The attitudes of mental health professionals towards the use of these interventions as adjunctive therapies when treating trauma-related conditions have changed significantly over time (Ligorio & Lyons., 2019). This is reflected in interest in these alternative therapies from mental health professionals. According to Casey, this interest in the mental health sector has primarily been based on dissatisfaction with treatment outcomes when talk therapy has been used in isolation:

> *I just got sick of hitting a plateau [in therapy], like we [talk therapists] would always hit a point where there was nowhere else to go* – Casey

Practitioners in the field of trauma are beginning to understand that mind-body therapies as an adjunctive intervention may add value in terms of reducing symptomology, with outcomes and treatment gains greater than when applying talk therapy on its own (Nguyen-Feng et al., 2020):

> *… the thing that's piquing people's interest the most is we are starting to recognise that we* [mental health professionals treating trauma] *aren't hitting all the marks, like we have part of the puzzle but this body approach people are like "is this the missing piece? –* Casey

One motivating factor in terms of adopting adjunctive mind-body treatments alongside talk therapy in practice was highlighted by Tony:

> *…like we see these people with horrible traumas, and developmental, and complex traumas and they've been given these CBT skills or psychoanalytic skills and they're just not working, or not working very well, and so people are getting really quite frustrated and wanting something more effective, so that's a big part of it –* Tony

As a practitioner, Tony reports witnessing the significant debilitating effects of people's trauma symptomology. He shares his lived experience of sitting alongside his client's frustration with regard to the limits of therapies such as CBT in reference to minimal treatment gains. He notes that service users are looking for more in their treatment plan; they want other approaches in addition to the status quo that might add value with respect to alleviating symptoms.

Tamarere also underscored the benefits of adopting a somatic approach. He notes that bodywork gets to the source of the trauma. The trauma referred to in this extract as a physiological manifestation located in the body:

> *when you get into your body what happens is you start to connect with the trauma … now I just know this from experience with my clients* - Tamarere

In the extract below, Sophia also shares her perspective on the limitations of talk therapy when delivered in isolation. She highlights that when TCTSY is employed in conjunction with top-down approaches, trauma-related symptomology lessens rapidly:

> *…We can talk about the strategies for a long time and then have a body that's like a ticking time bomb and you've got to really approach it from the top and the bottom-up. And when you do, from my experience of using both, it's quick, it's fast, nothing is like it when you use both* – Sophia

A salient belief in the effectiveness of mind-body treatments and more specifically TCTSY as a complementary treatment alongside talk therapy was also shared by Casey and Georgia.

> *I would say top-down processing versus that bottom-up processing, and for me it's both, I don't think one overtakes the other* – Casey

> *…I truly don't believe that we can treat trauma by purely top-down cognitive approaches* – Georgia

Although there is interest in mind-body practises from service users in terms of access to these interventions the fact is that there are very few mental health practitioners who have adopted these types of mind-body interventions as part of their professional repertoire of skills and according to Nathan, is a significant barrier.

> *there's a handful of people in the whole country, who are doing mind-body work as far as I can tell* – Nathan

Nathan's statement regarding practitioner availability and access to mind-body therapists is synonymous with points highlighted by Belton et al. (2023). Belton et al. (2023) note that there are very few educational opportunities for budding mind-body therapists in the tertiary sector. This has impacted the number of practitioners available to engage in and offer these interventions. Besides Auckland University of Technology, very few tertiary institutions in NZ, have promoted the value of the body alongside psychology in terms of human wellness (Anjum et al., 2020). Without therapists trained in these fields, accessibility in NZ, will remain sparse.

The factors raised in this section relate to individual beliefs and knowledge about mind-body therapies in the context of mental health. The extracts suggest that service user interest and curiosity have peaked with regard to these mental health intervention alternatives; however, a tacit understanding of these modalities and the mechanisms at work to treat mental health conditions is still in its nascent stages.

To summarise this entire chapter, which has been dedicated to findings, it appears there are numerous factors operating at the levels of the health sector, organisations, and practice that have facilitated and constrained access, availability and the adoption of mind-body therapies and TCTSY as adjunct interventions for treating trauma-related conditions. From a health systems perspective, at the macro or ecosystem level, a significant constraining factor and a historical artefact impacting the adoption of mind-body therapies in the treatment of mental health conditions was Cartesian dualism (van Inwagen & Zimmerman, 2007). The health sector supports the notion that the body is separate from the mind. Cartesian dualism philosophy was considered by the participants as a significant factor that has had a significant

bearing on not only the way health is viewed in NZ, but also how health and mental health interventions are selected and utilised in this context.

From an organisational perspective, participant accounts suggest that there is resistance from certain sectors (tertiary and health) to teaching about, adopting, and implementing mind-body therapies for the treatment of mental health conditions, such as PTSD. Extracts suggest that slow systemic change in the health and tertiary sector are responsible for this, as is the fact that most mind-body therapies remain unregulated (Sierpina et al., 2007; Goodyear-Smith & Ashton, 2019). According to participants, the glacial pace at which mind-body therapies are finding space in organisational decision-making and funding is associated with a lack of rigorous research and issues with organisational inertia when it comes to change processes. The participants also named direct-to-consumer marketing, difficulties in securing appropriate therapeutic spaces/landscapes, and the absence of (high-quality) training in NZ, as other factors slowing the adoption and availability of these interventions (Donohue et al., 2007; Zadeh et al., 2019). That said, my analysis suggests that there is a definitive need and desire for change among participating practice experts with regard to adding mind-body therapies to organisational suites of services to address mental health issues and the course curriculum of tertiary healthcare and social science programmes. A change in this direction, according to the participants, would be well supported by health practitioners and service users alike.

Issues of cultural appropriation in the adoption of somatic (whole-bodied) approaches to health and well-being were raised by participants(Ijaz et al., 2016). Participants voiced various perspectives on this issue, with some believing that the somatic qualities embedded in the practice of mind-body therapies might align well for Māori service users seeking mental health interventions. There appeared to be some consensus that Māori models of health and

wellbeing such as Mason Durie's Te Whare Tapa Wha reflected the principles embedded in mind-body approaches to treat mental health issues (Pitama et al., 2007). That said, several participants noted that the likes of TCTSY for Māori were just another example of WEIRD misappropriation whereby an intervention designed by Caucasians would be imposed on Māori, with no evidence that this may, in fact, be useful (Rolleston et al., 2020).

A lack of public awareness regarding the notion of mind-body therapies as an intervention for mental health was raised by participants with regard to this being a particularly salient constraining individual factor in terms of the NZ public knowledge about health interventions and service use (Lui et al., 2021). That said, the public has access to alternative new and innovative interventions via the internet and social media. This information it seems, has spurred along interest in these modalities and has facilitated a curiosity for alternatives to current mental health treatment for both the public and mental professionals alike.

Particular themes from these findings will be discussed further in the following chapter. These themes will be organised in reference to their relevance to one another from a systems perspective. Factors will be highlighted in terms of their relationship to one another and how the culmination of these relationships has facilitated or constrained access, availability and adoption of mind-body therapies and TCTSY as adjunct interventions to treat trauma-related conditions in NZ.

Chapter Twelve: Discussion

The objective of this study is to explore factors that have facilitated and constrained access, adoption and availability of mind-body therapies, with TCTSY as a subset, as adjunctive treatment interventions for trauma-related conditions in the NZ context. The factors noted in the findings that have been selected for discussion have been purposefully situated within four important, somewhat nested levels of the social system— the health sector, organisations, culture, and the individual. These nested levels have been employed not only to help locate specific contextual influences on the phenomenon under investigation but also to illuminate the idea that these factors across the social system influence one another from the mesosystem right through to the microsystem (Apostolopoulos et al., 2020; Anderson, 2016).

As such, this discussion chapter will rely more heavily on a systems theory construct to frame not only structure and content but to highlight the complex web of inter-relating factors that appear to be governing and influencing the development of the phenomenon under examination (Apostolopoulos et al., 2020). All of the variables highlighted in this chapter found to influence access to, adoption and availability of mind-body treatments and TCTSY as supplementary interventions to treat trauma-related conditions in NZ, will be viewed from an inter-dynamic and relational viewpoint (Apostolopoulos et al., 2020; Vogd & Knudsen, 2015).

To begin, a brief summary of findings will set the scene for the discussion chapter. Following this will be selected topics from the findings believed by the writer to be worthy of further discussion regarding their relevance to the research question. These points are grouped under two headings in the following order: Discussion points - Constraining factors in the NZ Context, and Discussion points -Facilitating factors in the NZ Context.

A Brief Summary of Findings:

Findings from the current study have highlighted a number of factors in the NZ setting that have both facilitated and constrained access, adoption, and availability of mind-body therapies and TCTSY as adjunct therapies to treat trauma-related conditions. Broader health sector factors noted in the findings included a longstanding and pervasive social investment by the NZ population in Cartesian dualism and a bias toward the use of pharmacology as a first line of defence to treat mental health conditions (Brown & Key, 2020; Stevenson & Cutcliffe, 2006). That said, like many other countries worldwide, in more recent years NZ has seen a shift in service users' and mental health professionals' preference for whole-bodied approaches to healthcare. This shift has brought an increase in CAM treatments and a notable change in service user interest and demand for mind-body health treatments alongside other more conventional Western approaches to mental health interventions (Lui et al., 2021).

With the exception of the Justice Resource Institute in the US, which was identified as an organisation that has helped facilitate access to mind-body treatments – specifically TCTSY - in NZ, findings highlighted that many organisational factors are a barrier to access, adoption, and availability of the interventions under investigation in this study, in the NZ context.

One such constraining factor noted was the significant impact and overshadowing of direct-to-consumer marketing of pharmaceuticals in NZ, concerning the pervasive influence and power of this marketing strategy on service user healthcare knowledge, specifically regarding mental health treatment interventions (Coney, 2002; Mukherjee et al., 2013). In addition, findings highlighted how difficult it has been for CAM professionals in NZ to develop organisational space and sustain discourse in health settings, discourse that may influence funding and resourcing decision-making. Barriers to access, adoption and availability of mind-body interventions as adjunctive practices were characterised in findings through a lens

of resistance to innovation in organisational settings. In addition, health organisations in the public sector were recognised as slow when it came to engaging in systemic changes, including those that may relate to mind-body interventions to treat mental health conditions (Frizelle, 2022; Zabrodska et al., 2011). Findings suggested a somewhat neoliberal bias toward conventional Western health treatments and education in the tertiary context. This was evident in some instances in the context of inequitable wealth distribution in health and/or Indigenous stewardship of health curricula and/or policies (Kersey et al., 2018).

Other organisational constraints highlighted in the findings included a need to regulate and standardise mind-body therapies in the NZ context. Findings noted that standardisation of practice and governance by a regulatory body for mind-body therapies in the NZ context might increase the adoption of these interventions. Findings suggested that greater oversight of practice and monitoring by a regulatory body might evoke greater organisational and public trust in mind-body therapies for mental health conditions, particularly in reference to ethics and safety for those practising and receiving mind-body therapies (Bassman & Uellendahl, 2003; Liem & Newcombe, 2020). Findings also suggested that standardisation of mind-body treatments in the mental health context could be detrimental. Detriment to the field was considered from the perspective that the underlying tenets of an intervention, when secularised to fit a specific ontology, may strip away the essence of an intervention and as such may compromise the mechanisms and therapeutic benefits of these modalities as they were originally intended (Sharp et al., 2018; Suwankhong et al., 2011).

An absence of rigorous research studies, particularly quantitative research designs employing RCTs, was also highlighted in the findings as a constraining factor with regard to accessing organisational funding and resources for mind-body therapies. This issue was also noted by Maha and Shaw (2007) and Holger (2019). These authors reported that qualitative research was more often employed when studying CAM. They also suggested that the quality of the

qualitative studies was more often than not substandard. Without a wealth of evidence to support the efficacy of new interventions such as those under investigation in the current study, organisations such as Te Whatu Ora/Health NZ were unlikely to support the implementation of practices (mind-body) and/or research projects exploring outcomes of these interventions. That said, findings suggested that ACC have supported the implementation of TCTSY under the ISSC initiative. According to the findings, this initiative took place as a result of significant lobbying by the NZ TCTSY community.

Findings also highlighted that universities in NZ have historically been reluctant to develop curricular content to support the use of mind-body therapies to treat mental health conditions. One example raised in findings in reference to the absence of course curricula in mind-body therapies in the clinical psychology programme referenced making space for another psychology construct/model/conceptualisation of mental health in an ever-increasing course curriculum and how difficult this might be to execute. NZ has been slow to develop mind-body course content, content that more closely represents the shift in servicer user attitudes toward the use of adjunct or complementary interventions to treat mental health conditions (Lui et al., 2021; Maizes, 2006; Waldstein et al., 2001).

With regard to organisational constraints, findings raised the issue of practising mind-body therapies and organisational landscapes. Findings noted that the availability of appropriate and user-friendly physical spaces to conduct the likes of yoga or mind-body therapies was scarce. Conventional psychological therapy tends to be practised by health care professionals in small offices typically adorned with office furniture such as a chair and a couch. The practice of trauma-sensitive yoga and other mind-body therapies requires a safe and big enough space for the health professional and client to engage in movement and body-related interventions and techniques. As such, the therapeutic space must be fit for this very purpose; most mental health therapeutic environments are not (Hoyez, 2017).

Cultural factors highlighted in the findings were referenced for the most part in terms of what works best for Māori in NZ (Shroff, 2011). Findings reflected the longstanding argument of holism versus reductionism. That is, an ontological conundrum in the healthcare context that brings to bear models of health, approaches and interventions for Indigenous peoples in reference to their effectiveness (McCabe, 2008). Cultural misappropriation was raised concerning the application and facilitation of TCTSY for Māori who have been affected by trauma. The overall themes in the culture section of findings referenced a need to tread carefully when working alongside Māori with regard to mind-body interventions and trauma treatment more generally. Findings highlighted that mental health treatment recommendations for Māori must be given careful consideration and particular priority. Findings noted that one size does not fit all, a position made clear in the mental health review conducted by Oakley-Brown et al. (2006). The one-size-fits-all approach to mental health treatment in NZ has historically been detrimental to mental health outcomes for Māori. In short, the provision of mental health and health treatment approaches and quality of care have been inadequate for Māori and mind-body therapies, according to findings, may or may not be useful for this particular population (Oakley-Brown et al., 2006).

The limited, albeit increasing, public awareness of mind-body therapies was noted in the findings as an individual factor positively impacting access, adoption and availability of mind-body interventions to treat trauma-related conditions in NZ. It seems that an increasing proportion of the NZ population has recognised that mind-body therapies and CAM can be helpful adjuncts to treat a range of health conditions (Liu et al., 2021). Findings suggested that increased public awareness may have happened as a result of theorists, scholars and practitioners invested in mind-body therapies across the globe, publishing the therapeutic benefits and nuances of these interventions in accessible podcasts, films and books available in bookstores, on the internet and social media platforms (Mate, 2011).

In summary, findings have highlighted that although there is real interest in CAM and mind-body therapies among NZ mental health professionals and service user populations, there remain a number of constraining factors to access, availability, and adoption of these interventions, particularly at the organisational level. Some of these constraining and facilitating factors and their interrelatedness across the social system are discussed in greater detail in the sections below.

Discussion Points - Constraining Factors in the NZ context:

Point One: The impact of Cartesian dualism:

The following discussion point is focused on Cartesian dualism and the impact this has had on the access, adoption and availability of CAM and mind-body therapies. Although in recent years, there has been an increase in interest in CAM and traditional whole-bodied approaches to health and well-being (Liu et al., 2021; Mark & Lyons, 2010), according to findings, these therapy approaches in NZ remain situated under the long and somewhat impenetrable shadow of Cartesian dualism and a biomedical epistemological viewpoint. Findings suggested that this conceptualisation of the human body is an artefact of colonisation, a relic that has infiltrated the health system and our social framework concerning the body and health, from government policy at the macrosystem level through to individual worldviews and health-related behaviours at the microsystem level (Umeh, 2021).

Findings note that a by-product of the population's social investment in Cartesian dualism in terms of mental healthcare more generally, is continued societal and organisational support for a dualistic epistemology in health. This epistemology tends (in mental health at least) to favour treatment for the mind (including biomedicine, pharmacology and psychotherapy) at the expense of other more holistic ways of conceptualising health issues and treating the whole-body/whole person (Umeh, 2021). This dualistic philosophy, which separates the mind from the body, drives Western healthcare globally from research and policymaking to

assessment, treatment selection and service user knowledge of health issues (van der Kolk, 2015).

Findings suggested that Cartesian dualism has shaped how NZ society views the treatment of conditions such as PTSD and CPTSD. Society views these conditions as injuries of the mind as a result of trauma (van der Kolk, 2015). According to findings, this lens has had a significant constraining effect on the endorsement of other ways of viewing mental health and reactions to trauma events. Findings highlight that the adoption of Cartesian dualism as a philosophical way of viewing the human subject has had an impact on the promotion of, and in turn access to, alternative holistic epistemological perspectives and treatments such as those embedded in traditional healing practices and CAM (Caldwell, 2018; Tulip, 2021). Findings indicate that support for Cartesian dualism in NZ has, at the macro level of our social structure, directly influenced social norms and economic distribution of health funding (Correll, 2022). At the exosystem level, the tenets of Cartesian dualism have permeated marketing legislation (DTCM) via the distribution of pharmaceuticals. In addition, findings suggested that in the tertiary sector, the philosophical tenets of Cartesian dualism have wielded power over mental health course curricular content. Via scientist practitioner learning models as an example, student understanding and knowledge have significantly shaped conceptualisations of health issues and treatments in practice (Maizes et al., 2006). The flow-on effect of having Cartesian dualism as the guiding philosophy of subjective human being, according to findings, has stifled the availability of information and services of CAM and traditional healing at all levels of the social ecosystem, which has, directly and indirectly, influenced access to these types of therapies (Gergen et al., 1996). This includes mind-body interventions to treat trauma-related conditions. As findings suggest, because the NZ population views mental illness through the Cartesian dualism lens, disease experienced by sufferers of trauma-related conditions is considered by the majority of the population as a

problem with the brain, the mind, and/or brain chemistry. According to findings, with respect to this philosophy, trauma symptoms are viewed by service users of health care and healthcare professionals (GPs, psychologists, psychiatrists) as an injury of the mind. Through this lens, this injury requires treatment in isolation from the rest of the body with either psychological/psychiatric interventions such as talk therapy and/or pharmaceuticals (APA, 2013; Busfield, 2015; Foa, 2011).

To recap, findings suggest that from a Cartesian dualism perspective, psychopathology such as PTSD (as is classified in the DSM-5) is a problem of the mind, and as such the mind is the focus of treatment (APA, 2013; Kelmendi et al., 2016). Findings have characterised Cartesian dualism as largely bio-reductionistic and somewhat unhelpful for the treatment of trauma-related conditions. Findings from this research project suggested that the effects of trauma if a mental injury has occurred would be better served from a multisystemic perspective, a viewpoint that more closely aligns with theory and literature purported by Levine (1996), van der Kolk (2015), Emerson and Hopper (2011), and Wirihana and Smith (2014). According to a multisystemic theoretical perspective of trauma, the effects of trauma are located not only in the mind but on a cellular level in the body across multiple organs and functions, a condition that, in some cases, can span generations of people (Emerson & Hopper, 2011; Levine, 1996; van der Kolk, 2015; Wirihana & Smith, 2014). As such, a whole-bodied approach to healing (which may include mind-body therapies) may be a more effective treatment approach for this particular condition.

To touch on other findings related to this topic, the notion of a biochemical imbalance in the brain as a cause of mental health conditions was raised by participants in the study. This topic is contentious, according to Whitaker (2015), and has been directly challenged in terms of scientific legitimacy. There has even been speculation that the biochemical imbalance theory

aligns more closely with pseudo-science (Whitaker, 2015), another finding intimated by particular participants in the study.

According to findings, the flow-on effect of Cartesian dualism in the health care arena in NZ has been profound. This tenet has seen the legitimacy of psychiatry, pharmacology and talk therapy in psychology thrive at the expense of other epistemological and ontological ways of viewing subjective human beings. Findings imply that this social norm situated at the macro level of the social-ecological framework has fundamentally impacted access, adoption and availability of CAM and mind-body therapies. Cartesian dualism has permeated the very fabric of how health organisations, professionals and service users in NZ and Western countries conceptualise mental health and mental health treatment. The next discussion point will explore the significant impact of Cartesian dualism on GP behaviour in primary care settings regarding adherence and support for a biomedical approach to mental health care.

Point Two: The influence of the Biomedical model on GP healthcare behaviour:
In the following section, discussion point two, Cartesian dualism, and (as a derivative of this philosophy) biomedicine are discussed in reference to how these frameworks and their foundational tenets have shaped GP health care behaviour and, in turn, constrained access to CAM.

This factor was raised in the findings as a constraint with regard to service user access to mind-body therapies to treat mental health conditions. Findings in this study noted that GP perceptions, behaviours and biases toward the endorsement of Cartesian dualism and biomedicine to treat mental health conditions were, to some degree, constraining the access to and delivery of more integrated models of care in health. This is a factor that has been reflected in literature on this topic in other parts of the globe (Ormond et al., 2020).

As a professional group, GPs (with respect to their training) support the Cartesian dualism split (Correll, 2022). Findings suggested that when service users in NZ seek relief from mental health symptomology for the likes of trauma-related conditions (PTSD, CPTSD), it is likely that in the first instance, they will seek help from their GP. According to findings, service users who are seeking a solution to healthcare issues from their GP are more likely than not to be offered a biomedical perspective (based on Cartesian dualism) to explain their symptomology, and a treatment plan aligning with this biomedical perspective (Bandelow et al., 2012; Forbes et al., 2001). Mji (2019) notes that in most cases, unwell service users look in the first instance to a biomedically trained GP to help with relief from mental health issues. In doing so, service users tend to receive and submit to biomedical advice and treatment options for their dis-ease. Service users in primary care who report symptoms, such as those classified under the diagnosis of PTSD in the DSM-5 (APA, 2013) are most likely to be directed toward some form of psychotherapy (talk therapy) and/or pharmaceuticals as the first line of defence. According to findings, and Davis et al. (2001), concerning trauma-related conditions, pharmaceuticals such as sertraline and other serotonergic antidepressants such as paroxetine, fluoxetine and nefazodone are often prescribed. According to findings and recent literature on this topic, although GPs in NZ have more recently demonstrated an attitude that is more open to promoting CAM and mind-body therapies (Lui et al.,2021), they remain loyal to their biomedical training and knowledge base. This factor, as intimated in the findings, has made it difficult for mind-body practitioners in NZ to get referrals from GPs. Findings indicated that interest is present among GPs in terms of endorsing CAM treatment approaches (Lui et al., 2021); however, GP healthcare behaviour, which is largely based on their biomedical knowledge and training, prevails. As such, a fluid stream of referrals to CAM from the primary healthcare sector in NZ is yet to materialise (Lui et al., 2021; van Haselen et al., 2004).

From a systems perspective, the inherent unwavering support from GPs in NZ toward a biomedical approach to treat mental health is an issue that has also been reflected in several studies in other parts of the world (Kenny & Adamson, 1992). The full endorsement of biomedicine at the expense of other ways of understanding health and healthcare has profoundly impacted GP behaviour in the consultation space in terms of dissemination of biomedical information and biomedical patient care. Findings highlighted a bias in GP practice toward biomedicine, a discourse that does little to promote and/or endorse a whole-bodied approach to health and/or the mind-body connection. In NZ, medical training programmes that support a mind-body connection and integrative care models are few and far between, as is the case across the globe (Auckland University, n.d.).

Rotar et al. (2018) suggest that the influence of biomedical discourse in primary care, at the exclusion of other ways of conceptualising health issues, has been maintained in part by the professional autonomy doctors have historically been afforded in healthcare. According to Rotar et al. (2018), medical doctors have significantly influenced medical legislation and economic processes in health, including dominance over other allied health occupational groups. This significant influence has a bearing in terms of the referral process to secondary service providers. The findings of this study intimated that in NZ, the medical profession's overarching influence is responsible for limited access to mind-body therapies and CAM more generally. Kenny and Adamson (1992) maintain that the medical profession's absolute desire for autonomy over its own work, and the fact that this profession is not subject to the evaluation or scrutiny of other health professions, is a significant issue for other healthcare professions such as those under the umbrella term CAM. By definition, the medical profession wields authority over not only how patients are treated, but they also have power over other allied health professions (including CAM practitioners) via direct supervision, limitation, restriction, and exclusion (Kenny & Adamson, 1992). Furthermore, regarding

decision-making, legislation and governance in healthcare, the medical profession, and alongside this biomedicine, is significantly over-represented (Kenny & Adamson, 1992). In addition, and perhaps most importantly in reference to the topic under investigation, the medical profession in NZ (as it is in other parts of the world) has considerable influence in terms of its formidable administrative power in the form of referrals to secondary services (Lewith, 2001). Findings also suggest that in the NZ context, access and availability of mind-body therapies as complementary interventions, including as treatment options for trauma-related conditions, have been affected by this professional group's hold over power in the healthcare arena. Doctors have a deft adherence to the biomedical perspective, a perspective that has stifled the development of integrative care and the use of holistic healthcare, an issue that has also been highlighted in the literature in other parts of the world (Lewith et al., 2021; Liem & Newcomber, 2020).

The influence and impact of the medical profession on the development and sustainability of CAM was highlighted by Ovretveit (1985) almost 40 years ago. Ovretveit (1985) noted that as a result of the medical profession's significant influence in healthcare, new and innovative practices such as mind-body therapies (which for the most part sat well outside the biomedical purview) have missed out on organisational resource allocation, and as such, have not been afforded opportunities to make decisions and establish organisational authority in healthcare settings across all levels of the social system, a perspective supported in findings and discussed by Chung et al. (2021). Through the lens of Bronfenbrenner's ecological systems theory, innumerable overarching, medically driven decisions at the governance level trickle through to each level of the ecosystem and stifle opportunities to legitimise and promote the value of other epistemological perspectives in healthcare, for example, traditional healing, CAM and mind-body therapies, thus reducing accessibility and availably of such treatments to service users (Astin et al., 2005).

To build greater access to mind-body therapies and interventions such as TCTSY for trauma-affected individuals alongside treatment as usual in NZ, a significant shift in the way doctors are trained, behave, endorse and refer to secondary services would need to transpire (Astin et al., 2005). According to findings, in order to achieve this, GPs, alongside other mental health practitioners such as psychologists, would benefit from access to more knowledge on CAM, which to date in NZ, has been scarce. This topic is discussed further in the following section.

Point Three: Beleaguered health and educational institutional entities and their resistance to change:

Findings suggested that in NZ, overarching and governing entities in the healthcare system and tertiary institutions delivering healthcare knowledge are cumbersome, outdated, and, to some degree, administratively damaged beyond repair. This issue with regard to governance in these contexts has been highlighted as a problem not only in NZ, but across the globe (Currie & Suhomlinova, 2006; Vize, 2022). Where once health professionals, tertiary staffers and students of healthcare programmes were mostly satisfied with the processes and outcomes delivered in these establishments, what is more often than not being highlighted now, according to findings, is frustration with the lack of innovation in these contexts and exasperation with deft adherence to outdated philosophical and practical ideals in these spaces (Sachs, 2020).

According to findings, public healthcare in NZ for both service users and mental health professionals is somewhat beleaguered, difficult to navigate and very slow to change. These findings are reflective of a global trend in healthcare whereby the systems, processes and practices of today in this context (that have a direct impact on service user healthcare options and experiences) have become administratively cumbersome and overly and unnecessarily complex (Cumming et al., 2021; Gauld, 2018). Cummings et al. (2021) note that these somewhat impenetrable systems, intended to help the unwell and infirmed, are more often

than not lacking in cohesion and direction and notoriously slow to warm up to the promotion of new initiatives and ideas, such as the phenomenon under investigation in this study.

Findings intimated that when a conjoint approach to healthcare has been supported in NZ, initiation of the adjunctive approach has not prospered from government or ministerial advocacy at the macro level of the ecological and social system, but rather from grassroots advocacy by practitioners. According to findings, the introduction of integrated care, traditional healing interventions and/or CAM was either consumer-led or practitioner-led, with little if any government resourcing or fiscal support at the service-delivery level. According to findings, this scenario is particularly evident for interventions in their early stages of development, a finding reflected in healthcare contexts worldwide (Steel et al., 2018).

Findings noted that it was more likely that grassroots movements (specific individuals and groups) at the microsystem level of Bronfenbrenner's ecological systems framework have lobbied larger organisations and governing bodies. In doing so, these individuals and groups have, according to findings, built greater access and availability to the likes of mind-body therapies without the help of governance-level funding. TCTSY, according to findings, is a good example of this type of lobbying. Service delivery of the trauma-sensitive yoga programme under the ISSC contract held by ACC in NZ increased as a direct result of advocacy to ACC by facilitators of this intervention (ACC, 2023). Findings suggested that TCTSY facilitators advocated and lobbied ACC to get TCTSY introduced as a legitimate intervention to treat symptoms of trauma-related conditions.

Even though grassroots movements appear to have successfully lobbied larger organisations to build access to mind-body therapies to treat trauma-related conditions, findings highlighted that it is really only at the macro level in terms of policy change that these interventions can

be adequately funded, that is salient fiscal governmental support would be required and is absolutely necessary to actually make a real difference in terms of availability and access to these treatment protocols (Tran et al., 2020).

Findings also highlighted how traditional healing models and practices that employed a whole-bodied approach to health and well-being were also more often than not advocated for and established by grassroots movements. This point has been acknowledged and highlighted by Rolleston et al. (2016). Rolleston et al. (2016) noted that traction and integration of Māori traditional healing practices (which include mind-body therapies, such as mirimiri and romiromi) at the macro level of the healthcare system in NZ has been slow. Although, according to findings, there is interest from specific actors at the micro and exo levels of Bronfenbrenner's ecological system (that is, specific individuals and Indigenous groups), little influence in terms of building access to these interventions for mental health conditions can be achieved by grassroots actors (Hoffman, 2008). Findings suggested that individual members of the population who see the advantages of using these healthcare interventions, although helpful, rarely influence actors further up in the ecological social system framework. According to findings and other literature, real influence and change in healthcare service delivery tends to occur higher up the food chain (Park & Canaway, 2019).

Findings suggested that NZ's tertiary institutions (universities) are characterised as a constraining factor of the phenomenon under investigation. University curricula focussed on mental health assessment and treatment were referenced in the findings as outdated and slow to change. Findings note that curricular content delivered on CAM and integrated healthcare was completely absent in the NZ tertiary education context. This issue has been highlighted in the tertiary sector in other parts of the globe (Maizes et al., 2006). It seems there is an overreliance in the tertiary sector in psychology on outdated curricular content. This issue was considered in findings as a significant constraining factor with regard to the phenomenon

under investigation in terms of student learning opportunities and limited access to knowledge on CAM, traditional healing and mind-body therapies to treat mental health conditions. The overreliance in these contexts on what is considered tried and true curricular content to address mental health symptomology, such as pharmacology and talk therapy, is, in these spaces, firmly adhered to, regardless of service user interest in alternative healthcare approaches (Lui et al., 2021). Findings also suggest that due to the absence of curricular content in the tertiary sector on the mind-body connection, the adoption of mind-body therapies by budding new professionals stepping out into the mental health field in NZ is slow. Unless students access learning to provide CAM treatment for specific mental health conditions via short courses in the context of further professional development, competence in the practice of these alternatives by budding health professionals will remain scarce.

Findings noted that there was an insistence in the tertiary sector (in psychology/psychiatry) to deliver conventional and what can be described as well-worn course curriculum content. This was identified as a significant barrier and force to reckon with for advocates of integrated healthcare, CAM and traditional healing practices to treat mental health. This constraining factor has also been noted in other parts of the globe (Maizes et al., 2006). To remedy this, a concerted effort on behalf of universities and psychiatry residency training programmes to help trainees learn the epistemology and ontology behind mind-body therapies is necessary. However, given the status quo in the tertiary sector, CAM and traditional healing ontologies, epistemologies, and practices may find it difficult to establish legitimacy in the current social science and health science course programming. Findings note that an insistence on conventional WEIRD curricula content has stifled progress and innovation in the field of mental health care in NZ, a factor most salient with regard to mental and physical health outcomes for Māori (Waitoki, 2012; Waitoki et al., 2023).

According to Berry (2019), exploring the organisational change process via engagement in research studies or data-gathering exercises is necessary to better understand how a loss of coherence impacts organisational processes and development in these spaces. The cumulative effects of small continual organisational scale changes according to Berry (2019), can take a toll and, in some contexts, overshadow innovation such as that being explored in this study (Berry, 2019). According to findings, psychology faculties appear to be fixed on regurgitating a homogenous curriculum at the expense of new and potentially innovative practices in mental health treatment, such as mind-body therapies/practices. According to Kersey et al. (2018), a change in mental healthcare curriculum in the tertiary sector could add value to student learning and, as such, broaden the way health is viewed concerning ontology, epistemology and discourse in these settings, practice in healthcare settings and beyond. This shift in teaching and learning in the tertiary context may serve the populations these programmes aim to serve.

According to McGregor (2001), this problem of beleaguered institutional change in the tertiary sector in the NZ context appears – at least in part - to be driven by decades of neo-liberal government policy at the macro level focussed on ensuring that tertiary institutions are competitive in the global marketplace. The main thrust of policy decision-making in this context is to ensure these educational entities remain viable learning institutions (McGregor, 2001). As a result of this need to economically survive on the global stage, it seems university outcomes have focussed less on the development of rich and robust course curricula, consumer demand, interests and health needs of the population, and more on numbered student completions and quality assured research outputs (Zabrodska et al., 2011). It seems resource allocation in this business-driven milieu is paramount. Alongside this, partnerships have been brokered with influential corporations to make up for fiscal shortfalls, a business function in this context that has created tensions between universities and their

incumbent actors. Fiscally driven decision-making in this context is further compounded by a need for productivity outputs (Zabrodska et al., 2011). Although at the micro level, as findings suggested, most psychology staff and researchers would agree that health care is a holistic and evolving concept, tertiary institutions appear tethered to somewhat narrow and competing fiscal parameters, parameters that accentuate the idea of playing it safe with regard to curricular content. Regarding the topic under investigation, the economic climate in universities in NZ has left little room for innovation in course curricula, a problem further exacerbated by the implementation of the tried-and-true ethos and an overreliance on conventional course content and structure at the expense of and in the face of new innovative health care alternatives, public interest and demand for change (Lui et al., 2024).

As such, in the tertiary sector in NZ in the field of psychology, the WEIRD ethos and leadership reign supreme, as does investment in education that supports constructs foundational to biomedicine and paradigms that support the conceptual tenets of DSM-5, a classification system with an inherent bias toward mind-based biomedical framing of mental health symptoms. Psychology faculties and tried and true course curricula spearhead WEIRD psychology, and the notion that value added in this context refers to dominant and conventionally safe epistemological learning and teaching in mental health course material at the expense of all else (Came & Tudor, 2020; Lafrance & McKenzie-Mohr, 2013).

The impact of the WEIRD ethos on student course selection at the micro level of the social-ecological framework is that subject choice and course availability are constricted and consigned to conceptual frameworks and models of healthcare imbued with WEIRD ontological and epistemological viewpoints, that is, subject choice representative of Western science-based information such as CBT (Rad et al., 2018). According to findings, the university curriculum, as it is today in NZ, is nowhere near ready to accommodate the likes of

CAM, traditional healing methods and/or body-based trauma treatments from a whole-bodied perspective.

The following section discusses additional constraining factors regarding the tertiary sector and its impact on access, adoption, and availability of mind-body therapies. It focuses on the quality of research studies, or lack thereof, in the field of CAM and how this has also impacted the topic being examined.

Point Four: Quality builds efficacy:

The discussion point to follow will explore findings highlighting the negative impact of substandard research studies on CAM and mind-body therapies in the context of mental health, not only in the NZ context but in other parts of the world (Holger et al., 2018). Findings noted that there has been an excess of poor-quality research studies in the field of CAM, which has impacted the development of efficacy for mind-body therapies and protocols such as TCTSY. According to Bronfenbrenner's ecological systems framework, this factor is situated at the exosystem level of the social system. Although there is an abundance of research on CAM and mind-body therapies to treat the likes of trauma-related conditions, qualitative research designs, according to findings, have taken up the majority of these studies. Findings suggested that the lack of quantitative studies in the field of CAM has had an impact on building credibility and legitimacy with regard to the outcomes of CAM and mind-body therapies when used to treat mental health conditions. This factor was also highlighted by Holger et al. (2018) in relation to qualitative research studies conducted on TCTSY and the negative impact this has had on building efficacy for this protocol.

According to Chambless and Ollendick (2001), the pathway through which the field of psychology has identified appropriate and suitable treatments to treat psychological conditions has typically meant that interventions are researched in terms of the mechanisms at work in each protocol. The results from such studies must meet a specific threshold with

regard to research design and reporting. Not until this threshold is met will an intervention join the list of what is commonly known as evidence-based, supported therapies (Chambless & Ollendick, 2001). To reach this threshold, rigorous research studies across time are applied to the selected treatment protocol. In most cases, these studies are quantitative in design and have included RCTs and large sample sizes to make their case (Chambless & Ollendick, 2001).

As findings suggested, globally, research on mind-body therapies to treat psychological conditions is still in its nascent stages, with proof of concept regarding the feasibility and acceptability of these interventions often falling to less than rigorous qualitative research study designs. These research studies have more often than not been characterised by low sample sizes, poor methodological designs and anecdotal conclusions based on limited evidence (Nguyen-Feng et al., 2019). Research in CAM, mind-body therapies and TCTSY in NZ is notably sparse compared to the volume of research studies in Australia, the US, the UK and other parts of the world (Liu et al., 2021; Stapleton et al., 2015). According to Maha & Shaw (2007) and Wider & Ernst (2003), a shortage of research studies in this field is also frequently encountered in other parts of the world. In the UK, a mere 0.0085% of the medical research budget was spent studying CAM. Maha and Shaw (2007) noted that a lack of funding in this field regarding research grants can be attributed to an absence of data on the effectiveness of these interventions for treating mental health conditions, especially data generated from quantitative research studies. Without quantitative, evidence-based research studies to support and legitimise these therapies, research funding from sources such as government agencies will remain scarce.

Findings intimated that in NZ, there has been a real lack of government and health care organisational fiscal support for CAM. In line with the findings and according to Lui et al. (2021), more research in NZ is important to build efficacy for these interventions. Until this

happens in NZ, mind-body therapies will remain mostly unfunded and unavailable, as will mind-body treatments for trauma-related conditions. Findings suggested that more quantitative research in mind-body therapies is favourable, including research on TCTSY to help legitimise, promote and build efficacy and increase the likelihood of government ministerial funding opportunities for these approaches in NZ (Holger et al., 2018). National organisations that promote quality research in CAM do exist. The NCCIH is one such organisation in the US; the Practitioner Research and Collaboration Initiative multi-modality practice-based research network (PBRN) in Australia is another (Steel et al., 2017; Wong & Nahin, 2003). The NCCIH initiative provides information about health products and practices in CAM and dedicates service provision and funding to research approaches under the complementary and alternative health purview (NCCIH, n.d). Another priority for this organisation is rigorous research in the field of mind-body interventions to advance understanding of the mechanisms through which somatic and psychological approaches can affect health promotion and restoration, resilience, disease prevention and symptom management in mental health (NCCIH, 2022). Remarkably, the most recent Ministry of Health inquiry into CAM practices in NZ was conducted 20 years ago in 2004 (Ministry of Health, 2004; Stapleton et al., 2015). Given the recent increase in interest in CAM in NZ (Lui et al., 2021) from both a professional and service user standpoint, investigation and up-to-date analysis of data on consumer behaviour with respect to the use of these interventions may provide useful information and a way forward with regard to greater promotion, research and funding prospects in this field in NZ.

Findings indicated that current research methods and designs employed to investigate and analyse the mechanisms at work in mind-body interventions, primarily qualitative methodologies, have partly contributed to the absence of funding for these modalities. To date, qualitative research designs and smaller sample sizes are the hallmark of mind-body

research studies and have not inspired confidence in the field. Treatments such as CBT with quantitative designs and RCTs are bountiful and helpful when making decisions about funding in the healthcare sector (Hofmann et al., 2012). Quantitative studies and RCTs seem to be the crowning glory of the promotion and legitimacy of evidence-based medicine. Research on treatment interventions such as CBT has historically been the bedrock of affirmative decision-making when selecting and funding mental health treatment support and research in NZ and overseas (Pegg et al., 2021). To date, RCTs are the prevailing pathway to funding treatments in the healthcare sector, further research, and legislating healthcare treatments in the public domain across the globe (Manuti, et al., 2022). It seems CAM may need to follow suit and provide quantitative evidenced-based data based on rigorous research studies if these practices are to build legitimacy and efficacy in conventional healthcare contexts.

Although an argument can be made for more rigorous quantitative research on CAM, which might promote greater funding and availability of mind-body therapies, findings also highlighted an issue with this approach, namely the complexities experienced by researchers when studying the mechanisms at play in CAM, mind-body interventions and TCTSY. This issue was also highlighted by the Medical Research Council (UK), the National Center for Complementary and Alternative Medicine (USA), and Norway's National Research Center for Complementary and Alternative Medicine. These health organisations, which are representative of biomedicine and CAM treatment practises, and findings argued that the methodological approaches and epistemological paradigms typically utilised in research to study treatment interventions and the mechanisms of treatment effectiveness more specifically, may not be fit for purpose when studying whole systems therapies under the banner of CAM (Boon, et al., 2007). According to the findings, there is a need for new ways to evaluate, describe and understand the components at work in CAM interventions. This

process would require a fresh perspective in research design to truly capture not only the effectiveness of the mechanisms at work in whole-bodied health systems but also the multi-dynamic moderators at play and how well they worked with regard to effectiveness when applied to different mental health conditions and presentations (Boon et al., 2007).

The matter of constructed knowledge sharing, a factor situated at the macro and exosystem levels of the social-ecological framework, is important to consider with regard to shared social attitudes and beliefs held about health and wellness and what research design formats are considered best to inform healthcare systems of what works and for whom. Human learning is socially constructed (Gergely & Csibra, 2005), and as such - in the case of NZ and Western countries - is value-laden based on, for the most part, Western worldviews of medicine. This Western epistemological perspective reveres science as truth. The persistent and insistent call for evidence in the name of science and the use of models in psychology to build discourse and efficacy for all health treatments is, according to findings and also supported by McLaren (1998), currently being challenged. This debatable and well-worn dialectic supports the notion that if we do not have a scientific rationale, that is, an empirical way of investigating non-observables in health interventions, the research is deemed less than adequate and unworthy in the name of science. This rhetoric, according to findings in reference to CAM and mind-body therapy research, is unhelpful. The promotion and development of an alternative discourse in research that challenges the notion of good research and good enough evidence is long overdue (Boon et al., 2007).

As a collective, the Medical Research Council (UK), National Center for Complementary and Alternative Medicine (USA), and National Research Center for Complementary and Alternative Medicine (Norway) have suggested a different research perspective/paradigm when investigating whole-bodied health systems such as that being explored in the current study, a paradigm or research design based on different rules than conventional research

guidelines known to date (Boon, et al., 2007). This move to a new research method is essential to promote and build efficacy for CAM (whole-body systems) and mind-body therapies. More broadly, this approach to research would promote multiple ontologies to inform research and research guidelines and support the enhancement of knowledge sharing across heterogeneous contexts. The proposed recommendations are intended to soften complex power relations in regulatory spaces and build inclusionary/exclusionary strategies among disparate fields in health, such as the field under investigation, to ultimately build interprofessional cohesion among key players in the health space. A different approach to researching CAM may enhance research dynamics and, as a result, open doors to integrated healthcare models, systems and services (Adams et al., 2009; Boon et al., 2007). This idea has been well supported in NZ in the field of research in psychology for Māori (Waitoki, 2012; 2023).

To recap the previous section pertaining to research studies, on the one hand, researchers interested in advancing the field of CAM and mind-body therapies may benefit from complying with what the WEIRD fraternity of psychology calls more conventional rigorous quantitative science-based research designs. These designs might benefit from RCTs to promote understanding of CAM interventions and a move that might potentially build efficacy for these interventions. According to the literature, this has most certainly produced benefits for interventions such as TCTSY (van der Kolk, 2015). Conversely, researchers exploring the benefits of CAM, whole-body health systems and mind-body therapies could look to alternative research methodologies to help build efficacy and legislate and legitimise these treatment approaches. In terms of the latter, according to Boon et al. (2007), there is a need for a specific type of research design to ensure the components of complex interventions are described and understood as they are practised in context. In order to honour the complex nature of some CAM therapeutic whole-body treatment systems (such as Chinese medicine or

Ayurveda) and to uphold and respect the alternative ontological and etiological explanations that support these systems, an alternative research design to what is typically employed to explain and report on outcomes to build efficacy for interventions is required. Verhoef & Boon (2010) suggest a mixed methods research design. This type of research design includes wide-ranging methodological techniques, both explanatory and as well as pragmatic (Verhoef & Boon, 2010).

To conclude this discussion point, findings suggested that research approaches indelibly embedded at the mesosystem and macrosystem level of the social system have impacted how mind-body therapies are studied and viewed by organisational structures and funding bodies in NZ and across the globe. Broader mesosystem-level factors at play that influence organisational decision-making with regard to research include a significant bias toward WEIRD, that is, knowledge brokers in psychology that influence how research on treatments is viewed in the field of psychology. As such, when healthcare resources are limited (as is the case in NZ), when considering which particular mental healthcare service should be publicly funded, interventions such as CBT, an intervention that has a wealth of RCTs to support its efficacy, will almost always be the strongest contender (Martin, 2019). Essentially, research projects that can demonstrate the greatest potential based on translation will be the first to receive funding and be more likely to be adopted as the intervention of choice (Jorm &Piper, 2022). Given the status quo in research on CAM, the phenomenon under investigation is likely to be left out in the cold (Jorm & Piper, 2022).

Point Five: Service users need to know what's available

Findings highlighted a desire and demand in NZ for more integrated and holistic healthcare service delivery. Healthcare service users, according to findings, are interested in seeking and experiencing alternative treatments; however, other than what is provided on the Internet, they have limited access to information on alternative or complementary treatments to

address symptoms related to their health conditions. Although, as suggested in findings and by Lui et al. (20121), service users in NZ are becoming increasingly aware of new and innovative approaches to healthcare and are asking for alternatives to treatment as usual, little investment in the dissemination of information on alternative therapies has been afforded in the primary healthcare context. As previously discussed, how GPs disseminate knowledge and inform patients of treatment, care options, and availability is key to meeting service user needs and directly affects the development and promotion of CAM approaches in the healthcare milieu (Wiles et al., 2000). According to findings, although GPs pass on information to their service users about pharmacology and psychotherapy treatment options, they are less likely to venture into information dissemination on treatment alternatives under the CAM purview. According to Entwistle et al. (1998), healthcare information disseminated to service users must be relevant to the condition at hand and include a range of options, including outlining the potential health outcomes of each option and other such information. The information provided by GPs, according to Entwistle et al. (1998), must consider the local availability of treatments and the cost involved in engaging in any such treatment. In addition, high-quality, accurate healthcare resources available to service users must be based on evidence and appropriateness of treatments with regard to the individual service user's health needs. According to Entwistle et al. (1998), information distribution and content must also respect principles of equity and acceptability. According to findings, if GPs in NZ were to build their own knowledge and that of their service users on mind-body therapies in reference to the impact of these treatment approaches with regard to specific health conditions, as suggested by Wilkinson and Simpson (2002), they would be more inclined to refer to CAM as a secondary service. According to findings, if this were the case, mind-body therapies such as those under investigation in this study may have a greater opportunity to, at the very least, emerge from under the shadow of pharmacology as a first line of defence and

take a rightful place as a treatment for mental health conditions such that being described in this study (Cohen, 2007).

Summary - Constraining Factors:

In summary, with regard to the various points of discussion under the heading constraining factors, it appears that there was a great number of factors described in findings with interrelated impacts across the social system that have prevented access, adoption and availability of mind-body therapies and TCTSY as adjunct interventions to treat trauma-related conditions in NZ. The strength and influence of factors at the mesosystem level of the social-ecological framework is an overarching theme, particularly the influence of Cartesian dualism and the population's endorsement of biomedicine as a primary method of treating mental illness or disease in NZ. According to the findings, biomedicine also promotes the use of pharmacology as a first line of defence to treat mental health conditions such as PTSD. This bias toward biomedicine and the likes of DTCM regarding the promotion of pharmacology is also impactful, particularly in constraining access and availability to other sources of information on alternative ontologies and treatments for trauma-related conditions. DTCM by pharmaceutical companies utilises standard profiling data such as demographics to identify health-conscious consumers as advertising targets. According to Mukherjee et al. (2013), most consumers have favourable attitudes toward DTCM, a factor that may affect information search intentions with regard to barriers to alternative information that might expound the benefits of other interventions such as mind-body therapies (Prevel Katsanis, 2016). Although the Indigenous population in NZ, which supports a holistic view of assessing and treating health and well-being, is estimated at 800,000 (Statistics NZ, 2020), substantial support for a Western and Americanised view of healthcare remains well entrenched in NZ.

Discussion Points: Facilitating Factors in the NZ Context:

Point One: Digital platforms make haste

There is an upturn of interest in CAM and mind-body therapies in NZ and around the globe. According to findings, this appears to be credited to public and professional exposure to resources on CAM and mind-body therapies made available via social media platforms, books and film (Gupta et al., 2013). Findings have identified that these conduits (social media, books and film) have facilitated access to information on mind-body therapies and alternative theoretical explanations of trauma and trauma-related conditions that mental health professionals and service users may not necessarily be exposed to in the primary care context.

The advent of the Internet represents one of the most dramatic social and technological evolutions of the last two decades, with the number of Internet users increasing from half a million in the year 2000 to almost four billion in 2017 (Meeker et al., 2019). According to Lowrey and Sherrill (2020), social media platforms are generating rapid change in digital spaces between the micro-level of individual agency and the macro-level of structure and power. At the meso level, fields such as the one examined in this thesis have developed scholarship online aimed at promoting new ways of treating mental health conditions such as trauma-related disorders, an innovation in the mental health field that is somewhat different from what the service user might experience in primary and secondary health care services. Lowrey and Sherrill (2020) explain that these mesosystem-level digital developments are especially useful not only to promote change and innovation but also to dissect the evolution of change in any given field across time (Lowrey & Sherrill, 2020).

Findings elucidated the positive influence of contributions from theorists, scholars, and practitioners in NZ and across the globe who have utilised the World Wide Web to disseminate information about the mind-body theory and practices in trauma. According to

Gupta et al. (2013), leveraging the web and social media platforms to advance understanding in the health context has become increasingly popular and is considered an efficient and effective mechanism to promote help-seeking behaviours, communicate and broadcast health messages, and increase the service user audience. Findings indicated that social media, with its significant influence on how human beings think, feel and behave, has been credited with the emergence and spread of theoretical approaches and practices about a number of trauma-specific mind-body therapies and theories. Participants in the current study lauded the work of Gabor Mate (Maté, 2011) and Bessel van Der Kolk (van der Kolk, 2014) in the field of trauma and trauma treatment in reference to their presence on social media platforms, books and film, as well as their significant contributions to the field of mind-body therapies for trauma-related conditions.

Social media and its role in the healthcare industry is, according to Sharma and Kaur (2017), continuously being propelled by not only service user demand but mobile technology and the significant influence of the native digital generation. In recent years, mobile phone use has had a mounting influence over the deliverance of healthcare interventions, and according to findings, this includes the promotion of ontologies and practices related to mind-body therapies to treat trauma-related conditions in the NZ context. As suggested earlier, some of those engaging in digital promotional activities include NZ and overseas individuals keenly interested in the topic under investigation. The impact of these individuals' actions and the grassroots movements they are connected with are discussed further in the following section.

Point Two: Grassroots movements and the impact of advocacy

Findings indicate that grassroots movements and the individuals connected with these communities (which, in the context of Bronfenbrenner's ecological systems framework, are situated closer to the micro level) were a facilitating factor advocating for and building interest in the interventions relevant to this study. Findings noted that grassroots movements

were materialising in NZ in support of CAM and, more specifically, mind-body therapies to treat trauma-related conditions. An example given in the findings was TCTSY and how champions of this trauma treatment intervention had generated and established enfranchisement in spaces and organisations at the macrosystem and exosystem levels of the social-ecological system. Advocates and facilitators trained in TCTSY in NZ were identified not only as salient examples of people involved in a grassroots movement but also as individuals who had developed a successful working relationship with ACC. ACC is now supporting the use of this mind-body intervention as an adjunctive treatment option to assist victims of sexual assault affected by PTSD and/or other mental health conditions. ACC, it appears, has acknowledged the value of other approaches to healthcare, including TCTSY and Rongoā Māori, and in addition to this, has promoted an innovation fund to assist with access and availability of a broader range of services to those who are receiving services from this organisation (ACC, 2023). This fund is essentially open to new and innovative service designs, systems, technology and enterprises that build equity and improvements in current processes and clinical pathways to wellness (ACC Innovation Fund, n.d).

ACC-funded TCTSY and Rongoā Māori aside, findings suggested there are few government-funded mind-body healthcare services available. It is important to note that funding for TCTSY as a service for trauma-affected individuals at this stage is limited exclusively to the ACC ISSC contract. To date, funding arrangements like this are yet to be situated across the NZ healthcare system. It seems according to the findings, and noted by Hoffman (2008), that regardless of how innovative grassroots movements might be, these groups have limited reach across the ecological social system. Without the backing of a larger entity such as the Ministry of Health, mind-body services to treat trauma-related conditions (such as TCTSY) will remain scarce in the NZ mental health public healthcare sector, regardless of whether these adjunct therapies add value, a topic discussed in the following section.

Point Three: Somatic approaches add value

Findings noted that mind-body therapies are, in fact, being used concurrently in some healthcare spaces with conventional healthcare approaches (Seetharaman et al., 2021; Lui et al., 2021). TCTSY is an example of this in the ACC context, the provision of this mind-body intervention amongst a suite of other service interventions to treat mental injury as a result of sexual assault (ACC, 2023).

Findings suggested that mental health practitioners (at the microsystem level of the social-ecological framework) who are using mind-body therapies as adjunct interventions to treat trauma-related conditions are reporting that these mind-body therapies are adding value in the treatment space. Findings have highlighted that when employed as adjunctive treatment approaches for trauma-related conditions such as PTSD, there is a greater reduction in symptomology at a faster rate than what has been noticed by the treatment providers when employing conventional talk therapies in isolation. It seems that when bottom-up and top-down therapies are combined to treat trauma-related conditions, treatment gains are greater than when applying talk therapy on its own (Liu et al., 2018).

Summary – Facilitating Factors:

To recap the previous section exploring the facilitating factors highlighted in the findings, it appears there are fewer factors with interrelated impacts across the social system that have perpetuated and promoted access, adoption and availability of mind-body therapies to treat trauma-related conditions in the NZ context.

One facilitating factor noted in the findings was the influence of the World Wide Web, digital media platforms, written text, and film with regard to the NZ population's access to information on alternative practises and ontologies in health care treatment (Lowrey & Sherrill, 2020). Findings also highlighted the influence of grassroots movements and

advocacy for mind-body therapies. TCTSY as an adjunct treatment was illuminated in findings under the auspice of the ISSC contract held by ACC (ACC, 2023). The impact of advocacy for TCTSY in NZ, in terms of the promotion of an alternative complementary treatment for trauma-related conditions, was noted in the findings as nothing less than exceptional. TCTSY, as an adjunctive treatment approach in NZ, has benefited from advocacy, as have the service users who have connected with this service. Findings suggested that those who are delivering mind-body therapies as adjunctive interventions alongside more conventional treatment approaches have been impressed with the value added when utilising both talk therapy and mind-body therapy when treating trauma-related conditions. The results, anecdotally according to findings, seem to be speaking for themselves (Barry, 2006). These final words recapping facilitating factors bring this discussion section of the thesis to a close. The following chapters illuminate the current study's limitations and potential directions and recommendations for future research in the NZ context. Following this are reflections, final conclusions, references and appendices.

Limitations and Directions for Future Research:

When considering the implications of the above findings, it is important to acknowledge the limitations of the current research study and highlight future recommendations across the social-ecological framework that may help understand what facilitates and constrains availability, access, and adoption of mind-body practises to treat trauma-related conditions in NZ.

One limitation important to identify is that the current research employed a homogenous purposive sampling method. This method identified three groups of people with similar characteristics and investment in the field of interest. A homogenous purposive sample was selected based on a rationale that these specific groups of individuals might be the most likely to contribute data relevant to the topic under investigation. As such, the findings of this study can only be viewed through the lens of these few participants' opinions and perspectives. Simply put, the findings cannot be generalised to broader populations. Future studies could explore this same topic but engage a broader sample of mental healthcare professionals across disciplines. In addition, future studies could employ a much larger sample size, allowing for deeper exploration of the facilitating and constraining factors relevant to the topic under examination.

The writer also acknowledges the limitation of employing RTA. This qualitative research study, which used RTA as the method of analysis, paid homage to a constructionist approach. Findings in terms of analysis and selected themes were influenced by my biases and interpretation of the data. Cognisant efforts were made to adhere to the guidelines outlined by Braun & Clark (2006) concerning analysis and potential researcher bias.

Further recommendations in terms of future research into what works for those interested in mind-body therapies for trauma-related conditions are seen as important by the writer. Researchers of this field are encouraged to adhere to rigorous research methods that employ either quantitative or mixed methods research designs. According to the findings, there is a real absence of high-quality research in the field of CAM and mind-body therapies in NZ and abroad (Holger, 2018), making it difficult to build efficacy for these therapies as legitimate adjunctive approaches to treat mental health conditions such as trauma-related conditions. The absence of quantitative studies in this field in NZ is pronounced and has, according to findings, a direct bearing on the access, availability and adoption of these practices in the NZ context (Lui et al., 2021).

Further recommendations include regular investigations, by NZ government bodies or appointed organisations exploring the use of CAM, mind-body and traditional healing practices. Data such as this has proven helpful to the healthcare field in other parts of the globe (NCCIH, n.d). Data referencing numbers of practitioners utilising these methods, their scope of practice, service user engagement rates, GP referrals to these interventions, and the modalities used may offer information to help decision-making regarding funding. This data may impact access, availability and adoption of these services.

It is recommended that ACC, identified in this study as a critical facilitator of access, adoption, and availability of mind-body therapies for trauma-related conditions, undertake a review of its operational guidelines to address existing barriers to interventions such as TCTSY. Furthermore, it would be advantageous for ACC to provide clear, transparent, and detailed information regarding mind-body therapies — including the role of interventions such as TCTSY and mirimiri within trauma treatment as adjuncts to talk therapy — on its publicly available platforms. Enhancing the accessibility and visibility of this information would enable service users to make more informed and empowered choices about their care.

Further research in the NZ context might include a similar study exploring the factors that have facilitated and constrained access availability and adoption of mind-body therapies (as adjunctive treatment to treat trauma related conditions) but with a much larger sample size. Further research could also include exploring the same phenomenon as the current study; however, specifically focused on the context of ACC and sexual assault. Another area for further research in NZ might include exploring factors that have facilitated and constrained access availability and adoption of mind-body therapies as adjunctive approaches to treat trauma related conditions with a focus on Rongoa Māori practices such as mirmiri.

Reflexive Statement:

In this chapter I would like to critically reflect on my own position throughout research process. I would like to make explicit my background, assumptions, identity, values, experiences, and relationships that may have influenced the topic I chose, the questions I asked, my interactions with the participants, my interpretation of data and how I wrote up the findings. My hope is that this reflective statement will highlight my positionality, potential biases and previously held assumptions that may have influenced the current study and with respect to this and the steps I took to maintain ethical practice and transparency.

Selection of research topic:

I would like to begin by clarifying my professional background and its relevance to this research. Over the past 20 years, I have worked extensively in the field of trauma, across a variety of settings including prisons, hospitals, non-profit organisations, and more recently as a lead service provider for ACC, delivering talk-based and arts therapies to individuals who have experienced sexual trauma. My experience as a therapist, alongside a strong professional and personal interest in the field of trauma, profoundly shaped my approach to this study.

These roles have offered opportunities and insights into the complex and nuanced presentations of trauma-related conditions. In particular, CPTSD, although defined clearly within diagnostic frameworks such as ICD-11, often presents in therapy as an especially challenging and multifaceted condition to treat (World Health Organisation, 2019). When CPTSD intersects with historical and intergenerational trauma — a frequent occurrence in the NZ context — is that barriers to successful treatment outcomes become even more significant (Durie, 2001; Atkinson, 2002).

My lived experience in these professional settings has over the years raised important questions for me about how practitioners, including myself, can enhance mental health outcomes for individuals affected by trauma. These observations prompted my curiosity and motivated this research inquiry into what works, and what might additionally support or complement evidence-based practice, to achieve better treatment gains for trauma-affected individuals in NZ. By acknowledging my professional history and the assumptions that have emerged from it, I aim to be transparent about how my perspective has influenced the framing of this research, while remaining open to new understandings offered through the voices of participants (Finlay, 2002).

Positionality:

As a researcher with experience in the NZ public correctional and health systems, I have witnessed the impacts of neoliberal policy frameworks, including competitive tendering, managerial accountability pressures, and under-resourcing. These structural features have at times generated frustration for me and a sense of disillusionment in my professional role. These experiences may have shaped a critical stance toward the limitations and inequities embedded within current health service models. This frustration may have also influenced my expression of dissatisfaction with the public health system and may have also strengthened my sensitivity to systemic barriers that constrain trauma recovery and holistic care (Smith, 2012; Malterud, 2001). I recognise the importance of making this positionality explicit, in line with best practices for reflexivity, so that readers can understand how my background, assumptions, and advocacy for change may influence the interpretation and analysis of the research findings (Finlay, 2002). Across the breadth of this study, to address these potential biases I engaged in supervision, critical self-reflection, and ongoing dialogue with my academic supervisors in an attempt to remain as open as possible to the range of participant

perspectives encountered in the interviews and to ensure that my findings were as trustworthy and balanced as possible.

Relationships:

The selection of participants for this study was complicated not only by the limited number of professionals with expertise and interest in mind-body therapies for trauma-related conditions, but also by the close-knit nature of this professional community in NZ. Many potential participants were individuals I had known previously through professional or personal relationships. To address ethical concerns, including potential conflicts of interest, power dynamics, and the risk of compromising confidentiality, I made the decision at the very beginning of this project to exclude from the participant pool those with whom I had had prior professional contact before the onset of the study (Finlay, 2002; Liamputtong, 2010). This strategy was intended to protect the integrity and trustworthiness of the data by minimising any perceived coercion or bias that could arise from pre-existing relationships, in line with best practices for ethical qualitative research (Patton, 2015). Reflexive awareness of my position in relation to participants was crucial in ensuring that the recruitment process supported fairness, transparency, and the overall credibility of the research (Finlay, 2002).

Learning journey:

Having worked in the field of trauma for so many years and then having the opportunity to reflect on what I have learned to date has been a real privilege throughout the investigation. This thesis has offered a range of gifts notwithstanding the fact that throughout this project from the literature review to the discussion I could hone-in and develop a deeper understanding of conventional therapeutic approaches to treating trauma related conditions while broadening my knowledge of mind-body therapies and what these more recently researched modalities could provide as evidenced based adjunctive treatments.

From a training and clinical perspective, I as a result of this thesis engaged in professional development in the context of TCTSY (the 20-hour introductory training module) and have attended Bessell van Kolk's workshop explaining how the 'body keeps the score' with regard to trauma-related conditions. These workshops have added value in terms of practice and how I conceptualise symptoms under the umbrella term trauma-related conditions.

Final Conclusions:

The aim of this study is to inform policymakers, organisations, communities, mental health professionals, and service users about factors that have facilitated and/or constrained the access, availability, and adoption of mind-body therapies as adjunct treatments to treat trauma-related conditions in the NZ context. This was achieved by capturing the rich narratives of 12 participants who shared their perspectives and lived experiences on the topic under investigation.

The overarching goal in this study was to identify these factors within the context of a social system, that is Bronfenbrenner ecological framework, to better understand how these factors interrelate and where they hold the greatest influence in NZ. Findings suggest that at the macro level—specifically within the health sector and organisational settings—there remains notable resistance to adopting a whole-bodied approach to wellness more generally and more specifically this has a bearing on access, availability and adoption of mind-body trauma treatments under the same purview. Furthermore, this research advocates for greater attention and investment in mind-body approaches to treat these conditions, approaches that have been largely overlooked within the NZ healthcare system—approaches according to some theorists/authors that are urgently needed to improve poor mental health outcomes, especially for Māori (Oakley Brown et al., 2006; Gillifan, 2018).

In addition to highlighting facilitating and constraining factors in the NZ context the current study also offers deeper insights into the ontologies, practices, and perspectives that underpin trauma theory and integrated whole-body medicine—whether grounded in traditional healing, CAM, or conventional Western frameworks. These diverse foundations offer promising insights into to healthcare practices that might meet the varied needs of mental health service users in NZ experiencing trauma-related conditions. My hope for this study is that its

contents might enhance understanding of the challenges and opportunities surrounding mind-body therapies as adjunct approaches to treat trauma related conditions in NZ.

In drawing these final conclusions, I would like to emphasise that this study was in fact conducted in the NZ context. As such I would like to close this thesis by saying that there is need for special attention when implementing mind-body therapies as adjunctive treatments for trauma-related conditions in NZ, particularly when working with Māori. As highlighted in the findings, mind-body interventions such as TCTSY require a high level of cultural safety and responsiveness when offered to Māori clients. Given the foundational status of Māori as tangata whenua (the Indigenous people of Aotearoa), any therapeutic approach, including that under investigation, must respect and integrate Māori worldviews and traditional healing practices. Rongoā Māori and mirimiri serve as pertinent examples of culturally grounded therapies that inform practice. To this end, all practitioners embarking on the use of mind-body therapies to treat trauma related conditions such as TCTSY must receive specific training in the approach they are delivering alongside cultural competence. Such preparation is essential to avoid harm and to foster trust within the therapeutic relationship, a value that has historically been eroded with regard to the delivery of healthcare services for Māori in NZ in the past. Equally vital in the delivery of mind-body therapies with Māori is the need to uphold governance and sovereignty of data. This is also especially important with regard to trauma affected individuals given the sensitivity of trauma-related information (Kukutai & Taylor, 2016; Office of the Privacy Commissioner, 2020). To that end, ensuring that data storage and management practices when delivering mind-body therapies align with both cultural values and legal obligations when providing a service for Māori, is paramount. Failure to uphold the principles mentioned above may undermine trust in these interventions and restrict availability, due to fear or reluctance among Māori clients to engage with services perceived as culturally unsafe.

To conclude I would like to add that a continued emphasis in healthcare in NZ must be placed on the benefits for Māori of decolonisation and indigenous self-determination. These principles must underpin the implementation of mind-body therapies in NZ to counter the enduring effects of colonisation. Actions that align with decolonisation and self-determination bolster indigenous health systems (including mind-body therapies) and support Māori leadership in therapy design and delivery. Such principles and approaches not only enhance cultural validity of the likes of Rongoa Māori (mirimiri) but also empower Māori communities to take control of their own health outcomes (Smith, 2012; Came & McCreanor, 2015).

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Appendices

Appendix A - Participant Information Sheet

Title of Project:

Exploring what facilitates or constrains access to Trauma Center Trauma Sensitive Yoga and other complementary or alternative mind-body approaches for the treatment of trauma in Aotearoa New Zealand.

An invitation

My name is Meredith Standing. I am a post graduate student at Massey University and I am inviting you to participate in my research project for my Doctorate of Clinical Psychology. Your agreement if you choose to take part in this study is greatly appreciated.

What is the purpose of the research?

The broad aim of this project is to understand how various factors at a societal, organisational, cultural and individual level in Aotearoa New Zealand facilitate or constrain access to TCTSY and/or other complementary and/or alternative mind-body approaches to trauma treatment in an Aotearoa New Zealand context. Throughout this study TCTSY is considered an example approach that both complements traditional evidenced based trauma treatments, and which represents an alternative to approaches typically employed to treat symptoms of trauma related conditions.

As a participant what will I need to do?

I will interview you via Zoom which will take about an hour. The link will be sent to you via email a few days prior to the interview. This interview will be subsequently transcribed. During the interview I will ask you questions relating to either Trauma Center Trauma Sensitive Yoga and/or other complementary and alternative mind-body approaches to treat trauma that are relevant to your specific role. Together we will explore your experiences, thoughts and attitudes about these approaches to trauma treatment and what you believe has helped or hindered the adoption of these modalities in an NZ context.

If I participate, what are the risks of being involved?

You may feel concerned about being identified in the study and the transcribed data. You will be invited to choose or be allocated a pseudonym at the beginning of the study and any identifying details will be removed from your transcript, the research report and any other academic publications arising from this project. Therefore, only I will know your identity, however your transcript will also be viewed by my supervisors Dr Ella Kahu and Dr Ian de Terte, both senior lecturers at Massey University.

If I participate, what are my rights?

You are under no obligation to accept this invitation. If you decide to participate, you have the right to withdraw from the study at any point prior to analysis of the transcripts. You may ask any questions about the study at anytime and you may decline to answer any particular question or reflect on any particular issue. When the project is concluded, you will be given access to the full report upon request.

If you participate, how will your data be managed and stored?

The transcriptions for this study will be stored securely in password protected electronic files and/or locked filing cabinets for five years after completion of the project, when they will be destroyed.

Who else is involved in this research?

As previously mentioned, Dr Ella Kahu, Senior Lecturer and Dr Ian de Terte, Senior Lecturer from Massey University are supervising the study. In addition, Associate Professor Dr. Natasha Tassell-Matamua will oversee the cultural aspects of the project. The Treaty of Waitangi principles of partnership, participation and protection will provide a framework for the rights, roles and responsibilities of myself as the researcher and you as a participant. Oversight will take the form of discussions with Associate Professor Dr Natasha Tassell-Matamua which are intended to challenge any western ideological bias or blind spots that I may have. I am aware that in the past Māori have frequently been studied by non-Māori and I am cognisant that being Pākehā may, for some, generate discomfort. As such, your right to withdraw from the study at any point will be justly observed.

Participant Consent Form

I have attached the Participation Consent Form. If you are happy to take part in the research, please read and sign the Consent Form and return it to me via this email address: [redacted]

If you participate, what do you do if you have concerns about the research?

If you have any concerns, please don't hesitate to contact my supervisor, Dr Ella Kahu either by phone or email.

Phone: +64 (04) 801 5799 Ext. 63602 Email: E.R.Kahu@massey.ac.nz

Yours sincerely,

Meredith Standing

Student Massey University

This project has been reviewed and approved by the Massey University Human Ethics Committee: Ethics Notification Number: 4000024336. If you have any concerns about the conduct of this research that you want to raise with someone other than the researcher(s), please contact:

Dr Fiona Te Momo

Chairperson

Te Pūtahi-ā-Toi

Ph - 64 9 414 0800 x 43347

Email - Human Ethics Committee Northern

Appendix B – Participant Consent Form

Title: Exploring what facilitates or constrains the access to and availability of Trauma Center Trauma Sensitive Yoga and other complementary and/or alternative mind-body approaches for the treatment of trauma in an Aotearoa New Zealand context.

I have read this form and have been given time to consider my participation in this study and I understand the Information Sheet attached. I have had the details of the study explained to me, any questions I had have been answered to my satisfaction, and I understand that I may ask further questions at any time. I understand participation is voluntary and that I may withdraw from the study at any time.

1. I agree/do not agree to the interview being video recorded.

2. I agree to participate in this study under the conditions set out in the Information Sheet.

Declaration by Participant:

I _____ hereby consent to take part in this study.

(please print name in full)

Signature: _____ Date: _____

Please print and complete form and return to: [redacted]

Appendix C - Interview Guide

- Opening process:

Text supervisor that interview will be commencing in 5 minutes.

Open zoom and wait for participant.

- Start of interview

Make introductions/whanaungatanga.

Ask how the participants would like to open the interview, karakia, prayer something else?

Let participants know the zoom recording is about to start.

Start recording.

Go over information sheet.

Let all participants know to think about a pseudonym that they can be identified by throughout the study and beyond.

Explain to TCTSY group that there are small number of TCTSY facilitators in the country and as such the researcher will do their best to ensure anonymity is upheld by asking not only for a pseudonym but by eliminating geographical or identifying markers from their transcripts in any of the quoted material in the thesis.

Let the participants know they can with draw from the interview or study at any time up until the study is in its final draft before submission.

Explain that the recording will be sent to a transcription service and that this service is bound by the Privacy Act and has signed a confidentiality agreement.

Ask if the participant has any questions regarding the study before we proceed with the semi (lightly) structured interview.

Answer these questions before proceeding.

- Interview questions:

1. Tell me a bit about your current work and how long you have been in your role?

2. As you know the project is investigating the phenomenon trauma and mind-body bottom-up therapies – in light of this tell me a bit about your theoretical understanding of trauma?

3. What training courses informed your understanding of trauma and treating the likes of PTSD CPTSD and developmental trauma?

4. What is your understanding of Trauma Center Trauma Sensitive Yoga and/or other complementary and alternative mind-body approaches for the treatment of PTSD, CPTSD and or developmental trauma?

5. TCTSY/Psychologists only- How has your theoretical understanding of trauma impacted your treatment choices as a practitioner?

6. Tertiary educator only- How has your theoretical understanding of trauma impacted your decision making and the choices you make in your role as a tertiary educator of the applied psychological training programme you are connected to?

7. What has continued to fuel your interest in TCTSY and/or complementary and alternative mind-body approaches to treating trauma?
8. TCTSY/Psychologists only - On an individual level what do you believe are some of the benefits of employing TCTSY or other alternative mind-body approaches in practice when working with trauma?

9. On a cultural level what do you believe are some of the benefits of employing TCTSY or other alternative mind-body approaches in practice when working with trauma

10. On an organisational level what do you believe are some of the benefits of employing TCTSY or other alternative mind-body approaches in practice when working with trauma?

11. On a societal level what do you believe are some of the benefits of employing TCTSY or other alternative mind-body approaches in practice when working with trauma?

12. Tertiary educator only- On an individual what do you believe might be some of the benefits of teaching the likes of TCTSY or other alternative mind-body approaches as part of a curriculum in applied psychological training programmes?

13. Tertiary educator only- On a cultural level what do you believe might be some of the benefits of teaching the likes of TCTSY or other alternative mind-body approaches as part of a curriculum in applied psychological training programmes?

14. Tertiary educator only- On an organisational level what do you believe might be some of the benefits of teaching the likes of TCTSY or other alternative mind-body approaches as part of a curriculum in applied psychological training programmes?

15. Tertiary educator only - On a societal level what do you believe might be some of the benefits of teaching the likes of TCTSY or other alternative mind-body approaches as part of a curriculum in applied psychological training programmes?

16. TCTSY/Psychologists only- What do you believe might be some of the challenges of employing TCTSY or other alternative mind-body approaches in practice?

17. Tertiary educator only - What do you believe might be some of the challenges of teaching the likes of TCTSY or other alternative mind-body approaches as part of the curriculum in applied psychological training programmes?

18. In your experience as a _____ in terms of individuals experiencing PTSD, CPTSD or developmental trauma, who do you think these people would typically approach to help resolve the symptoms they are experiencing and more importantly why?

19. Do you think this would have an impact on what kinds of treatments they received? How come?

20. In your experience what do you think trauma affected individuals know about top down or bottom-up approaches to treating this condition? How come?

21. In your experience what do you think psychology students in psychology training programmes know about top down or bottom-up approaches to treating trauma affected individuals? How come?

22. How open do you think trauma affected individuals are to the likes of yoga or alternative mind-body approaches to the treatment for trauma? Why? Or why not?

23. How conversant do you think mental health practitioners (therapists, GPS) in general are with bottom up and top-down theories of trauma? How come?

24. How conversant do you think tertiary educators in psychology post graduate training programmes are with bottom-up theories and treatment for symptoms of PTSD CPTSD and developmental trauma? How come? Where do educators at this level get this knowledge from?

25. In your experience is it easy to access training and knowledge about mind-body approaches to treating trauma?

26. In your experience what do you think prevents mental health practitioners and tertiary educators in psychology from gaining more knowledge in this area?

27. How open do you think mental health practitioners and tertiary educators in applied psychological training programmes are to learning about the likes of TCTSY and other complementary and alternative mind-body approaches to treating trauma?
28. Which populations/groups in NZ who are affected by symptoms of trauma might specifically benefit from TCTSY or other complementary and alternative mind-body approaches to treating trauma? Which groups and why is that?

29. TCTSY is seen to be effective when coupled with other more conventional approaches to treatment such as CBT and exposure therapy. In your experience do you think complementary mind-body approach with clients who have are experiencing symptoms of PTSD CPTSD or developmental trauma could be used more in therapy in Aotearoa New Zealand? Why/why not?

30. In terms of learning opportunities and prioritizing curricula at university- what do you believe post-graduate applied psychological training programmes in Aotearoa New Zealand are doing to address the concerns raised by the Ministry of Health that mental health outcomes for our population are a problem? In terms of trauma theory and practice what could they do differently? What might enable this process? What might prevent this from happening?

31. In terms of larger organisations such as tertiary learning institutions, the District Health Boards, Accident Compensation Cooperation or the Ministry of Health what do you believe has hindered or helped the implementation of TCTSY or other alternative mind-body approaches to treating trauma?

32. What would need to happen for TCTSY or other alternative mind-body approaches to be fully embedded alongside other conventional top-down models to treat PTSD CPTSD developmental trauma in Aotearoa New Zealand? What do you think would be the challenges in making that happen?

33. Accident Compensation Corporation is currently funding TCTSY under the ISSC - do you think it is likely TCTSY or other complementary and alternative mind-body approaches to treating trauma might be funded by other organisations in future (eg DHBs or under the PHO contract)? Why/why not? What might increase the likelihood of funding in these other domains?

- <u>Closing process:</u>

Let the participant know this is the end of the interview questions and that I am open to any other thoughts or ideas they may have about the topic under investigation.

Let the participant know that it is important that they select a pseudonym and email it to me over the next few days so it can be used to name the recording when it is sent to the transcription service.

Invite the participant to close with karakia (something else) if the interview began with karakia.

Close the zoom and ensure recording is uploading.

Text the supervisor to let them know that the interview has come to a close.

Appendix D - Confidentiality Agreement for Transcription Service

This agreement is entered into on this date _____ between the Disclosing Party _____ and the Receiving Party _____

The Receiving Party desires to provide transcription services to the Disclosing Party. During the provision of services, the Disclosing Party may share certain information with the Receiving Party.

1. Definition of Confidential Information.

(a) For purposes of this Agreement, "Confidential Information" means any data or information that is proprietary to the Disclosing Party and not generally known to the public, whether in tangible or intangible form, whenever and however disclosed, including, but not limited to: (i) information contained in audio and video recordings, (ii) transcriptions of audio and video recordings; and (iii) any other information that should reasonably be recognized as confidential information of the Disclosing Party.

2. Disclosure of Confidential Information.

In accordance with seeking transcription services the Disclosing Party may disclose Confidential Information to the Receiving Party. The Receiving Party will:

(a) limit disclosure of any Confidential Information to the Disclosing Party.
b shall keep all Confidential Information strictly confidential by using a high degree of care and security; and

(c) not disclose any Confidential Information received by it to any third parties

3. Use of Confidential Information.

The Receiving Party agrees to use the Confidential Information solely in connection with the provision of transcription services and not for any purpose other than as authorised by this Agreement without the prior written consent of the Disclosing Party.

4. Return of Confidential Information.

Receiving Party shall return, delete or destroy all recordings embodying the Confidential Information provided including all transcripts and audio and video recordings, upon the completion or termination of the project and due payment between the parties being contemplated hereunder

5. Miscellaneous.

(a) This Agreement constitutes the entire understanding between the parties and supersedes any and all prior understandings and agreements, whether oral or written, between the parties, with respect to the subject matter hereof. This Agreement can only be modified by a written amendment signed by the party against whom enforcement of such modification is sought..
(b) The validity, construction and performance of this Agreement shall be governed and construed in accordance with the Information privacy principle 11 - Limits on disclosure of personal information New Zealand - Privacy Act (2020).

Receiving Party	Disclosing Party
Printed Name:	Printed name
Date:	Date:
By (Signature):	By (Signature):

Appendix E – Research Case Study

RESEARCH CASE STUDY

Trauma Treatment Interventions

How exploring what factors have facilitated and constrained mind-body therapies as adjunctive interventions to more conventional talk therapy trauma treatments in Aotearoa New Zealand has shaped my view of trauma theory and practice as an intern employed in the adult community mental health setting

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Meredith Standing

Massey University DClinPsych Candidate

Student ID:

Clinical Psychology Intern with Community Adult Mental Health Services Tauranga Hospital

This case study represents the work of Meredith Standing during her research from 2021 to 2022 and reflections as an Intern Psychologist in 2023

Candidate: Meredith Standing [redacted] Date: 13/11/2023

Clinical Supervisor: Leigh Rynhoud [redacted] Date: 13/11/2023

Abstract:

This case study is intended to capture a broad outline of this research project which is focused on elucidating the factors that have facilitated and constrained the use of mind-body therapies as adjunctive therapeutic interventions to treat trauma related conditions in the Aotearoa New Zealand (NZ). The case study is also intended to highlight how the examination of this phenomenon has impacted and shaped my perspective on trauma treatment and practice as an intern clinical psychologist in an adult community mental health service setting in Aotearoa NZ.

The case study begins by offering a short synopsis of the literature review including various studies relevant to the topic under investigation, a brief outline of the current research design, method and methodology and the findings of the current research. The case study concludes with a reflective discussion on how this investigation has influenced the way I think about my role as a psychologist in the field of trauma in the adult community mental health context, what I intend to promote and focus on in this context as a practitioner, what I intend to study in reference to professional development going forward and my broader intentions in terms of meeting the needs of our local community with regard to treating mental health and trauma related conditions.

Introduction:

Pepeha

Tēnā koutou katoa.

Ko Taranaki toku maunga, Ko Urenui te awa.

Ko tau iwi nga te iwi

Ko Russell Archie John Standing toku Pāpā

Ko Janet Ida Tocher toku Māmā.

Ko Meredith Standing toku ingoa.

No reira. Tēnā koutou, tēnā koutou, tēnā koutou katoa.

My name is Meredith Standing. I am Pākehā. For the first few years of my life I lived in Tāmaki Makaurau (Auckland) and following this spent my childhood and adolescence under the shadow of Taranaki te Maunga in the small town called Hawera. My father is English, he identifies as "cockney" he was born in London and immigrated to Aotearoa New Zealand on his own at the age of sixteen. He met my mother in a town just north of Hawera called Eltham. I have one sibling who is two years older than me. I am a mature student. I entered the clinical psychology programme at the age of 54. My working life prior to entering the psychology clinical training programme has been varied. I was a primary school teacher for five years when my children were very young, a programme facilitator in the correctional setting in both community and prison for 15 years and a registered arts therapist working with survivors of sexual trauma in years prior to me reengaging in tertiary study.

My learning and development journey has been peppered with various graduate and post graduate degrees mostly in the fields of sociology, psychology and the arts. Outside the learning environment I read, spend time with whanau and enjoying health and fitness activity particularly yoga. Most recently my focus and interest in terms of reading material has been primarily related to physical and mental wellness and the healing powers of yoga. My interest in yoga in reference to trauma was sharpened in the wake of Christchurch earthquakes in

terms of healing my own trauma injury. This healing among other things included a daily yoga practice, Bikram yoga to be precise. My penchant for understanding the link between trauma, and mind/body trauma treatments is inextricably linked to this particular event and has played a significant role in terms of the decision regarding selecting this research topic.

Study Beginnings:

In early 2021 I started this journey in a somewhat different place than where I have ended up. The original idea for the thesis was focussed on exploring the experiences of those who were engaging in the protocol Trauma Sensitive Yoga. Trauma Sensitive Yoga is a relatively new treatment protocol to treat trauma. It is now funded by the Accident Compensation Corporation (ACC) Te Kaporeihana Āwhina Hunga Whara, the NZ Crown entity responsible for administering the country's no-fault accidental injury compensation scheme, under the Sensitive Claims Contract (ISSC) (ACC, ISSC Operational Guidelines, 2022) This contract has been established by ACC to help sexual abuse survivors recover from mental injuries occurred as a result of sexual trauma. ACC funds services from qualified and experienced clinicians to deliver appropriate treatment and rehabilitation, including both talk-based and non-talk-based therapies. The non-talk-based therapies include breath therapy, music or art therapy, equine therapy, trauma-based yoga, and group-based therapies.

I shifted the focus of the thesis to what factors have facilitated and constrained the adoption and use of mind-body interventions to treat trauma related condition in Aotearoa NZ. I positioned mind-body therapies as the umbrella topic in the investigation with Trauma Center Trauma Sensitive Yoga an evidence-based Trauma Sensitive Yoga protocol as a subset of these complementary and alternative interventions. In collaboration with my primary supervisor, I decided to explore the phenomenon from a systems theory perspective, the investigation examining the components/factors within and between social systems that have impacted the access, availability and adoption of these interventions in the treatment of trauma in Aotearoa NZ. The systems explored in the study include individual, cultural, organisational and social systems in the Aotearoa NZ context.

Study Rationale and Aim:

There is a significant body of literature that supports the use of talk therapies such as cognitive behavioural therapy, trauma focussed cognitive behavioural therapy and prolonged exposure to treat symptoms associated with trauma related mental health conditions such as posttraumatic stress disorder (PTSD), complex posttraumatic stress disorder (CPTSD) and

developmental trauma disorder (DTD) (Bradley et al., 2005; Ennis, et al., 2020; Foa et al., 1995; Forbes et al., 2007; Prendes et al., 2020). Recent research suggests that although these talk therapies are beneficial, for many, symptom relief can be further enhanced through the use of alternative and complementary therapeutic approaches (Cushing, & Braun, 2018; Stewart et al., 2017). In terms of adjunct or complementary modalities to treat trauma related conditions, in recent times mind-body therapies have become increasingly popular (Cushing & Braun, 2018; Emmons et al., 2021). Van der Kolk (2015) suggests that for trauma sufferers to move toward wellness and to feel relaxed and physically safe in their own bodies, a mind-body connection in treatment alongside talk therapy must be cultivated and maintained. Recent advances in neuroscience echo this idea and suggest that a real sense of self is anchored to a vital connection with sensations within the body, the interpretation of which is crucial to trauma affected individuals in terms successfully navigating life in a tolerable and meaningful manner (Shilson, 2019; van der Kolk, 2015). As such, mind-body approaches such as the trauma resiliency model, sensory motor therapy, somatic experiencing and Trauma Center Trauma Sensitive Yoga (TCTSY) as adjuncts to talk therapies are considered particularly effective to successfully treat trauma related symptomatology (Emerson et al., 2009; Grabbe & Miller-Karas, 2018; Lohrasbe et al., 2017; Payne et al., 2015, van der Kolk, 2015).

Many therapies under the banner of complemenatry and alternative therapies, especially mind-body treatments, are known to be effective in helping mange physiological and psychological arousal symptoms experienced by those diagnosed with PTSD, CPTSD and DTD (Fleming, 2017; Hill, 2012; Kysar-Moon, et al.,2021). Mind-body therapies are also known to ameliorate the acute distress experienced in conventional exposure-based PTSD treatments such as Prolonged Exposure (Libby et al., 2013). Studies on the effectiveness of somatic interventions for DTD with regard to understanding and managing emotional regulation have also proven effective (van der Kolk et al., 2019).

TCTSY which has been positioned in this study as a subset of the umbrella topic mind-body therapies has been well evidenced in terms of research and proven to be effective in terms of elevating trauma symptomology. TCTSY was originally developed by David Emerson and Jenn Turner at the Trauma Center Justice Resource Institute in Brookline, Massachusetts in the United States (US). TCTSY was the first yoga informed treatment programme in the US to qualify for inclusion in the National Registry of Evidence-based Programs and Practices (NREPP) database, published by the Substance Abuse and Mental Health Services

Administration (SAMHSA). NREPP was set up to provide communities, clinicians and policymakers with information and tools about evidence-based psychological practices (Hennessy et al., 2006).

Like other traditional forms of yoga TCTSY employs the principles of hatha yoga however this mental health intervention has been specifically designed to meet the therapeutic needs of trauma survivors in terms of their experience of trauma related symptomology. TCTSY differs from other trauma informed yoga approaches, of which there are many, in that this framework has been protocolised and as such lends itself well to research studies and facilitator learning and development (Emerson et al., 2009; Emerson, 2015; Emerson & Hopper, 2011).

Western yoga practices tend to favour a focus on physical postures (asana) and command-driven language. The TCTSY protocol illuminates the internal aspects of traditional yoga where awareness is turned inward and focus (listening to and feeling the body) is directed toward increasing introspection (the felt sense) in an effort to reduce the effects of possible triggers often experienced as a result of trauma (Nguyen-Feng et al., 2020). The TCTSY protocol and principles have adapted Western yoga practices with a focus on five core domains; language, assists (teacher support and/or aid to the participant), teacher qualities, environment, and exercises (Emerson et al., 2009; Emerson, 2015; Emerson & Hopper, 2011).

Fundamental to TCTSY and other mind/body interevntions such as somatic experiencing is a focus on interoceptive awareness and embodiment and the value of these lements when employed as a complementary intervention alongside talk therapy to treat trauma related conditions. TCTSY seeks to help manage emotional dysregulation (the ability to exert control over one's own emotional state) which is often difficult for trauma survivors. Emotional regulation requires a coherent relationship with the self, and effective communication between the mind and body which is sometimes absent or damaged with respect to survivors of trauma (Emerson et al., 2009; Emerson, 2015; Emerson & Hopper, 2011; Price & Hooven, 2018). TCTSY as an adjunct intervention to talk therapy with its focus on movement and the felt sense is intended to forge clearer links between disrupted signals of sensory information and the internal and external environment to aid with emotional regulation (Emerson et al., 2009; Emerson, 2015; Emerson & Hopper, 2011; Price & Hooven, 2018).

The phenomenon under investigation in this study is mind-body interventions as adjunct treatments to talk therapies with regard to trauma related conditions, many of which have their origins in Indigenous methodologies (Mark et al., 2010; Stewart et al., 2017). Traditional mind-body healing practices, not only for trauma related conditions but for other mental health presentations, have been and still are practiced with great success by many Indigenous cultures worldwide, this includes Māori body healing health practices in Aotearoa NZ (Mark et al., 2010). According to O'Connor (2008) spiritual and ancient knowledge regarding health for Māori is considered both valuable and knowable through an embodied awareness of not only the self, but in relation to others. Romiromi (Māori bodywork) is good example of this. Romiromi is a mind-body healing technique derived from centuries old Māori traditional spiritual lore (Mark et al., 2010). Romiromi bodywork aims to heal the physical, emotional and the etheric layers of a person while forging a sacred connection between the tipuna of the healer, the person in treatment, and Io the God - the source of all (Mark et al., 2010). More broadly, in terms of Māori models of mental health such as Mason Durie's Te Whare Tapa Wha developed in 1982 (Pitama et al., 2007), there is a degree of philosophical alignment with the practice of mind-body approaches and Indigenous approaches to healing, in that healing the body alongside the mind is considered critical to a successful journey of health and wellbeing (Pitama et al, 2007). As such, factors that have facilitated or constrained Indigenous mind-body approaches to treat mental health conditions more generally in Aotearoa NZ are also of interest in the current study.

In reference to the adoption and use interventions to treat mental health conditions more generally, research suggests researchers, developers and practitioners face many challenges in their attempt to promote the spread of new and innovative clinical interventions (Backer et al., 1986). The introduction, initial implementation, and sustainability of new evidence-based mental health practices into healthcare settings has been notoriously slow and the subject of an increasing amount of debate and research in recent years. The extent to which these practices are facilitated or constrained and what factors have influenced implementation and sustainability is not only of great interest to this study but is of significant importance to mental health research communities, psychologists, practitioners of Indigenous methodologies, practitioners of psychology more generally, those delivering mind body interventions and healthcare services users alike (Ahenakew, 2011; Park, 2013; Wiltsey Stirman et al., 2012).

A short synopsis of the literature review:

Factors identified across the individual, cultural, organisational and societal systems in the literature that have facilitated the use of mind-body interventions and TCTSY as adjunctive treatment interventions to talk therapy are many and varied. The factors include mental healthcare practitioner values, attitudes and knowledge of these practices (Liem & Newcombe, 2019; Liu et al., 2021), consumer affordability, healthcare provider and service user perceptions of alternative health approaches (Jauhari et al., 2012; Liu, et al., 2021), the socio-economic status of service users (Molassiotis et al., 2005) and lifestyle choices that promote engagement in spirituality and the likes of veganism (Fuller & Drane, 2004).

Factors identified in the literature across the individual, cultural, organisational and societal systems that have constrained the use of these interventions include an unequivocal belief in the benefits of the biomedical model (at the political, organisational, cultural and individual levels) (Gergen et al., 1997; Zadeh et al., 2019), government policy promoting direct to consumer marketing of pharmaceuticals (Deacon, 2013; Zadeh et al., 2019), power struggles and semantic misunderstandings, lack of cognate mental modes and threats to professional identity in conventional healthcare systems such as the National Health Care System and Te Whatu Ora as well as tertiary institutions and university programme designed and development to deliver curricula on healthcare practices in Aotearoa NZ (New Zealand Productivity Commission, 2017; Mitchell et al., 2010). Closer to home the slowness with which Aotearoa NZ healthcare has been to adopt, developed and implement policy at a government level was also highlighted in the literature as a factor known to constrain the adoption of , access to availability of mind-body practices to treat mental health care conditions in Aotearoa NZ (Park & Canaway, 2019). A real lack of rigorous evidence-based studies in the field of mind-body interventions to treat mental health conditions has also made it particularly difficult for national healthcare systems to integrate these types of practices into the healthcare funding pool (Maha & Shaw, 2007) According to Wynn (2015) there is ambivalence among health professionals with regard to adopting complementary and alternative practices such as mind-body therapies into their repertoire of skills due to the cost of training, a lack of confidence and apprehension regarding aptitude in this field and an overwhelming number of professional development options available to mental health professionals with regard to training courses after graduation. What has also been highlighted is a very real lack of professional standardised practice in complementary and alternative medicine as well as the absence of regulatory bodies for these modalities. This has been

identified as a significant deterrent with regard to healthcare professionals failing to adopt these interventions as part of their skill set and the negative attitudes toward gaining knowledge in the complementary and alternative medicine fields more generally (Bassman & Uellendahl, 2003; Chung et al, (2022); Liem & Newcomber, 2020).

Factors that have facilitated access, availability and adoption of the TCTSY intervention worldwide has included research studies (including randomised controlled trials) that have promoted the efficacy of this protocol (Emerson et al., 2009; Nguyen- Feng et al. 2020; Oosterbroek & Dirk, 2021; Spinazzola et al. 2011; van der Kolk, 2014; West et al., 2017; Zaccari et al., 2022), the strength of the training curriculum at the Justice Resource Institute (Oosterbroek & Dirk, 2021), the promotion of this protocol by large organisations such as ACC and Nation Registry of Evidence Based Programs and Practices (Hennessy et al., 2006; K. Swartz, personal communication, August 17, 2020;) as well as the success of other less conventional mind-body approaches such as EMDR, which has helped healthcare service providers of trauma treatments and services users alike consider the benefits of a very different and somewhat alternative way of treating trauma symptoms (Nichols, 2015).

Factors that have constrained access, availability and adoption of the TCTSY intervention include limits regarding proof of concept (Nguyen-Feng, et al 2019), flaws in studies in terms of research design (Holger et al., 2018), the limited amount TCTSY research studies available to date (Cabral et al 2011; Cramer et al., 2016) the cost of training in TCTSY (Oosterbroek & Dirk., 2021), user bias in reference to preconceived ideas of yoga in the modern day health and fitness setting (Patwardhan & Lloyd., 2017), feasibility in terms of organisations providing this service (Clark et al., 2014), and safety issues in reference to TCTSY trained facilitators and an absence of education in the fields ofmental health and trauma (Oosterbroek &Dirk, 2021).

This is a short summary of the literature that has elucidated factors that have facilitated and constrained access, availability and adoption of mind-body therapies and TCTSY as adjunctive therapeutic interventions alongside talk therapy in the treatment of trauma related conditions.

The current study:

The research question for the current study was as follows. What societal, organisational, cultural, and individual factors facilitate or constrain access to, availability and adoption of mind-body complementary and alternative approaches as adjunctive interventions for trauma

treatment in an Aotearoa New Zealand context. This was a qualitative research design. According to Braun and Clarke (2016) for interview-based qualitative research the sample size does not need to be very large; themes and the development of complex analyses is very successful from smaller samples. As such twelve participants were selected for the study.

Participants:

To answer the research question the opinions and experiences of three targeted groups were explored. These groups included TCTSY facilitators who are currently practicing this intervention in Aotearoa NZ as an adjunct to talk therapy, psychologists who are familiar with complementary and alternative approaches to treating trauma, and tertiary educators delivering curriculum in applied psychology programmes nationwide. The sample comprised of ten females and two males. One participant identified as Māori, nine as NZ European, one American and one Scottish. All participants had been working in their respective roles for over five years. This was a homogeneous purposive sample based on the participants knowledge of mind- body therapies to treat trauma related conditions in Aotearoa NZ and/or their understanding of interventions to treat trauma related conditions.

Methodology and Method:

Refelxive theamatic analysis (RTA) was chosen as the methodology for this qualitative study as it is a theoretically flexible and easily assessable interpretative approach to analysing qualitative data. RTA, developed by Braun and Clark (2021) was designed to straddle the three main continua along which qualitative research can be located: inductive versus deductive, experiential versus critical orientation and essential versus constructionist theoretical perspectives. The current research aimed to be inductive in that the analysis was grounded in the data, but also deductive, in that the data were viewed through the lens of a systems framework (Braun & Clark, 2021; Vogd & Knudsen, 2015).

Prior to engaging in the study participants were given an information sheet and consent form which explained the purpose and scope of the research and highlighted the freedom to withdraw from the study at any time. In terms of confidentiality the participants were informed that their data would be anonymised with the use of pseudonyms for personally identifiable data. Given there were only eight TCTSY registered facilitators in Aotearoa New Zealand at the time of this study, guaranteeing anonymity was not possible. To mitigate this issue as much as possible, it was explained that any identifiable information, for example place of work or geographical location, would be excluded from any outputs from the study

to reduce the risk of identification. All participants were made aware that their data would be stored on a password protected personal computer. When not in use this would be stored in a locked password protected filing cabinet. All materials related to the study would be disposed of after 7 years.

Semi structured interviews were selected as the method of data collection for this study based on a number of factors. This method, when contrasted with the likes of a questionnaire, offers an opportunity for two-way communication and a comprehensive discussion on the topic of interest. As such, the interviewee can ask questions and clarify answers, both of which may elucidate unintentional but relevant knowledge and experience pertinent to the research question. I am well versed in the skill of question asking, particularly open-ended questions and consider myself prepared in an interview setting to change topic or focus if required, or develop further questions spontaneously if warranted. As such, the interviews resembled an informal conversation between two people on the topic of interest. This fostered an atmosphere of relaxation and promoted deeper conversation regarding the sharing of thoughts, ideas and opinions relevant to the topic of interest. The interview questions were developed with social systems theory in mind in terms of questions that might best explore attitudes and beliefs about the phenomena of interest across the social system from an societal, organisational, cultural and individual perspective. This structure was employed to ensure there was an opportunity to capture the broadest range of opinions possible that might provide answers to the research question. The questions at the beginning of the interview were designed to build manaakitanga (kindness and respect) and covered the participant's current role, interest in the topic, training background and their theoretical understanding of trauma. The following questions inquired about their lived experiences and their beliefs regarding what facilitates or constrains access to, availability and adoption of complementary and alternative mind-body therapies and TCTSY as adjunct interventions to treat trauma related conditions in Aotearoa NZ.

The interviews were recorded using Zoom. The benefits of employing Zoom as the method of data collection included time and cost saving in terms mitigating the need to travel. This method also facilitated the ability to record the sessions directly onto a password protected computer. Zoom was also considered the most appropriate method of data collection to ensure the timeline for this study would be met. This decision was based on recent issues encountered by researchers if COVID regulations were enforced, and travel was restricted as a result.

In terms of analysis I followed the RTA six-phase process suggested by Braun and Clark (2016, 2021) which highlights a set of guidelines, as opposed to rules, that are applied in a flexible manner to fit the data set and research questions. The six phases were, familiarisation with the data, generating initial codes, generating themes, reviewing potential themes, defining and naming themes and producing the final report. These phases did not happen in a logical sequence. The process of analysis was iterative in that I moved back and forth throughout each of the phases until a rich and thorough analysis of the data set was realised.

Findings:

Analysis of the data found a number of factors that facilitated and/or constrained access to, availability and adoption of mind-body complementary and alternative approaches and TCTSY as adjunct interventions to treat trauma related condition in an Aotearoa New Zealand context. Some of these findings have been captured below.

- Societal Factors

One of the most prominent societal factors highlighted in the data was the Aotearoa NZ populations enduring support for the biomedical model. Over two thirds of the participants in the study reported that mental health patients were over reliant on biomedical epistemological framework. These participants indicated that a medicalised view of treatment for mental health was both embedded and supported within the fabric of Aotearoa NZ society and as such had a significant impact on the endorsement (or lack thereof) of alternative mind-body interventions to treat mental health conditions within this context.

- Organisational Factors

Direct to consumer marketing of pharmaceuticals was an organisational factor highlighted in the data. In the US and New Zealand, the past decade has seen tremendous growth in the marketing of prescription drugs directly to patients, this is called direct to consumer marketing. The power of direct-to-consumer marketing was highlighted by a number of participants as a significant contributor to the Aotearoa NZ populations over reliance on biomedicine and more particularly pharmacological treatment of mental health conditions such as PTSD and CPTSD.

Another organisational factor constraining the adoption of new and innovative evidence based mental health treatments more generally was how historically systemic change in healthcare in Aotearoa NZ had been difficult and slow to change. Health policy and reform

have almost always relied international data and epistemological frameworks to guide decision making. Regardless of the merit proposals are often debated across a wide range of forums, altered and redeveloped which takes a significant amount of time. This process has historically been implicit in terms of government policy proposal and implementation process in Aotearoa NZ. Two thirds of the sample agreed that this was an issue in terms of a constraint that has slowed the adoption of body therapies and the like of TCTSY to treat trauma related conditions in Aotearoa NZ.

Lack of government funding due to limited numbers of published studies highlighting efficacy for mind-body treatments (and TCTSY more specifically) was also considered by the participants as an important organisational constraint marring the adoption and access of these type of interventions as adjunctive treatments to treat trauma related conditions in the Aotearoa NZ.

All of the participants in the sample that were employed in the applied psychology tertiary training sector and two thirds of the practicing healthcare professionals noted barriers with regard to accessing relevant learning and knowledge in the field of mind-body therapies in Aotearoa NZ. For the most part, lack of access to good quality training was the considered one of the most profound barriers. Inadequacies in the design, sequencing and implementation of curricula content at the tertiary level alongside a real shortage of mind-body training programmes and short course opportunities in Aotearoa NZ outside the tertiary learning environment, were also organisational constraints considered noteworthy.

In reference to access of TCTSY data suggests that finding appropriate therapeutic space that is safe for participants to practice this intervention in was difficult to source. The elements essential to a safe therapeutic space include a location that is comfortable, clean, quiet, and set up to create privacy, a place where tangata whaiora can feel relaxed and calm, where they can feel free to be themselves. The struggle to find such a space was consider yet another constraining factor terms of the availability and delivery of TCTSY in Aotearoa NZ.

- Cultural Factors

Cultural determinants relevant to the topic under investigation included how the application of these modalities for Aotearoa NZ population in reference to Māori might be both appropriate and inappropriate. On the one hand some participants reported positively regarding working with models that support a whole bodied approach to wellness when working alongside Māori. Those holding this perspective noted that an holistic and whole

bodied approach to health and wellbeing was synonymous with the likes of Te Whare Tapa Wha and the Meihana model, models that reference the interconnection between mind and body on the journey toward healing. Other participants in the study highlighted cultural misappropriation in terms of delivering mind-body interventions such as TCTSY when working alongside trauma affected individuals who identify as Māori. Problems included how safe it would be to use this intervention with Māori based on historically determinants of good healthcare how more often than not "good healthcare for have been based on western cultural ideals. This was reiterated by participants in reference to the TCTSY founders residing outside the Aotearoa NZ context (Boston Massachusetts United States) and them identifying as Caucasian.

- Individual Factors

An individual factor relevant to the topic under investigation included the population's limited awareness and understanding of the origins of mental health issues (in this case trauma) and the various treatments available that may help alleviate symptoms. Yoga and other forms of healing (modalities that are situated outside the mental health context) participants reported were rarely discussed in reference to mental health care and treatment in mainstream healthcare environments and because of this it seems, little is known about the efficacy of these interventions in terms of how they might complement others forms of treatment such a talk therapy.

Reflexive Discussion:

This investigation has offered me the opportunity to explore a wide variety of perspectives on trauma theory and treatment (both internationally and locally) and has provided a platform on which I could connect with a wide range of healthcare practitioners and tertiary educators in Aotearoa NZ that are truly invested in this field. The way I think about trauma theory and treatment intervention here in Aotearoa NZ has been shaped by what I have discovered along this journey. It has also provided data to support an argument for change in the way we deliver trauma treatment in terms of considering mind-body therapies as complementary interventions to conventional talk therapies within the adult mental health service environment particularly in the public sector, a sector which is in dire need of investment and transformation (Swinburn, 2023).

This investigation has encouraged me to publish my research in the hope that this study (alongside the study currently being completed by the other Massey University student) starts

a conversation among psychologists and other healthcare practitioners who are interested in illuminating new and innovative treatment protocols in the field of trauma. My hope is this will translate into benefits for trauma affected individuals in Aotearoa NZ.

I have been asked to share my findings with the healthcare professionals at the adult community mental health service I am currently employed. I have been invited to present my findings and generate a discussion at our monthly psychology meeting among the psychologist about the range of trauma treatments available to trauma survivors and the mind-body therapeutic practices that are now available across the world that might make a difference to those suffering from conditions such as PTSD and CPTSD. My hope is to support a shift in practice with regard to trauma treatment and advocate for not only a trauma informed approach in the mental health public sector which has recently emerged as best practice but an approach that best fits tangata whaiora needs both mind and body.

This investigation has further ignited my interest in a whole bodied approach to trauma treatment, which I believe aligns well with the likes of Mason Durie's whole bodied Te Whare Tapa Wha model of health and wellbeing. What I have taken from the literature review and my own personal experience of trauma is that this phenomenon is both cognitive and somatic in expression, as such treatment would do well to reflect a mind-body approach.

With regard to my own learning and development, in 2022 I completed the 20-hour foundational pre-requisite training required to apply for the longer TCTSY 300-hour programme through the Justice Institute in the US. I intend to complete this 300-hour programme by the end of 2024. If permitted, I intend to provide this service to trauma affected tangata whaiora in the adult community mental health service I am currently employed and in the ACC space under the Integrated Services for Sensitive Claims contract. This will be the first time this service has been made available in the Bay of Plenty region.

The field of trauma is of interest to me and as such I will continue to read articles on trauma theory and treatments and will hopefully synthesise this new information into my practice as I develop my clinical skills going forward. My greatest hope is that alongside other mental health practitioners in my local region and beyond I can play a role in providing a broad and well-rounded range of services to those affected by all kinds of trauma to improve their lived experience of daily life as they know it.

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