Delivery of an Occupation-Focused Cognitive Remediation Therapy Programme in an Aotearoa New Zealand Public Mental Health Service: Case Study Research

Katrina Wallis

A thesis submitted to the Auckland University of Technology in partial fulfilment of the requirements for the degree of Doctor of Health Science (DHSc)

2024

School of Clinical Sciences

Faculty of Health and Environmental Sciences

Abstract

People with enduring psychotic illness face difficulties with attention, memory, information processing, executive functioning and social cognition, which impact on social and occupational functioning. A body of evidence shows that cognitive remediation therapy (CRT) addresses cognitive difficulties. Some secondary mental health services in Aotearoa New Zealand have started delivering CRT with an emphasis on supporting tāngata whai ora (service users/consumers) to embed skills gained through CRT in the context of their day-to-day occupations. However, little is known about what is needed to effectively deliver this intervention. In particular, little is known about the experiences of organisational leaders, therapists and tāngata whai ora who have taken part in the delivery of such a programme. The aim of this study was to gain understanding of how an occupation-focused CRT programme was delivered as a basis for clear recommendations to support an effective roll-out of the programme through Aotearoa New Zealand mental health services. This research therefore asked, *How was an occupation-focused CRT programme delivered in a community mental health setting within Aotearoa New Zealand? What were peoples' experiences of the delivery of the programme? What factors influenced the delivery of the programme and how did those factors shape delivery?*

Qualitative, constructivist case study methodology was used to address the research questions. Four organisation leaders, five occupational therapists and four tāngata whai ora were interviewed and sixteen documents were reviewed. The interview data was interpreted using reflexive thematic analysis. The documents were analysed using direct interpretation, providing insights into the context of the case. Through an iterative search for correspondence and patterns within the interpretations, the findings from the interviews and documents were brought together to arrive at 14 assertions about the case.

The leaders' experiences of the programme delivery were constructed into two themes. 'Managing Tensions' conveys the multiple demands leaders needed to juggle, and 'Embedding CRT' describes what the leaders needed when considering delivery of CRT. The therapists' experiences were constructed into five themes. 'Splicing Occupation and CRT' conveys therapists combining new knowledge of CRT with existing knowledge of occupational therapy. "Taking the Lead" describes the actions of

one therapist in rolling out delivery. Therapists expressed that 'Strong Relationships were Essential to Delivery', along with ideas for "Enhancing Future Delivery". The theme 'Broken Feedback Loops' highlights a lack of communication that hindered ongoing delivery. Tāngata whai ora conveyed they were moving forward in their lives captured in one theme 'Making Way' with 'Changes to occupational performance' highlighted after participating in the programme. Assertions identify complexities that hindered programme delivery including a lack of overarching direction and ineffective communication, and crucial elements required for delivery including leadership, training and facilitating self-determination for tāngata whai ora.

The findings have generated six recommendations to help leaders, clinicians and policy makers understand what is needed to support delivery of an occupation-focused CRT programme, including ministerial support, engagment with Māori and an occupational-focus. Further research entailing a broader implementation pilot is recommended, along with CRT research that focuses on tāngata whai ora occupational needs.

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Attestation of Authorship

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the acknowledgements), nor material which to a substantial extent has been submitted for the award of any other degree or diploma of a university or other institution of higher learning.

Signature

Date 13 April 2024

Acknowledgements

While undertaking this doctoral research, there were many people who embarked on this journey with, and alongside, me. I would like to begin by sincerely thanking the four tāngata whai ora participants who shared their experiences of the CRT programme with me, and the additional tāngata whai ora who allowed me access to their CRT reports. You are the essence of this study and the purpose behind undertaking this research. I also want to thank the other nine participants in this study who gave generously of their time and shared their experiences. I hope I have done justice to your stories and honoured your generosity with respect and dignity.

To my supervisors, Dr Margaret Jones and Dr Kirk Reed, I feel privileged to have had you both as my supervisors. The depth of your support, guidance, wisdom, encouragement, and patience was felt throughout this journey and made this research possible. You both brought something different to my journey and I needed you both. Thank you for persevering with me, especially in those challenging times.

I wish to thank Te Whatu Ora for enabling me to undertake this research in their setting and for their financial support. To the Kaumātua, you have opened my eyes and helped me see the world in a different way—I appreciate all that you have taught me. A big thank you to Wieteke who started this journey with me many years ago; Melodie, Jenny, and Sophie who have walked the CRT journey with me; and to Andrew and many of my occupational therapy colleagues who have picked up the CRT mantle. Your enthusiasm and passion for the programme have inspired me to keep going on this DHSc journey. To my work colleagues, thank you for all your support and encouragement. Thank you to Shoba, for your outstanding editing skills.

To my longstanding friends, my sisters Glenda and Janine, my daughters Jordan and Madison, and my extended family. I know I have been tucked away working on this thesis, and I have been saying that I am “nearly there” for what seems like an eternity. Thank you for being understanding. I am so fortunate to have you all in my life, and now that I “am there” I look forward to spending an abundance of precious time together. To my husband Dene, it has not been an easy journey, but I am grateful to reach this point and we are stronger now than we were when I started. Thank you for

being a solid rock, particularly in the last eighteen months; I know you have made sacrifices to support my dreams and goals, I appreciate you so much.

I would like to dedicate this work to my Mum and Dad who passed away during my doctoral journey. At times when I considered giving up, I felt your gentle support and encouragement. I am sad that you are not here to see this through to the end with me, but I know that you will both be proud and continue to be my biggest supporters.

This study was approved by Auckland University of Technology Ethics Committee on 14th March 2019. Approval number 19/15

Chapter 1 Introduction

This qualitative constructivist case study research sought to understand how an occupation-focused Cognitive Remediation Therapy (CRT) programme was delivered to tāngata whai ora (people seeking wellness) within a public mental health service in Aotearoa New Zealand. This research will generate important insights into key aspects that managers, leaders, therapists, service providers, and policy makers need to consider when delivering an occupation-focused CRT programme in various mental health settings. Grounded in a strong occupational perspective, the research draws from my personal experience and theoretical understandings as an occupational therapist. The driver to undertaking this research was based on my colleagues' and my endeavours to start delivering an occupation-focused CRT programme within services, to improve the lives of people living with an enduring psychotic illness (EPI).

This introduction chapter firstly states the research purpose and aim. I then define an EPI and discuss the significance of cognitive symptoms associated with an EPI. Next, I situate myself as the researcher in this study by highlighting my personal values which includes my motivation to address the cognitive needs of people living with an EPI. I also provide background information which informs this study wherein I define occupation and discuss theoretical understandings that I brought to the study as an occupational therapist. I then discuss CRT, an international, evidence-based intervention used to improve cognitive functioning. Furthermore, I define what is meant by an occupation-focused CRT programme, explain delivery, and then describe an occupation-focused CRT proof-of-concept pilot that was undertaken by myself and a group of occupational therapists which ignited my research journey. Understandings of how to deliver an occupation-focused CRT programme are limited, and further considerations were required regarding the contextual factors when delivering an occupation-focused CRT programme within an Aotearoa New Zealand mental health service, which led me to embark on this research. This chapter also highlights key sociopolitical and historical factors of the health system pertinent to the study, including Te Tiriti o Waitangi and colonisation. Throughout this thesis I use words in Te Reo Māori. Te Reo Māori is the Indigenous language of Aotearoa (Te Reo Māori word) New Zealand (English word). Words used in Te Reo Māori throughout the thesis are referenced in the Glossary, providing the English translation and translation source.

This chapter concludes with my research question and an outline of the thesis structure.

This research is guided by Stake's (1995) case study methodology and is underpinned by the constructivist philosophical perspective of Egon Guba and Yvonna Lincoln (Lincoln & Guba, 2013). Participants', organisational and geographical names and places have been changed; and pseudonyms used throughout the thesis for confidentiality.

Research Purpose and Aim

The purpose of this research was to shed light on various aspects that services need to consider and address when delivering an occupation-focused CRT programme in a mental health service in Aotearoa New Zealand, with the view to support more effective outcomes for tāngata whai ora and their whānau (family). More specifically, this research aims to:

- Gain an understanding of how to deliver an occupation-focused CRT programme, so that understandings can support the programme being rolled out effectively throughout Aotearoa New Zealand mental health services.
- Provide evidence within the Aotearoa New Zealand context about the support needed for on-going delivery of an occupation-focused CRT programme, including resource allocation.
- Provide recommendations for training to upskill clinicians to address cognitive difficulties that tāngata whai ora experience which impact on their ability to undertake meaningful occupations.
- Provide recommendations for future delivery of an occupation-focused CRT programme.

The next section defines what an EPI is, the core cognitive difficulties experienced by people living with an EPI, and why addressing cognitive difficulties is important.

EPI

EPI is defined by Lambert et al. (2017) as "recurrent psychosis associated with schizophrenia or other psychotic illnesses" (p. 329). Schizophrenia is an enduring mental illness described in the Diagnostic and Statistical Manual of Mental Disorders

5th edition (DSM-5) as having two sets of symptoms, positive and negative (American Psychiatric Association, 2013). Positive symptoms are acute and present as auditory or visual hallucinations, delusions, and disordered thinking, often described as psychosis. These symptoms are often managed by mental health services with ongoing medication management and oversight. Negative symptoms are described as a reduction or lack of emotional and verbal expression, interest and motivation (Correll & Schooler, 2020). Negative symptoms are enduring and disabling leading to poor functional outcomes. Decreased cognitive functions including memory and attention are negative symptoms of schizophrenia. (American Psychiatric Association, 2013). According to Saperstein and Kurtz (2013) "between 70% and 80% of people with schizophrenia show cognitive impairments relative to the general population" (p. 311). While current medical treatments such as antipsychotic medications are effective in treating positive symptoms, they are not effective in treating negative symptoms including impaired cognition; therefore, new and effective ways to address negative symptoms are required (Correll & Schooler, 2020). For this study, the definition of an EPI goes beyond symptoms of recurrent psychotic episodes and focuses on difficulties with cognitive functioning in the absence of psychosis.

Cognitive functioning

Cognitive functions are mental processes utilising thinking skills that enable a person to carry out tasks related to self-care, work, or leisure (McGurk & Mueser, 2017). Cognitive functioning is categorised as an aspect of body function and structure in the International Classification of Functioning, Disability and Health (World Health Organisation, 2001). Body function and structures are made up of physiological components, including the human brain, which are responsible for enabling a person to acquire knowledge and skills through gaining information. Cognitive functioning encompasses mechanisms such as memory, attention, language, and reasoning (McGurk & Mueser, 2017).

Cognitive functioning supports the person to transform, store, process, and retrieve information in order to navigate the world around them. Difficulties with cognitive functioning are a defining feature of schizophrenia (Wykes et al., 2011). Poor attention and concentration are mentioned in the DSM-5 as part of the negative symptoms; however, core cognitive difficulties extend beyond attention to other areas such as

memory, processing speed of information, social cognition, and executive functioning, which are often overlooked in the context of schizophrenia (Cella et al., 2017; Correll & Schooler, 2020; Heinrichs & Zakzanis, 1998; Kahn & Keefe, 2013; Zipursky et al., 2013). Negative symptoms such as changes to cognition and task performance are often non-acute; yet have a significant impact on social and occupational functioning.

There is much debate regarding whether difficulties with cognitive functioning precede the onset of the illness or occur due to the progression of the illness (Kahn & Keefe, 2013; Kake et al., 2016; Zipursky et al., 2013). Some studies have shown that people who develop an enduring psychotic illness often have lower than average global cognition during childhood; while other studies indicate that medication and lifestyle choices contribute to cognitive decline throughout adulthood (Kahn & Keefe, 2013; Kake et al., 2016; Zipursky et al., 2013). Despite the debate, cognitive functioning is the strongest determinant of recovery due to the deteriorating effects on a person's ability to go about their life in a meaningful way (Cella et al., 2017).

First episodes of psychosis often occur in late teens or early twenties and can endure throughout adult life if not addressed. Late adolescence and early adulthood is important for cognitive development and is a period of life involving formation of adult social connections, independent living and vocational choices. It is a time of life where competency over activities of everyday living can support transition into adulthood. The impact of psychosis and subsequent cognitive difficulties can have a negative impact on a person's life trajectory including activities related to relationships, employment, income, and housing. The impact of psychosis and unaddressed cognitive difficulties can also lead to social, economic, and personal costs such as physical health conditions and premature death (Burgher et al., 2023; Gibb et al., 2021). Despite the debilitating effect that reduced cognitive functioning has on an individual's ability to go about their life, there is limited medical treatment for addressing cognitive functioning (Bowie & Harvey, 2006; Correll & Schooler, 2020).

During my time working as an occupational therapist in community mental health services, I saw the debilitating effects that difficulties with cognition had on the lives of individuals living with an EPI, including their whānau. I was curious to know the broader impact an EPI had on communities and the health system.

Prevalence of EPI

The prevalence of EPI is low; however, the impact on the individual, their whānau, and mental health services is significant if not addressed. According to the World Health Organization, 1% of all people in all populations will develop an enduring psychotic illness such as the diagnosis of schizophrenia (World Health Assembly, 2012). Stats NZ Tahuranga Aotearoa (2023) estimate the population of Aotearoa New Zealand to be 5,199,100 as of March 31, 2023; therefore, according to the World Health Organization calculations, approximately 52,000 individuals are living with an EPI in Aotearoa New Zealand.

Although the global prevalence of people living with schizophrenia appears low, the burden of illness is high due to the far-reaching implications of the illness (Neil et al., 2014; World Health Assembly, 2012; Saperstein & Kurtz 2013). A systematic review of the global burden of schizophrenia was undertaken by Chong et al. (2016), estimating that, for higher income countries, the economic burden of schizophrenia ranged from 0.02% to 1.65% of the gross domestic product (GDP). Aotearoa New Zealand is considered a high income country. The average GDP for health care in Aotearoa New Zealand between 2010 and 2020 was 8.86%. Therefore, it is estimated that the economic burden of schizophrenia made up 0.02% to 1.65% of the entire 8.86% of GDP for health care in Aotearoa New Zealand. This is a significant economic burden given the estimated prevalence of the illness.

In 2006, the New Zealand government attempted to gain an understanding of the prevalence of mental diagnosis in New Zealand to develop a strategic and funding framework to address mental illness. Thus, the first Aotearoa New Zealand Mental Health Survey—Te Rau Hinengaro—was undertaken (Oakley-Browne et al., 2006). The survey produced useful information, particularly the high representation of Māori diagnosed with a mental illness, providing clear evidence of the disparities between Māori and non-Māori. Concerningly, people with a psychotic diagnosis were excluded from the survey due to a belief that people with a psychotic illness would not be able to undertake that specific survey due to the presence of cognitive difficulties: “Accurate estimates of such disorders would require a different survey design and use of more extensive psychometric testing and medical evaluation” (Oakley-Browne et al.,

2006, p. 212). Consequently, up until recently, there was limited epidemiological research on the prevalence of schizophrenia in Aotearoa New Zealand.

A recent study by Gibb et al. (2021) used administrative data which indicated the prevalence rate of schizophrenia in Aotearoa New Zealand for Māori is 1 in 1,000 and 0.3 in 1,000 for non-Māori. Gibb et al.'s study is one of the first to capture information regarding the Aotearoa New Zealand population of individuals living with schizophrenia and the related government costs. For instance, health costs for individuals living with schizophrenia were estimated to be seven times higher, and social support five times higher, than people who do not live with a diagnosis of schizophrenia. However, administrative data were collected from hospital admissions and those who accessed secondary mental health services which relied on staff entering clinical coding information which may not always be accurate; therefore, casting doubt on the true reflection and accuracy of the prevalence data.

The overall costs associated with people living with an EPI are broad ranging and far reaching, including the costs to whānau and caregivers (Neil et al., 2014). My experiences and knowledge regarding the wide-ranging implications of an EPI contributed to my motivation to do something about addressing cognitive difficulties. It is, therefore, important to situate myself as the researcher within the context of this study and explain further my motivation to undertake this research.

Situating Myself as the Researcher

Even though I aspire to present the perspectives of the participants in my research, my interpretations cannot exist outside of my own perspectives and identity which have been forged by my personal and professional experiences. Therefore, it is important for the readers to understand a little about me. I am a middle-aged, white, economically-privileged western woman. I am a wife and a mother of adult children from a blended family, two of my own children and three of my husband's. During the 1970s and 1980s my upbringing took place within a close, middle-class New Zealand European family. I was fortunate to reside near the ocean, an experience that instilled in me a deep appreciation for the environment and sparked a passion for sailing. I was raised with the values of respect for the environment, respect for authority, to have a diligent work ethic, create my own opportunities, and construct my own life path. I

internalised the belief that having respect for the environment and authority, and being industrious were key. Additionally, my upbringing ingrained the conviction that all individuals should have access to work opportunities and the ability to create their own life trajectories through choice. After leaving school I worked for 16 years as a hairdresser and enjoyed hearing about people's lives, what they were doing, and what mattered to them. At the age of 34, I made the decision to embark on my occupational therapy career.

I was drawn to occupational therapy because it enabled me to hear peoples' stories, and work with people to create change by focusing on living their lives in a meaningful way. It also meant working with others, such as whānau, signficant others, and professional colleagues. I work best when I work collaboratively with others and my ideas and thoughts are formulated through conversations from the people around me. It is also important for me to check my ideas and assumptions with people I trust. I believe that what people do in their day, in context of where they do it, constructs their understanding about themselves and their world around them. How I work with tāngata whai ora, their whānau, and colleagues, involves a collaborative process which shapes how I interact and construct my understanding of what is happening for them and myself in our work together. Likewise, as a researcher, my interactions with the participants have shaped my understandings as I attempted to uncover the complex, context-specific issues that have different meanings for individuals.

My work as an occupational therapist has been grounded in the practice field of mental health, having worked most of my career in public mental health services. Influenced by my upbringing, I believe that people who experience enduring mental illness can build resilience, aspire toward goals, work towards a sense of achievement, engage in meaningful activities and, therefore, live meaningful lives regardless of the challenges they face. This belief was reinforced by my understandings of personal recovery, a concept adopted by mental health services, whereby a person diagnosed with a mental illness has the rights and opportunities to achieve a life they choose, providing they have the personal resources, services, and support to do so. Working within the realm of mental health, I learned from my own experiences that even though mental health services adopted the concept of personal recovery, translation into action was not always consistent. Due to the lack of support provided by mental

health services to address cognitive needs, I saw that people living with an EPI were often unable to exercise their rights, seize opportunities, and work towards their aspirations; thereby hindering their ability to develop personal resources and construct a desired life. The lack of support offered by services was restricting people's opportunities which consequently prompted me to act. The subsequent six sections provide context to the inception of my research elaborating on my motivation to make a change.

The context of my workplace

My journey to undertaking this research started when I was a key worker and occupational therapist in a rural, multidisciplinary mental health community team. The team was made up of a psychiatrist, two nurses, a social worker, psychologist, and me. Excluding the psychiatrist and psychologist, the team were all key workers. The key working role consists of many tasks, such as monitoring the mental state of tāngata whai ora, and serves to provide one main point of contact to help navigate tāngata whai ora mental health care needs. However, as the only occupational therapist in the team it was also my role to provide occupational therapy.

Being an occupational therapist

Occupational therapists work with people in their communities to enhance their ability to participate in occupations they need, want, and are expected to do. The Occupational Therapy Board of New Zealand (2023) has defined occupation on their website as "the activities and tasks of everyday life. These include things people do to look after themselves, to enjoy themselves, and to contribute to the social and economic fabric of their communities." Occupational therapists view the world from an occupational perspective which is defined as "a way of looking at and thinking about human doing" (Njelesani et al., 2014, p. 233). Occupational therapists view occupations as central to living, encompassing all that humans do, which, in turn, shapes peoples' identities. Participating in meaningful occupations is viewed by occupational therapists as essential for health and well-being (Christiansen & Townsend, 2004; Kielhofner, 2009; Lawson-Porter & Creek, 2010).

Occupations can be about paid employment or study; they can also include self-care which involves looking after oneself, one's home, or taking care of others. Occupations

are important in fulfilling roles within the community and involve all the activities that are fun and provide leisure and pleasure. Occupations are the things people devote their energy to within a week, or day, an hour, or a minute. Over time these occupations form our identity and give our lives meaning. Occupations connect us with others and give us a sense of belonging. Occupational therapy is "the art and science of helping people take part in everyday living through their occupations" (Occupational Therapy Board of New Zealand, 2023). Occupational therapy is underpinned by a range of occupational therapy models. Within my practice, one model that I am particularly drawn to is the Person-Environment-Occupation (PEO) model (Law et al., 1996).

My connection with the PEO model (Law et al., 1996), is the emphasis on the environment which includes the context in which occupations can unfold. In the process of doing, a person continuously engages with their environment, which shapes their behaviour while also being shaped by it (Law et al., 1996). The PEO model captures the interconnectedness between the environment, occupations, and the person. However, it is crucial to recognise that models such as the PEO, and many others that form the foundation of occupational therapy practice, have originated in English-speaking Western countries. Consequently, occupational therapy assumptions may not comprehensively embrace diverse perspectives (Hammell, 2009). Considering this, I remain mindful of the prevailing Western viewpoint from which my theoretical comprehension and upbringing originate, and acknowledge the potential biases inherent in my perspectives which will have influenced this research. That said, my interpretation of the PEO model is that the environment can either confine or empower individuals in their pursuit of occupations given that occupations transpire within one's environment and context. As an occupational therapist I regard occupation as an essential aspect of life, encompassing tasks and activities carried out to achieve meaning and purpose. Occupations fulfil the requirements for building and sustaining relationships, self-management, and self-expression, all within the context of the surrounding environment in which the occupations take place.

Occupational patterns of people living with an EPI

As an occupational therapist, knowing how people spend their time is central to how I work and see the world. How a person spends their time and what they do with their time is essential for developing a positive occupational identity and a sense of well-

being and self-esteem. A person's identity is linked to their life roles, routines, and the occupations that they do (Christiansen & Townsend, 2004). How people with an EPI spend their time, has been investigated via time use surveys (Cella, et al., 2016a). Cella and colleagues (2016a) found that people with a diagnosis of schizophrenia spend less time doing functional, social and leisure activities and more time doing nothing. Likewise, Bejerholm and Eklund (2004) have conducted time use studies in the field of schizophrenia; their research demonstrated a stagnation in time use and occupational patterns, and suggested that most activities that people with schizophrenia did participate in, were not triggered directly by their environments but by fundamental requirements for daily existence and longing to flee from reality. Similarly, an Aotearoa New Zealand study by Sutton et al. (2012) captured narratives from individuals recovering from schizophrenia who described time periods during their recovery process where they withdrew from relationships and everyday activities, to escape others' expectations when demands from others were too difficult to uphold.

These studies highlight the link between the person, environment, and occupation, and demonstrate when one aspect is affected (i.e., the person experiencing a psychotic illness), the person's occupations and their environments are also affected. Social, cultural, and political contexts can place demands on a person, as shown in Sutton et al.'s (2012) study, with subsequent withdrawal from meaningful occupations. These studies also demonstrate the limited occupations, or occupational deprivation, experienced by people living with an EPI and, therefore, the importance of delivering a CRT programme with an occupational focus.

Occupational performance of people living with an EPI

Occupational performance is described in occupational therapy literature as the 'active doing' of an important task and emphasises the relevance of doing the task with competency within the context and nature of the activity itself, resulting in achievement of the task (Fisher & Griswold, 2014). Understanding the complex ways psychosis affects occupational performance was described in a phenomenological study by Brown (2011) who interviewed five people with a lived experience of psychosis. These people described how psychosis is often experienced as a lifelong phenomenon. Changes to occupational performance occurred as life unfolded around acute episodes, requiring people living with psychosis to often reconstruct their lives

though occupations. Learning through doing preserved autonomy, and participants described negotiating a way forward in life through a process of learning from experience of engaging in occupations. One participant in the study stated “if you’re not doing anything, you don’t know what is possible or not” (Brown, 2011, p. 160). Brown’s study highlighted that the participants were willing and determined to maintain control over their choices and, ultimately, their lives. Occupational performance can be captured by assessing the competency and satisfaction of the individual while they are ‘doing’ or engaged in occupations in areas of their life that are important to them and within the context where engagement usually occurs. One of the most common assessments of occupational performance found in studies involving people with an EPI is the Canadian Occupational Performance Measure (COPM) (Law et al., 2014).

The COPM can be used as an information gathering tool and has been proven to be responsive to occupational performance change (Eyssen et al., 2011). The COPM is a semi structured, interview-based outcome measure used to identify what a person wants to focus on. People prioritise up to five identified occupational issues that are most important to them. They are then asked to rate their performance and satisfaction of each issue where 1 indicates ‘not able to do/not satisfied at all’ to 10 indicating ‘able to do extremely well/extremely satisfied’ (Law et al., 2014). Bjørkedal et al. (2016) used the COPM assessment to assist participants, people with schizophrenia, set goals associated to meaningful occupations to help them maintain focus when trying out new strategies in real life situations. The authors reported that the participants valued engaging in real-life occupations while anchoring new strategies, and also valued the positive, client-centred partnership with the occupational therapists. The COPM was viewed as useful to maintain focus. “Participants experienced being engaged in activities as a way of challenging themselves in difficult situations. Engaging in activities allowed them to test new strategies and approaches for dealing with barriers and problematic situations” (Bjørkedal et al., 2016, p. 103). The COPM was also viewed by the participants as a useful and visual tool of progress. Likewise, Cresswell and Rugg (2003) found the COPM demonstrated significant and quantifiable change in their participants’

performance and satisfaction over time, and that the COPM was a useful tool to use in a community setting with individuals who have a diagnosis of schizophrenia.

Coming to know about CRT

I became increasingly frustrated by the lack of help that I was able to offer tāngata whai ora to address the cognitive issues they were experiencing. I recall a conversation I had in our multidisciplinary team meeting where the psychiatrist asked why we were not offering CRT to tāngata whai ora. I asked the psychiatrist what CRT was, and was informed it was a psychological therapy delivered as a programme aimed at improving cognition. The Cognitive Remediation Expert Working group has defined CRT as:

> A behavioural training intervention targeting cognitive deficit (attention, memory, executive function, social cognition, or metacognition), using scientific principles of learning, with the ultimate goal of improving functional outcomes. Its effectiveness is enhanced when provided in a context (formal or informal) that provides support and opportunity for extending to everyday functioning. (Bowie et al., 2020, p. 50)

The conversation with the psychiatrist sparked my curiosity. I could see how the CRT programme could target cognitive difficulties but, more importantly, could potentially address occupational needs and occupational performance. I was left with many unanswered questions such as, how can we address tāngata whai ora occupational needs via CRT? Is a psychological programme with an occupational focus more likely to be supported by management than occupational therapy alone? How do I find out more about CRT?

I gathered a group of occupational therapists working in the same organisation, South Central Health Board (SCHB), who were also interested in finding out more about CRT. We set about talking with clinicians in various practice settings who had some experience with cognitive rehabilitation more generally, as there were limited clinicians in Aotearoa New Zealand with experience of offering CRT. We also searched the literature to find out more about CRT.

The group found various cognitive rehabilitation therapies designed for tāngata whai ora with an EPI. These included Cognitive Enhancement Therapy which has a strong focus on social cognition (Hogarty et al., 2004); Cognitive Adaptive Training which focuses on adaptive and compensatory strategies (Hansen et al., 2013); and Cognitive Stimulation Therapy which is seen to delay degradation of cognitive functioning in middle age to elderly people living with an EPI (Chiang et al., 2023). We found that programmes that incorporate remediation; cognitive strategy training; and address social cognition, such as CRT programmes defined by the CRT Expert Working Group (Saperstein & Kurtz, 2013), appeared to be most effective in improving cognition and social cognitive functioning.

CRT is an evidence-based intervention. Results from multiple trials examining the efficacy of CRT for improving cognitive functioning for people with a diagnosis of schizophrenia have been pooled together in meta-analyses (Cella et al., 2017; McGurk et al., 2007; Revell et al., 2015; Wykes et al., 2011), including a systematic review by Anaya et al. (2012) for people with a diagnosis of schizo-affective disorder. Meta-analyses and systematic reviews are considered the most rigorous of scientific literature (Hoffmann et al., 2013). Most of these studies explored cognitive remediation as defined by the expert working group. These reviews showed that cognitive remediation produced significant improvements in memory, attention, and executive functioning; and that improvements in cognitive functioning are enhanced when combined with other rehabilitation approaches such as vocational rehabilitation, daily living skills, and social skills training. Wykes et al.'s (2011) meta-analysis included 2,104 CRT participants with chronic schizophrenia, and showed a significant improvement in cognitive domains. The authors suggested that improved cognitive functioning can enhance activity and participation. This review was replicated by Revell et al. (2015) who explored the efficacy of CRT for people with early onset schizophrenia and found improvements in global cognitive functioning, stating that "CR as part of continuing rehabilitation, may be able to translate cognitive gains directly to better function" (p. 219). Additionally, the most recent and comprehensive meta-analysis comprising of 130 trials and 8,851 participants showed small to moderate gains of global cognition and functioning (Vita, 2021). However, these

studies fall short of proving that CRT significantly improves functioning within real world practice settings.

A methodological appraisal of the quality of systematic reviews and meta-analyses relating to cognitive remediation in schizophrenia was undertaken by Bryce et al. (2016). These authors concluded that most studies fell within a 'medium level' of methodological quality and that these reviews can be considered a valuable source of evidence that cognitive remediation is effective in improving cognitive functioning for people living with schizophrenia. Due to the robust evidence-based research on CRT and cognitive functioning, CRT is now recommended as standard clinical care in mental health services for people living with an EPI in many mental health guidelines worldwide including Scotland, Italy, England, Japan, New York State, Australia, and Aotearoa New Zealand (Galletly et al., 2015; National Institute for Health and Care Excellence, 2020); as well as being recently recommended by the World Health Organization (2023) as a suitable rehabilitation approach for people with schizophrenia.

Back to coming to know about CRT. The group of clinicians I worked with that explored the literature regarding CRT were unable to find any structured protocols and session plans on how to go about doing CRT. However, we were able to find key principles that were important to be included when delivering a CRT programme. These key principles included: 1) drill and practice exercises either by pen and paper or via a computer programme designed to remediate cognition, 2) learning cognitive skills and strategies that can be generalised into real world situations, and 3) developing social cognition skills essential for community participation (Bowie et al., 2020; Cella & Wykes, 2017; Wykes et al., 2011). We also found key learning principles used when delivering CRT which included mass practice, errorless learning, and positive reinforcement (Cella & Wykes, 2017). Drawing upon the knowledge gained, a group of occupational therapists, myself included, proposed a proof-of concept CRT programme aligning it with our conviction that occupation plays a crucial role in fostering health and well-being. A proof-of-concept CRT pilot was supported by service management and occupation was placed at the core of the programme.

Occupation-focused CRT proof-of concept pilot

To work in an occupation-focused way means that an occupational therapist's primary focus is always on tāngata whai ora occupations. Anne Fisher (2014), an internationally recognised occupational therapy expert, defined occupation-focus as, "to focus one's attention on occupation – to have occupation as the proximal (i.e. immediate) focus of the evaluation or the proximal intent of the intervention" (p. 101). Therefore, an occupation-focused CRT programme firstly identifies occupations that tāngata whai ora deem important to them which they wish to improve or include in their lives, and all cognitive remediation and learning of cognitive skills linked to those occupations. In contrast, a CRT programme without an occupational focus is delivered with a focus on cognitive improvements that may lead to functional gains (Bryce et al., 2016).

Considering there are differences in how a CRT programme and an occupation-focused CRT programme is delivered, it is important to be clear what is meant by delivery. Delivery of a programme involves activities, interactions, and actions that are necessary to provide to achieve the desired outcome within usual context (Sidani & Jo Braden, 2021). Delivery of a programme is an important aspect of service provision as it aims to provide a high standard of quality and satisfaction to those receiving the programme. Delivery encompasses various elements such as the use of resources, execution of tasks, and interactions with all people involved in the delivery of a programme.

The pilot programme involved nine tāngata whai ora who first identified the occupations they wanted to improve, and then rated their current performance and satisfaction with these occupations using the COPM (Law et al., 2014). Goals were set to improve performance and satisfaction of identified occupations. Cognition was also measured by a psychologist using the Repeatable Battery for Assessment of Neuropsychological Status (RBANS) (Randolph, 1998).

Tāngata whai ora then engaged with an occupational therapist in individual sessions two to three times a week lasting from 20 to 60 minutes per session depending on how long attention could be sustained. The individual sessions went for 20 weeks and included the use of a computer programme called Brain HQ (Posit Science, 2020) which provided computer tasks for remediation of cognitive abilities. An example of a

computer task may require individuals to remember the names of people, engage with items to improve memory, or to split attention between two tasks at a time to improve attention. The individual sessions also included learning cognitive strategies with the help of the occupational therapist to overcome cognitive challenges in everyday life. Sessions linked improvements in cognitive ability and learnt cognitive strategies to tāngata whai ora identified goals encompassing meaningful occupations.

Alongside the individual sessions, the nine tāngata whai ora also attended a 16-week social cognition group run by an occupational therapist with the aim to improve social skills. Many of the occupational goals set by tāngata whai ora included occupations related to social situations. According to the CRT Expert Working Group (Bowie et al., 2020), a CRT programme is more effective if it incorporates improving social cognition; and according to Kurtz et al. (2015), social cognition is best addressed in a social situation. The development of a group programme was required because the computer programme did not address social cognition or provide opportunities to engage in social situations where skills could be practised.

On completion of the programme, three tāngata whai ora entered paid employment and a further two were referred to an employment agency. One tāngata whai ora moved into independent living. This progress was significant because these were people who had not worked or lived independently for many years. An evaluation of the pilot showed improvements in all identified occupations and in cognition. Feedback from tāngata whai ora, their whānau, and key workers indicated that seeing a change in occupational performance was more meaningful to them than seeing change scores on cognitive measures.

From the proof-of-concept pilot, recommendations for delivering an occupation-focused CRT programme were made which included decisions around assessments, content of the programme, training, a CRT computer software package, and procedures. An occupational therapy colleague and I were funded to receive training in CRT, in particular the use of a computer programme called CIRCuiTS, which stands for Computerised Interactive Remediation of Cognition and Thinking Skills (The CIRCuiTS Team, 2024a). We then set about training other clinicians in SCHB mental health

services to also deliver CRT. However, despite the recommendations and progress to date, there were only one or two teams that were delivering the programme.

Once more my frustration grew as I realised that despite the internationally recognised and evidence-based nature of the intervention, along with the positive outcomes from our local pilot, establishing an occupation-focused CRT programme as a continuous intervention within SCHB public mental health services was proving to be a challenge. I spent time reflecting on this situation, and asking questions such as why it is often so difficult to integrate new evidence-based interventions into public mental health services? There seemed to be many obstacles that got in the way, and our review of the literature had not highlighted any barriers in delivering CRT in other nations, although there was a lack of literature in this area. Consequently, it became essential for me to grasp the context of the mental health system in Aotearoa New Zealand to understand any context specific influences on delivering the programme.

The Aotearoa New Zealand Mental Health System

Understanding the Aotearoa New Zealand health system is significant to my study as it provides the context in which the occupation-focused CRT programme was delivered and where my study was undertaken. The sociopolitical and historical views of people living with an EPI, that are held by society and health care services, have shaped how services have been delivered and funded and are still relevant to health care today. The delivery of an occupation-focused CRT programme was breaking new ground in terms of funding and resource requirements, and in meeting the needs of people living with an EPI by addressing their cognitive difficulties which traditionally have not been met.

The following two sections shed light on how the Aotearoa New Zealand health system has catered to individuals living with an EPI by providing concepts from the historical and sociopolitical contexts of the mental health system that are relevant to this study. Aotearoa New Zealand's health system has a complex history which includes how the health care system was funded and the impact this has on service delivery, and differences between two worldviews of health—Indigenous Māori and Western European.

Aotearoa New Zealand health system at the time of the study

Unique to Aotearoa New Zealand is how health care is funded. Primary care, often provided by general practitioners, is partly funded by government, and partly funded by health care users; whereas secondary care, which includes hospital and mental health care, is free, supported fully by government funding (Gauld, 2009; Parliamentary Library, 2009). At the time that I embarked on this study, the health care landscape consisted of 20 geographically defined health boards, each accountable for managing government funding and allocation. This structure led to varying priorities and disparities in health care access throughout the country, with minimal focus on mental health services.

After the closure of government funded mental health asylums in the 1990s, following a programme of deinstitutionalisation, the New Zealand Government wrote a document known as the Blueprint (Gauld, 2009; Mental Health Commission, 1998; Parliamentary Library, 2009), designed to provide a plan for a new mental health system to function well and ensure appropriate and adequate treatment for those most affected by a severe mental illness. It included a ring-fenced portion of health funding that could only be spent on mental health. In 2006, heavily influenced by the Mental Health Survey, Te Rau Hinengaro (Oakley-Browne et al., 2006), which excluded people with an EPI, there was acknowledgment that the impact of mental illness extended beyond those with a severe mental illness, to those experiencing mild to moderate symptoms that required early intervention, prevention, and promotion of well-being (Mental Health Commission, 2010). The expectation was that services would meet these additional mental health needs without further funding. In 2012, the Mental Health Commission and the ring-fenced funding for mental health was disestablished, with the latter absorbed into mainstream health care; subsequently reducing the amount of funding to mental health services (McGeorge, 2012). The stretch on mental health funding has resulted in lack of service provision to address the needs of those already highly represented in poor health outcomes, such as people living with an EPI, contributing further to low employment rates, low education, and poor living environments (Thornicroft et al., 2013; World Health Assembly, 2012). Understanding the healthcare framework is crucial as funding shapes the allocation of

resources and, consequently, how health care services are delivered, which provides a context to explore the challenges of delivering an occupation-focused CRT programme.

At the time of my study, there were government guiding documents and strategic plans that guided mental health services; however, two documents held direct relevance. The New Zealand Health Strategy, Roadmap for Action (Minster of Health, 2016); and Rising to the Challenge (Ministry of Health, 2012). Roadmap for Action (Minster of Health, 2016) outlined three action points pertinent to my study. Action 7 emphasised the importance of optimising clinician expertise to provide appropriate care to tāngata whai ora; therefore, I was interested in staff training around delivery of an occupation-focused CRT programme. Action 8 required services to provide rehabilitation and well-being for people with long-term conditions; as such, I was interested to know the importance service managers placed on addressing the cognitive needs of individuals with an EPI. Action 8g, highlighted the necessity for evidenced based vocational rehabilitation programmes to support people with long-term conditions to get and maintain employment; hence, I was interested to know whether an occupation-focused CRT programme was being used to support people with an enduring mental illness into work.

Cognitive functioning stands out as a primary factor influencing recovery; yet, to date, it appears to be poorly addressed by mental health services. Rising to the Challenge recognises “people whose needs have not been consistently well addressed by previous service developments” (Ministry of Health, 2012, p. 14), and calls for mental health services to do better by “cementing and building on gains in resilience and recovery for people with low-prevalence conditions and/or high needs” (Ministry of Health, 2012, p. 14). Despite a call to action, there is also a clear message that there is no new money for secondary mental health services. Therefore, I wanted to understand whether these calls to action in the government strategic plans had any influence on the ability to deliver an occupation-focused CRT programme; and, if so, how that was navigated given the current fiscal climate.

In 2018, a change of government initiated the largest health reform in Aotearoa New Zealand’s history. Preceding the reform, an inquiry into Mental Health and Addiction services was undertaken due to widespread concern about the state of the mental

health and addiction sector. The inquiry resulted in He Ara Oranga Report (Pathways to Wellness) (New Zealand Government, 2018). He Ara Oranga Report found multiple areas within the mental health system that needed improving and made numerous recommendations to the residing government. One of these recommendations was to reestablish the mental health commission to provide oversight and guidance of service delivery and to do more to address inequities of health care that existed, particularly for Māori. In 2022, the 20 district health boards were to be disestablished, and one health system to be created by 2022 called Te Whatu Ora (the weaving of wellness). The data for this study were collected prior to the 2022 change of the health system; therefore, while this research was undertaken in the context that was current at the time, the discussion chapter will incorporate the most up to date changes relevant to this study.

Significance of Te Tiriti o Waitangi and colonisation for health

The disproportionate number of Māori living with an EPI, compared to non-Māori, reflects a defining event (the signing of Te Tiriti o Waitangi) in Aotearoa New Zealand's history and a pivotal moment for the nation's progression. Te Tiriti o Waitangi, signed in 1840, marked an agreement between the Crown (representing England) and some Indigenous Māori chiefs in Aotearoa (Eriksen-Sohos, 1995; Hanly, 2017). The Crown did not honour their obligations under te Tiriti. They banned the use of Te Reo Māori and, subsequently, put legislation in place that removed land from Māori and prevented the use of Māori customs and practices, including those that Māori used to address the health needs of their people. Non-adherence to te Tiriti by the Crown has resulted in inequitable health outcomes for Māori. At the time of signing te Tiriti, Māori made up approximately 90% of the population. Today, Māori make up approximately 16% of Aotearoa New Zealand's population; yet, are three times more likely to be living with an EPI than non-Māori population (Kake et al., 2016). This section explores the significance of te Tiriti o Waitangi on Māori health and the significance of te Tiriti to the current study.

According to the articles in te Tiriti o Waitangi, Māori were to retain tino rangatiratanga, which means political control by Māori people over Māori affairs, including Māori health practices. Māori regard their health as a taonga (treasure) and that health encompasses all beliefs, values, mythology, land, whānau, and spirituality

(McCarthy, 1997). For instance, karakia (prayer or incantations) were used to heal any kind of severe illness including injury to the mind and spirit (Bennett & Liu, 2017; Eriksen-Sohos, 1995). In Māori culture there is no mention of lunacy, and it was thought that many symptoms described as psychotic illnesses were spiritual encounters and dealt with within Māori customs and practices. People with such experiences were looked after by tohunga (spiritual healers), whānau, hapū (communities), and iwi (tribes) (Bennett & Liu, 2017; Eriksen-Sohos, 1995; Taitimu, 2007). Aotearoa New Zealand has a well-known model of health called 'Te Whare Tapa Wha' which goes some way to explaining the Māori holistic view of health (Durie, 1985). Te Whare Tapa Wha was developed by Sir Mason Durie (1985), a Professor of Māori studies and a psychiatrist. The model is made up of four interconnected pillars—taha hinengaro (thinking and mental health), taha tinana (physical health), taha wairua (spiritual health), and taha whānau (Durie, 1985). Viewed holistically, if there is a problem with one of the pillars the other pillars are affected.

Unlike a Māori world view of health, the Western biomedical model of health takes a reductionist approach wherein ill health is based on biological factors. Additionally, historical English viewed people with an EPI as criminals, perpetuated by Crown laws that incarcerated people for having a mental illness (Ball, 2010). The English views of mental illness were transported to Aoteaora New Zealand where legislation was created, such as the Lunatic Ordinance Act 1846 and the Imbecile Passenger Act 1873, enabling incarceration of mentally unwell people (Ball, 2010).

Western bio-medical treatments for psychosis over the ensuing years paid little regard to a Māori worldview and were based on barbaric (since banned) treatments adopted by Western medical models of health including lobotomies (removing a portion of the brain) and trephining (drilling holes in the side of the head to induce bleeding) (Taitimu, 2007). Historical and political views of mental illness led to much of the stigma and discrimination that people with an EPI face today (Andrews, 1997). Furthermore, many of today's poor health outcomes for Māori can be linked to the trauma experienced by Māori due to multiple breaches of te Tiriti o Waitangi over the last 170 years (Bennett & Liu, 2017; Graham & Masters-Awatere, 2020; Hanly, 2017).

Over recent years, Aotearoa New Zealand Governments have acknowledged the historical and political breaches of te Tiriti and the impact these breaches have had on the health of the Māori population. The Aotearoa New Zealand health system is directed by Manatu Hauora (Ministry of Health) to address inequities by honouring five key principles of te Tiriti: 1) Tino rangatiratanga, Māori self-determination; 2) Partnership, requiring Māori and Crown to work together in governance, design, monitoring, and delivery of health and disability services; 3) Equity, a commitment to achieve equitable health outcomes for Māori; 4) Active protection, ensuring actions achieve equitable health outcomes for Māori and that all Tiriti partners are well informed regarding the extent and nature of actions and outcomes; and 5) Options**,** which requires the Crown to provide and properly resource health and disability services that are culturally appropriate for Māori (Manatu Hauora Ministry of Health, 2020). In recent years, and of particular significance to this study, honouring te Tiriti is a core competency to practise as an occupational therapist in Aotearoa New Zealand. The Occupational Therapy Board of New Zealand (2022) stated that:

> Understanding how Te Tiriti affects all our lives is essential for helping people participate in their desired occupation. Such understanding helps you see how systemic and individual issues can breach people's rights and limit their opportunities to participate in their chosen occupations. (p.2)

There are five competencies that occupational therapists are required to meet which were recently updated in 2022. Competency 2 is relevant to the present discussion, and is Responsiveness to te Tiriti or Waitangi. It requires occupational therapists to apply their knowledge to ensure equitable outcomes for Māori well-being and that all aspects of Māori culture, 'Te Ao Māori', are respected and supported (Occupational Therapy Board of New Zealand, 2022).

Based on Te Tiriti principles, and Competency 2, set by the Occupational Therapy Board of New Zealand, I was interested to know if the delivery of an occupation-focused CRT programme honoured te Tiriti obligations. It was also important for me, as the researcher and an occupational therapist, to honour my obligations under te Tiriti and seek Māori guidance while undertaking this study.

Summary

The purpose of this study is to offer guidance on the key elements services need to attend to when delivering an occupation-focused CRT programme to tāngata whai ora living with an EPI, of which Māori are highly represented. The debilitating impact that cognitive difficulties have on the lives of tāngata whai ora, their whānau, communities, and the health care system is broad ranging and far reaching and is not currently addressed by mental health service provision. My experience working as an occupational therapist in mental health, and my belief that everyone should be able to exercise their right to construct and live a meaningful and purposeful life, prompted me to act.

CRT is an internationally evidenced based intervention that targets the cognitive difficulties that people living with an EPI experience. However, as an occupational therapist, I believe that the occupations people do, and the context in which they take place, is an essential aspect of life, health, and well-being; and, therefore, should be the focus when addressing cognitive difficulties. Consequently, an occupation-focused CRT programme pilot was undertaken resulting in successful outcomes based on tāngata whai ora occupations that had personal meaning. Regardless of the pilot's success, and establishment of CRT as an internationally recognised, evidenced based intervention, the ability to deliver the programme proved difficult. Offering a resource-intensive intervention to address cognitive needs contrasts with the historical and sociopolitical context of mental health and service provision for people living with an EPI in Aotearoa New Zealand. Despite difficulties, one or two teams were able to deliver the programme beyond the pilot. I was interested to find out how they were managing to deliver the programme within the current context of mental health service delivery.

Therefore, this study asked the following research questions: 1) How was an occupation-focused CRT programme delivered in a community mental health setting within Aotearoa New Zealand? 2) What were peoples' experiences of the delivery of the programme? 3) What factors influenced the delivery of the programme and how did those factors shape delivery?

Overview of the Thesis

The thesis comprises of my progression through the research which explores how an occupational-focused CRT programme is delivered from the perspectives of key stakeholders and in the context of a public mental health service in Aotearoa New Zealand. As a researcher it was important that I ensured all essential elements of the research study were addressed throughout this thesis to demonstrate ethical standards and completeness and to provide transparency and replicability. Therefore, I drew on published reporting guidelines using The Reporting Checklist of Qualitative Study developed by O'Brien et al (2014), to ensure all essential elements were included in my study. The completed checklist is presented in Appendix A.

Chapter One: Introduction

This chapter has provided background information relevant to the study, and my personal interest in the topic including my pre-understandings. An overview of the historical and sociopolitical influences on the context in which my research is undertaken was offered.

Chapter Two: Literature Review

In this chapter I provide a narrative review of the literature relating to my research questions. I take a critical look at literature relating to the delivery of an occupation-focused CRT programme.

Chapter Three: Methodology

In the third chapter I outline the study methodology, which describes Guba and Lincoln's constructivism as the chosen philosophical underpinning (Lincoln and Guba, 2013), and Stake's (1995) constructivist case study as my choice of methodology. The reasons why these choices are a good fit for answering my research question are explained.

Chapter Four Methods

In Chapter Four I outline the methods used to engage with the research process. The chapter includes ethical considerations, sampling strategy; recruitment processes; data collection processes, including considerations for consent and confidentiality; a

description of how I undertook analysis; and how I maintained rigour and trustworthiness.

Chapters Five, Six, Seven, and Eight: Findings

Chapters Five to Eight are the findings presented in a case study report. Chapter Five provides the context of the case study in which an occupation-focused CRT programme was delivered. Chapter Six presents the leaders' perspectives of the delivery of an occupation-focused CRT programme, Chapter Seven provides the therapists' perspectives, and Chapter Eight provides tāngata whai ora perspectives.

Chapter Nine: Assertions

Chapter Nine presents the overall findings as assertions to my case study. In this chapter I draw together commonalities and links presented in the case study report and make assertions about the case.

Chapter Ten: Discussion

The thesis concludes with a discussion chapter drawing together the findings and the literature, including new literature that has emerged at the time of concluding analysis. I discuss implications and recommendations for delivery of the occupation-focused CRT programme, limitations of the study, and recommendations for future research.

Chapter 2 Literature Review

In the previous chapter I introduced CRT as an evidence-based intervention and defined the occupational perspective that I brought to this study. I also explained the socio and political context in which this study was undertaken. In this chapter, I present the literature review. My research questions ask, how was an occupation-focused CRT programme delivered in a community mental health setting within Aotearoa New Zealand? What were people's experiences of the delivery of the programme? What factors influenced the delivery of the programme and how did those factors shape delivery? In reviewing the literature, I sought to understand what was known in relation to the context and complexities of my research questions and provide critical commentary.

The Literature Review Method

The aim of the review was to establish what was already known about the delivery of occupation-focused CRT programmes, and to identify any limitations and gaps in the literature (Basheer, 2022; Grant & Booth, 2009). This review did not seek to evaluate outcomes of an occupation-focused CRT programme, or to establish whether it is an effective intervention. Therefore, to gain an understanding of how the programme was delivered, I chose to undertake a narrative review. A narrative review explores the literature considering various perspectives and interpretations and provides a backdrop for understanding the complexities of a research question. This type of review synthesises the existing research on a particular topic into key concepts, highlighting trends and patterns. It can be used to identify the gaps in the existing research while critically evaluating the strengths and limitations of the studies, and can provide a comprehensive summary (Basheer, 2022; Ferrari, 2015; Greenhalgh et al., 2018; Stake, 2010; Sukhera, 2022). As explained by Greenhalgh et al. (2018), "Narrative reviews provide interpretation and critique; their contribution is deepening understanding" (p. 2).

Greenhalgh et al. (2018) also proposed that a narrative review is a preferred methodology over a systematic review when a naturalistic study design is useful in informing clinical practice within a real-world context. Narrative reviews are valuable for gaining understandings relevant to clinical practice and its context complexities to

produce meaningful synthesis of the research on a particular topic (Brown & Parry, 2022; Greenhalgh et al., 2018). As Stake (2010) noted, a literature review for qualitative case study research explores the complexity of the problem to understand the issue, and is better focused on relevant studies than a plethora of multiple related studies. Therefore, a narrative review is a useful methodology to explore what is known about people's experiences, preferences, and outcomes for informing mental health (Brown & Parry 2022; Panchal et al., 2022) and occupational therapy practice (Cunningham et al., 2022).

A narrative review is not without limitations. Conclusions made by the authors of narrative reviews may be open to bias with potential to 'hand pick' or omit pieces of literature, which may bring into question interpretations made (Grant & Booth, 2009; Greenhalgh et al., 2018). To address these limitations, it was important for me to apply a framework to reduce bias and synthesise the literature reviewed. This literature review was guided by a process identified by Efron and Ravid (2018). The process is: 1) Deciding on a topic for review. 2) Finding the topic literature. 3) Choosing, evaluating and analysing chosen articles. 4) Organise and synthesis the articles. 5) Build an argument, develop a "writer voice and the writer process" (p.207), and 6) refine and edit the literature review (Efron & Ravid, 2018).

Throughout my journey with CRT, I have continuously engaged with the literature, from gaining my initial understanding to run the pilot, to planning my research, through to concluding with the discussion chapter. However, I avoided keeping up to date with current literature during data analysis to ensure that the findings were interpreted from the participant narratives and were not derived from emerging findings in the literature. The information presented in this literature review represents the state of knowledge at the time the study commenced in April 2019; articles published over the course of the study are included in the introduction and discussion chapters. The first step in the literature review was to choose a literature review topic, which, as described above, focused on my research questions. The next section explains how and where I located the literature.

Search Strategy

A literature search was conducted between April and July 2019 using the electronic data bases CINAHL, Medline, Sports Discus, Scopus, PsychINFO, Pubmed, and the Psychology and Behavioural Sciences Collection. I started with an exploration to find out what was known about the delivery of an occupation-focused CRT programme for people with an EPI between 2008 and 2018, for which no studies were located. I also started my search looking for information about the delivery of CRT applying a limiter of the Aotearoa New Zealand context; again, no studies were located. Subsequently, the limiter of Aotearoa New Zealand was removed. I also broadened my search to include a range of terms similar to occupation, such as functioning. My search consisted of a variety of words relating to: function, occupation, activities of daily living, and psychosis; and then focused on search terms related to the delivery of CRT. The search was undertaken using varying combinations of the key words listed in Table 1, focusing on literature within a 10 year span, from 2008 to 2018.

Table 1

Search Terms Used

Main concepts	Synonyms
Cognition	Memory, attention, executive functioning, metacognition, cognitive skills
Psychosis	Schizophrenia, schizoaffective
Cognitive remediation	Cognitive rehabilitation
Occupation	Occupational performance, participation, goals, work, quality of life, community participation, activities of daily living
Delivery	Implementation
Social	Social cognition, social skills, improved function
Adults	
New Zealand	Aotearoa

I used a combination of search terms, Boolean operators, and phrase searches such as

- “cognitive remediation” OR “cognitive rehabilitation”
- cognition OR metacognition OR “cognitive skills” OR “social skills”
- cognition OR memory OR attention OR “executive functioning”
- occupation*

- “occupational performance” OR function OR “improved function”
- function OR work OR occupation* OR goals OR participation
- psychosis OR schizophrenia OR schizoaffective OR “mental health”
- delivery OR implementation
- adults

Various combinations of search terms using the Boolean phrase AND were undertaken.

- “cognitive remediation” AND occupation AND schizo*
- “cognitive remediation” AND adults AND psychosis
- “cognitive remediation” AND function AND psychosis
- “cognitive remediation” AND work
- “cognitive remediation” AND delivery AND psychosis
- “occupational therapy” AND schizophrenia
- “cognitive remediation AND New Zealand
- psychosis AND New Zealand

A total of 96 articles from 2008 to 2018 were found and included articles that appeared relevant to my topic that I had manually retrieved from reference lists. Abstracts were scanned for relevance to answering the research questions, considering the various aspects of the question that required exploration. Subsequently, articles were included in the literature review if they provided information that related to the research questions. After removing the limiters of focusing on New Zealand, I considered literature in countries such as the United State of America (USA), England, Canada, Singapore, Australia, Italy, Spain, and Hong Kong. I included articles that related to occupations such as work, social functioning, and activities of daily living. I found studies that related to CRT with other diagnoses, such as bi-polar disorder, depression, addictions, and eating disorders; and about CRT with a range of age-groups. However, given my population of interest, I chose to limit the inclusion of articles to people with a psychotic illness, both early-onset and enduring, and to keep the population age to adults. Given there were limited articles that delivered CRT with an occupational focus, I included articles that had delivered CRT on its own, along with articles that delivered CRT in conjunction with functional or occupation-focused training. However, articles were excluded if they did not provide information regarding how the CRT programme was delivered. Consistent with a narrative review

methodology (Ferrari, 2015), I included and critically considered a range of information sources. I also included articles that were prior to 2008 if they were considered relevant to the study. A total of 46 articles were finally included in the review based on their relevance to answering the research questions. These articles were filed within my reference-management software library.

The articles reviewed were wide ranging and consisted of large and small randomised control trials (RCTs), meta-analyses, surveys, retrospective studies, participatory studies, mixed method designs, a pilot study, a literature review, editorials, case study reports, and qualitative interviews. The studies were undertaken in various settings, which included inpatient, vocational, and community-based contexts. A large proportion of the studies were quantitative, evaluating the effectiveness of the CRT intervention but did provide some information on the delivery of the programme. Limited studies delivered the CRT programme with the addition of functional or occupation-based interventions or measures. There were a small number of qualitative studies that explored people's experiences of the programme, and a few studies that had a sole focus on delivery or implementation of the programme.

Once the final articles were chosen, I engaged in step 3—analysing and evaluating literature review sources—by immersing myself in the literature. Consistent with a narrative review method, I read each article thoroughly, highlighting relevant points, and making notes, seeking and chunking key ideas relevant to the research question within and across each study (Ferrari, 2015; Sukhera, 2022). I created a table to help organise my ideas. The table captured the reference, type of study, context of the study, study aim, aspect of delivery in the study, and relevance to my research questions. Further details of the articles reviewed are summarised in Appendix B.

Reflecting the key ideas from my analysis of the literature, the review findings are presented around key concepts of delivering the programme in relation to the research questions. This required organising and synthesising the literature to build an argument, developing my writer's voice, and refining the review (Efron & Ravid, 2018). Additionally, and in line with Stake (2010), my engagement with the literature was a reflexive and iterative process that involved engaging with my supervisors for peer

review of this chapter, refining search terms, and refining the focus and scope of the literature to be included and the key concepts presented in the subsequent sections.

The first section below reviews the literature in relation to treatment components to be considered when delivering a CRT programme, such as core elements recommended by an expert working group, computer programmes, and modes of delivery. The second section reviews the literature on the delivery of CRT alongside a focus on aspects of occupations such as work, social functioning, and activities of daily living. It discusses whether combining CRT with occupation-focused training made a difference to participants' occupations. Next, stakeholder involvement in the delivery of a CRT programme is explored, and shedding light on consumers' experiences, important therapist attributes, and organisational influences on the delivery of CRT. The concluding section explores and critiques an implementation trial that took place in Queensland, Australia, as the report of this trial contained information that was highly relevant to my research question (Cairns et al., 2013; Dark et al., 2018; Dark et al., 2016; Dark et al., 2015). Some of the studies in this literature review are discussed in more than one section.

Treatment Components When Delivering CRT

There are numerous ways in which cognitive remediation interventions have been described in the literature. This section reviews the literature regarding which treatment components are recommended by experts for the delivery of a CRT programme. Core elements deemed important when delivering a CRT programme are outlined, along with information about various computer programmes that have been used and modes of delivery such as individual sessions or groups.

Core elements required when delivering CRT

Considerable attention been given to establishing core elements required when delivering a CRT programme and to what constitutes a recognised CRT programme. There are many variations in the delivery of a CRT programme described in the literature. Drawing upon seminal works in the field of CRT, this review highlights the core elements recommended when delivering a CRT programme. In 2011, experts recognised in the field of CRT, through their research and publications, formed a Cognitive Remediation Expert Working Group (CREW). The expert working group met

and established an agreed set of essential core elements to support the fidelity of CRT programmes (CREW, 2012). These core elements include therapists who have a good understanding of cognition and the impact of cognition on day-to-day functioning, and who can link cognitive difficulties to meaningful goals. Other core elements include cognitive exercises that consist of mass practice, scaffolding to keep the tasks challenging and engaging, and positive reinforcement with feedback; as well as development of cognitive strategies and transference of learnt skills and strategies to everyday life (CREW, 2012). Combining CRT with other psychiatric rehabilitation models, such as vocational rehabilitation and social skills training, is also held to be an important element when delivering a CRT programme (CREW, 2012). In addition to applying core elements, when undertaking CRT in the context of a rehabilitation model, studies have shown the importance of including metacognitive training, which requires consumers to think about their thinking and learn about their cognitive strengths and weaknesses (Cella et al., 2015; Cella & Wykes, 2017). Furthermore, a therapeutic alliance, which is a collaborative relationship between a client and therapist, characterised by trust, mutual respect and working together on goals, is also seen as an essential component (Bowie et al., 2017; Cella & Wykes, 2017).

It is generally accepted within the literature that learnt cognitive skills and strategies need to be intentionally transferred to day-to-day functioning (Cella et al., 2017; Bowie et al., 2017), highlighting the importance of combining CRT with training that supports people's occupational functioning. However, there is little information on how to attend to the components needed for delivering the occupation-focused aspects of a programme, and guidance is lacking in this area. The gap reflects the predominant perspectives that have informed the development of CRT, and also reflects a lack of substantive research that includes occupation-focused components within a CRT programme to inform such guidance.

Although there is limited information in the literature on how an occupation-focused CRT programme can be delivered, as above, core elements that should be expected in a CRT programme have been established to achieve good cognitive outcomes (CREW, 2012). Studies claiming to have undertaken CRT without attending to the core elements may not have such favourable results. For instance, a study by Panickacheril et al. (2017) claimed successful implementation of CRT into their mental health

services in Perth, Australia; however, they also noted a high dropout rate which they attributed to lack of interest in CRT from the participants. This study did not apply the core elements as outlined by CREW group and focused only on drill and practice exercises via a computer programme that participants undertook individually with no therapist support. While a high dropout rate may be attributed to the lack of core elements when delivering the programme, without the participants' perspectives on their experiences of how the programme was delivered it is difficult to determine the factors that influenced disengagement and the high dropout rate. For example, the programme might have lacked relevance to the participants' daily lives. Therefore, research is needed that adequately describes the specific details of how the programme was delivered and whether it adhered to the core elements outlined by the CREW group. Within such research, given the possibility of dropouts, it will also be important to understand the experiences of delivering the programme from the consumers' perspective.

Computer programmes used in delivery of CRT

On reviewing the literature, there is no general agreement about the CRT computer programme that should be used, highlighting clear variation in the computer software programmes that have been utilised across studies. Computer software packages included CogPack (Contreras et al., 2016; Lindenmayer et al., 2017; Lystad et al., 2017; McGurk et al., 2017), the Orientation Remedial Module© (ORM) (Sandoval et al., 2017), Posit Science (Bowie et al., 2017), and CIRCuiTS (Cellard et al., 2016; Dark et al., 2018; Reeder et al., 2016). CIRCuiTS, in particular, has been well evaluated and found to be acceptable to participants. For instance, Cellard et al. (2016) found that few sessions were missed, and participants were motivated to attend. Likewise, Reeder et al. (2017) found that consumers reported positive experiences of the programme, which lead to perceptions of improved strategy use into daily activities and high acceptability from therapists. However, a CRT programme does not need to be tied to a single computer programme. The Neuropsychological Educational Approach to Remediation (NEAR) model uses a variety of computer programmes depending on specific cognitive difficulties any individual person is needing to address (Medalia & Freilich, 2008).

What previous studies do not take into consideration is why a particular computer programme was chosen and what influenced that choice, with limited studies seeking to understand people's experiences of engaging in those programmes. Knowing what computer programme was used, why it was chosen, what influenced the choice of computer programme, how computer programmes were resourced, consumer and therapists' experiences of the computer programme in routine care, and how the computer programme training was translated to everyday life, will be valuable information to help answer my research questions.

Modes of delivering the computer aspect of a CRT programme

Several studies provided information about the modes of delivery highlighting a variety of ways in which the computer aspect of a CRT programme can be delivered, such as using individual sessions, group delivery, and whether the adjunct of peer support or other staff members is viable. Subsequently, there is inconclusive debate within the research regarding the preferred mode of delivery.

The majority of earlier RCT studies investigating the efficacy of CRT delivered the programme on an individual basis to participants (McGurk et al., 2007). However, more recent studies have been delivering CRT in a group-based format (Bowie et al., 2017; Contreras et al., 2016; McGurk et al., 2017; Tan et al., 2016). Studies have shown that delivering CRT in a group-based format improves cognition (Cella et al., 2016b; Tan et al., 2016). Tan et al. (2016) conducted a RCT with 104 participants comparing a group-based CRT programme to a control group of music and dance therapy. In contrast, Cella et al. (2016b), conducted a small, controlled study (n=25) to compare the difference between a group-based CRT programme and a one-therapist-one-consumer mode of delivery. Both studies concluded that group-based CRT is an effective mode of delivery. Furthermore, results from Cella et al. found cognitive improvements in both the group and individual delivery modes with no differences between groups, concluding that both modes of delivery were feasible.

Typically, studies that delivered CRT in a group format provided little information about how or why they chose that mode of delivery, although authors of two studies intentionally adopted group-based CRT to improve access to the programme (Cella et al., 2016b; Tan et al., 2016). Cella et al.'s (2016b) study specifically sought to contribute

to efforts to keep CRT cost effective and more accessible. Similarly, Tan et al. (2016) set out to specifically explore the efficacy of a group CRT programme because of a perceived “translational bottleneck” (p. 107), due to an insufficient supply of therapists to deliver the programme in one-to-one sessions. Tan et al.'s study was undertaken in China where there is a large population to serve, so a group format was seen as way to overcome some of the access barriers to the programme. The researchers suggested that there are advantages and disadvantages in both individual and group modes of delivery. Further, there is emergent research exploring consumers’ perspectives of group-based CRT delivery.

Two studies have explored consumers’ perspectives of group-based delivery of CRT, with most participants in both studies reporting positive experiences (Cella et al., 2016b; Contreras et al., 2016). Contreras et al. (2016) used a questionnaire interview to explore the experiences of 20 consumers who took part in a trial completing 20 hours of group-based CRT. Most participants reported the group format gave them an opportunity to exchange ideas, support and learn from each other; yet, some participants felt distracted and experienced competitiveness which induced anxiety. It is unclear what other influences, if any, impacted these participants’ experiences. In contrast, Cella et al. (2016b), used a rating scale with five, open-ended questions to find out about consumers’ experiences; asking what they liked or disliked most about the group. Although results from the questionnaire indicated that the participants in the group had an enjoyable experience, these findings should be considered with caution. It is known that people with schizophrenia often have difficulty with communication and may require assistance to express themselves (Gepp & Cassata, July, 2021; Pawelczyk et al., 2015). It is unclear how the participants completed the forms; for example, if they were guided through the questions with an interviewer or if they were left to their own devices to complete the form in a written format. Subsequently, participants’ experiences of the group format are yet to be fully explored. Furthermore, the study by Cella et al. compared group-based CRT delivery to a one-consumer-with-one-therapist mode of delivery, but only sought the experiences of those in the group. Therefore, in my study, tāngata whai ora experiences of how the programme was delivered, whether that was group or individual, were important to explore and understand. Applying a methodology and methods that could support

tāngata whai ora to share their stories and experiences of how an occupational focused CRT programme was delivered was necessary to provide rich information on what influenced engagement with the programme.

Two studies have explored the adjunct of nonregistered health professionals in delivering the programme, with findings that suggest benefits to consumers with transference of skills to every life (Olaifa et al., 2015) and improved cognition (Sandoval et al., 2017). Olaifa et al. (2015) wrote a first-person account from two healthcare assistants (HCAs) on their experience of delivering CRT with oversight from a clinician in an inpatient setting. Sandoval et al. (2017) compared the addition of peer support to a CRT session in a small pilot with 16 consumers. The addition of peer support was talking with consumers about anything that came to mind during a 10-minute break in the programme. Although these studies conveyed some benefit, the small number of participants in both studies is a limitation. Furthermore, Olaifa et al.'s study was a case report that was not backed with a study design or quotes, and the HCAs worked in an inpatient ward; therefore, the results may be less applicable to a community-based CRT programme. Similarly, in Sandoval et al.'s study, it is not clear from the participants' perspective how the addition of a peer improved their performance on the cognitive tasks or if their cognitive improvement was meaningful and relevant to their everyday life, leaving a gap in knowledge as to how consumers experienced the addition of a peer support worker.

The vast amount of literature on CRT highlights the various ways that CRT can be delivered. There is a well-known model of CRT, called The Neuropsychological Educational Approach to Cognitive Remediation (NEAR) (Medalia & Freilich, 2008), that was developed by Alice Medalia in New York. It includes the core elements as outlined by the expert group, and is run as an open group, facilitating peer to peer support. NEAR has been commonly used in CRT research (Dark et al., 2018; Medalia & Freilich, 2008; Medalia et al., 2018) and is linked to other psychiatric rehabilitation approaches such as social skills groups or vocational rehabilitation. It focuses on personalised learning activities and attaching them to topics of high interest to promote intrinsic motivation. The NEAR programme encompasses the treatment components outlined in this current section (treatment components when delivering CRT); however, there is little information on various contextual factors, such as team culture, or key

stakeholders' experiences that may influence the delivery of the NEAR programme in clinical settings.

Summary

This section reviewed the literature regarding specific treatment components that need to be considered when delivering a CRT programme, and outlined core elements requiring consideration when delivering the programme including various computer programmes and modes of delivery. What remains unknown are the contextual influences that either impede or support the application of core elements, what influenced the choice to use various computers programmes, and the choices regarding the modes of delivering a CRT programme, whether on its own or with an occupational focus. Exploring, and subsequently gaining an understanding of, the contextual influences on treatment components will help inform how an occupation-focused CRT programme is delivered within the context of a public mental health system.

Delivery of CRT With an Occupation-Focus

My search of the literature found no information that provided a holistic view of people's occupations in the context of CRT, looking across the range of occupations in which people might engage. Much of the research found for my review had CRT delivered alongside vocational rehabilitation, with a focus on the occupation of work; or had activities of daily living and social participation evaluated as secondary outcomes. Given the dearth of literature that had occupations as the primary outcome, and given how people with an EPI spend their time and the occupational deprivation they experience (as highlighted in Chapter One), these studies were worth evaluating,

As already established, CRT improves cognitive functioning (Bryce et al., 2016). Authors have extrapolated that improvements in cognitive functioning may translate to improvements in functional activities and participation in daily living (McGurk & Mueser, 2017; Wykes et al., 2011). The next sections discuss the literature related to CRT that had some focus on discrete types of occupation. The literature is critiqued from an occupation-focused perspective and is divided into three parts. Initially I review studies that considered the delivery of a CRT programme and outcomes related

to employment or work. Next, I discuss studies that attended to social participation; and lastly, I consider studies that addressed and evaluated activities of daily living.

Delivery of a CRT programme in relation to employment

It is estimated that only 10 to 20% of people with a persistent mental illness are in competitive, paid employment (McGurk et al., 2005; McGurk et al., 2010), and job tenure is often limited with consumers either walking out of the job or being dismissed (McGurk et al., 2005). People living with an EPI express a desire to gain employment; therefore, employment is a meaningful occupation for many (McGurk et al., 2010). However, difficulty with cognitive functioning impacts a person's ability to obtain employment, maintain good work performance, and can negatively affect employment outcomes (McGurk et al., 2017).

There are various vocational rehabilitation approaches to support people with a persistent mental illness to return to and engage in work occupations, such as prevocational training, the use of affirmative businesses, or provision of sheltered workshops as an approach leading towards competitive employment (Drake & Bond, 2023). Additionally, occupation-focused approaches to promote work-related outcomes for this population include supported employment (SE), and individual placement support (IPS) which focus on rapid job search within the competitive employment market, integration of employment specialist with clinical care, and ongoing support once employment has been secured (Drake & Bond, 2023). However, for people who experience cognitive difficulties, gaining and maintaining employment remains a challenge.

Substantial attention has been given to ascertain whether the addition of CRT to usual vocational interventions improves employment outcomes. Susan McGurk, a prominent researcher in vocational rehabilitation and cognitive remediation, and colleagues have developed a programme called 'Thinking Skills for Work' which combines employment support with CRT. 'Thinking Skills for Work' has been evaluated and published over a series of studies (McGurk et al., 2005; McGurk et al., 2017; McGurk et al., 2010). Alongside McGurk et al.'s work, other researchers have also studied the combination of CRT with various vocational rehabilitation approaches (Au et al., 2015; Bell et al., 2014; Lystad et al., 2017). Four were studies with moderate to large RCT designs (Au et

al., 2015; Bell et al., 2014; Lystad et al., 2017; McGurk et al., 2005), one was a small, non-controlled study (n=25) (McGurk et al., 2010), and another reported on a large feasibility study (n=84) (McGurk et al., 2017). The studies were undertaken in a range of community settings from clinical (Au et al., 2015; Bell et al., 2014; McGurk et al., 2017) to vocational rehabilitation (Lystad et al., 2017; McGurk et al., 2005) and non-government agencies (McGurk et al., 2010). The majority of these studies recorded improvements in cognition and employment outcomes for participants who received CRT in conjunction with vocational rehabilitation, with people in one study maintaining paid employment or study up to 2-years after completing the programme (McGurk et al., 2017). However, the study by Lystad et al. (2017) only found improvements in employment outcomes for people who were deemed to have lower community functioning as opposed to higher community functioning. Conversely, the study by Au et al. (2015) found improved employment outcomes for both their treatment group (SE and CRT) and the control group (SE only), with no differences between the groups, suggesting that the addition of CRT yielded no noticeable effect.

The employment outcomes found in the above reviewed studies may be related in some way to how the programmes were delivered. A limitation of both Bell et al. (2014) and Au et al.'s (2015) studies was little to no description of how CRT or the control interventions were delivered, other than stating the use of computer-based exercises ranging from 6-10 hours a week in addition to their usual vocational rehabilitation interventions. Therefore, it is unknown whether the interventions included core elements of a CRT programme or how variability in the delivery might have influenced outcomes. In contrast, the four RCTs (Lystad et al., 2017; McGurk et al., 2005; McGurk et al., 2017; McGurk et al., 2010) had some description of how CRT was delivered, involving drill and practice exercises on a computer programme, development of strategies, transference of strategy use to work situations, and the development of personalised work-related goals. The three studies by McGurk and colleagues also included social skills training and a bridging group to help transfer learnt cognitive skills and strategies into job planning as part of the 'Thinking Skills for Work' programme. The description of how the programme was delivered covered the core elements recommended in a CRT programme, as outlined by the CREW group,

which may have contributed to positive outcomes and which also supports generalisability.

Most of the outcome measures in the above stated studies were focused on hours worked, the numbers of people who entered paid employment, and wages earned but provided little information about the quality of people's involvement in work as a result of the programmes. Additionally, little is known about the ways cognitive changes relate to employment outcomes (McGurk 2005). Addressing this knowledge gap, in part, was a study by Wykes et al. (2012) that used a single-group design with 49 adults who had a diagnosis of schizophrenia. The study sought to develop a test model to find out how cognitive improvements transfer to work behaviour. Findings indicated that although there were clear improvements in cognition following a CRT programme, these improvements did not necessarily drive key changes in work outcomes. Therefore, these findings challenge the idea that improvement in cognitive function can be extrapolated to improve functioning in day-to-day life, including work outcomes. From an occupational therapy perspective, there are many contextual factors and occupations that contribute to successful work outcomes, such as having a supportive routine and habits, attending to self-care, preparing meals, getting to work, and building relationships with others in the workplace (Matuska & Barrett, 2024). Thus, taking a holistic view of a person's occupations that extend beyond work is needed but missing in the literature. Understanding more about how a CRT programme is delivered alongside holistic, occupation-focused training in real world contexts may provide necessary insights into what drives better employment outcomes following a CRT programme.

All of the studies reviewed in this section were quantitative, with limited exploration of the details of delivery or contextual factors, such as funding or team culture, that may be important to consider when applying the findings in practice. McGurk et al. (2005) stated that the RCT design of their study was not appropriate to exploring essential components relevant to delivery of the programme, stating "with the present study design it is not possible to know how the programme works or which components are essential or not" (p. 906). In this way, quantiative study designs, such as RCTs, do not provide the complex contextual information required to understand important programme components that are needed when delivering the programme within real

world settings; indicating a research design that enables a deep exploration of context and experiences is required.

The studies in this section did provide general contextual information relating to where the studies were undertaken, such as community mental health sites, non-government organisations, and vocational rehabilitation settings. However little information was provided regarding the organisation's leadership structures, funding, team values, and people's experiences of the programme—all of which might influence the delivery of the programme and, potentially, outcomes. Failure to fully capture details about the delivery and context of the programmes also limits generalisability to practice settings.

One exception to seeking consumers experiences of CRT in relation to employment is a feasibility study by McGurk et al. (2017), who utilised a survey with 10 open-ended questions asking for feedback on improvements in cognition; with 53 out of 84 participants completing the survey. The results provided minimal information, noting self-report improvement in cognition only. Apart from this work, there is little information about consumers' experience of delivery of the programme in relation to employment, or therapists' experiences of delivering CRT. Knowledge of such experiences may shed light on other, unanticipated contextual influences, and may highlight important things to consider when providing the programmes in real-world contexts. My search of the literature did not find any in-depth qualitative research relating to experiences of delivering CRT within vocational rehabilitation services, which is a gap in the current research.

Delivery of the programme relating to social functioning

Social functioning involves people's interactions with their environments, which includes occupations related to community participation, social activities, and relationships with others (Lysack et al., 2024). People who have difficulty with social cognition, such as recognising facial expressions, often struggle with social functioning (Kurtz et al., 2015). A limited number of studies have included an additional intervention to address social cognition and social functioning in conjunction with a CRT programme (Kurtz et al., 2015; Lindenmayer et al., 2013; Lindenmayer et al., 2017).

These studies were small RCT designs ranging from 59 to 64 participants, undertaken in community mental health services in various parts of the United States; with one study also including those in an inpatient setting (Lindenmayer et al., 2013). There were variances between the studies regarding how social cognition was addressed, how CRT was delivered, and how social functioning was measured.

The two studies by Lindenmayer et al. (2013, 2017) used recognised CRT computer software to undertake CRT over a 12-week period. They also used an additional computer programme, MIRIGE (Baron-Cohen et al., 2004), to address social cognition. MIRIGE was developed to improve emotion and facial recognition (Lindenmayer et al., 2013). Participants received either three sessions of CRT a week, or two sessions of CRT and one session of MIRIGE. The latter study by Lindenmayer et al. (2017) also included a 1-hour discussion group that focused on generalising learnt skills and strategies into everyday life, although it was unclear if this was a one-off session or weekly. These two studies found some improvement in emotional recognition and emotion discrimination which were deemed to improve social functioning by the authors, although these findings were not significant. In contrast, Kurtz et al. (2015) found significant improvements in aspects of cognition and empathy following a intervention of CRT and social skills training (SST). The SST was delivered twice a week for four to six months in a face-to-face group setting to all the participants. Topics included skills in communication, conversation, assertiveness, and friendship. Participants were assigned to either CRT and SST, or basic computer skills and SST. The authors stated that participants' goals were modified as performance improved; however, there was no mention of what the goals were. CRT was described as taking part in computerised cognitive exercises with a thorough list of the exercises listed. The computer programme was not named and gaps in information relating to the delivery of the programme makes it difficult to ascertain what delivery components contributed to significant improvements.

In all three studies (Kurtz et al., 2015; Lindenmayer et al., 2013; Lindenmayer et al., 2017), the level of therapist input was not stated in the CRT computer aspect of the programme. Additionally, there was limited information regarding how social cognition skills were transferred to every life or relevant to the participants' social occupations (Kurtz et al., 2015; Lindenmayer et al., 2013; Lindenmayer et al., 2017).

Furthermore, different outcome measures were used to assess social functioning which may contribute to variations in results. Two studies (Lindenmayer et al., 2013; Lindenmayer et al., 2017), used the Personal Social Performance Scale (PSP) (Hsieh et al., 2011) while Kurtz et al. (2015) used the Social Skills Performance Assessment (Patterson et al., 2001). Both the PSP and the Social Skills Performance Assessment are clinician rated; therefore, providing no information from a consumer's perspective on their experiences of taking part in SST as part of a CRT programme and what this meant to them in terms of their meaningful social occupations and relevance to their lives.

The reports in all three studies contained little information about programme delivery, highlighting a gap in the literature around how to deliver a CRT programme that incorporates social functioning in the context of clinical practice and in a way that was relevant to the participants in their everyday life. Thus, it is difficult to apply the information to practice contexts. Moreover, the programmes had a narrow focus on social functioning in the context of occupation, so may not have adequately addressed the wider occupational performance needs that were relevant to participants. It will be important in my study to ascertain whether SST is incorporated as part of a CRT programme; and, if so, to understand how it was delivered, whether it was relevant to the consumers' lives, and how was it experienced from the consumers' perspective.

Activities of daily living

Several studies have investigated, as a component of their research, whether improvement in cognition gained through a CRT programme translated into improvements of activities of daily living (Bowie et al., 2017; Bowie et al., 2012; Tan & King, 2013; Vita et al., 2011). The study by Bowie et al. (2017) was a small, n=60, non-RCT; while the other three studies were moderate sized RCTs. All were conducted in rehabilitation settings, either community or outpatient (Bowie et al., 2017; Bowie et al., 2012; Tan & King, 2013), and within a hospital setting (Vita et al., 2011). The studies were conducted over a wide geographical range, from the USA (Bowie et al., 2017; Bowie et al., 2012) to Singapore (Tan & King, 2013) to Italy (Vita et al., 2011).

The four studies above delivered CRT with the core elements recommended for a CRT programme as outlined by the CREW group. However, there were differences in how

these studies transferred learnt skills and strategies into everyday life, and differences between the control and treatment groups. The studies by Tan and King (2013) and Vita et al. (2011) compared a CRT programme against treatment as usual which consisted of activities such as physical exercise (Tan & King, 2013), baking, and gardening; and other recreational tasks such as reading, walking, going to the gym, and horse riding (Vita et al., 2011). Transference of skills to everyday life in the CRT group consisted of coaching and discussing how learnt cognitive skills and strategies could be transferred to everyday life, and activities that participants were doing in their standard rehabilitation programmes. In contrast, the studies by Bowie et al. (2017) and Bowie et al. (2012) compared a standard CRT programme along with a CRT programme that included opportunity to practice cognitive skills in conjunction with activities of daily living which they called functional adaptive training or Action Based Cognitive Remediation (ABCR). In Bowie et al.'s (2012) study, participants practised tasks such as reading maps, planning recreational pursuits, and handling money within the CRT sessions; whereas Bowie et al. (2017) had a particular focus on simulated work-related tasks such as using a cash register, a filing system, or retail sorting tasks within their CRT sessions. Both studies used practice, props, and role play to transfer cognitive skills to everyday life, as opposed to the control group which used traditional methods of discussing transference to everyday life.

The studies by Tan and King (2013) and Vita et al. (2011) found moderate improvement in functional outcomes compared to the control groups. Vita et al. stated that modest improvements in function may be contributed to “naturalistic treatment conditions, where several factors within and outside the system of care may have interfered with and diluted not only the effects of cognitive remediation but also those of cognitive improvement on social functioning” (p. 229); athough these factors were not discussed. In contrast, the studies by Bowie et al. (2012) and Bowie et al. (2017) found a significant difference in functional capacity when CRT was combined with functional adaptive training within rehabilitation settings.

Furthermore, the study by Tan and King (2013) found that functional improvements, although not significant, were maintained 1-year post intervention. What is important in this finding is that participants continued to receive monthly support from a coach to continue to apply cognitive skills and strategies in everyday life. This finding implies

that continued support beyond the programme could be needed to sustain functional gains. In contrast, Bowie et al. (2017) found that functional gains were not maintained at various follow-up points, but the reasons for this finding were unclear.

All four studies concluded that CRT programmes should not rely solely on computer-based training for neuroplasticity, and that CRT programmes should also include active skill development and therapist support during sessions to help participants overcome challenges and generalise learnt skills into everyday life to achieve functional gains. The outcomes in Bowie et al. (2012) and Bowie et al.'s (2017) studies indicate that applying learnt skills and strategies in the context of doing an occupation may have significantly improved outcomes on the functional measures. However, a range of functional outcome measures were used in each of the four studies which may account for variations in outcomes (Bowie et al., 2017; Bowie et al., 2012; Tan & King, 2013; Vita et al., 2011).

All four studies used generic functional observer rated or clinician rated tools in controlled environments to measure function rather than in the context of the participants' everyday lives and based on their experiences. An editorial piece by Lucas et al. (2015) advocated for the use of generic functional measures in controlled environments alongside real world assessment of functioning in both research and practice. However, Fossey et al. (2006), who explored community functioning with people with a diagnosis of schizophrenia, proposed that generic functional assessments are not sensitive enough to capture the complexity of human doing specific to individuals and their specific contexts. Fossey et al. also argued that the use of such generic assessment tools, conducted in contrived contexts, may not provide reliable, desired, or valid reports of outcomes. Therefore, an apparent gap exists in the CRT research with respect to gathering information about outcomes that are relevant and meaningful to consumers. I could not find any studies that captured consumers' perspectives on whether they thought participation in a CRT programme improved their occupations, or whether activities of daily living that were assessed or included in the CRT sessions were meaningful to them. It will be important in my study to explore consumers' experience of how a CRT programme was delivered with an occupational focus, how outcomes were gathered with an occupational focus, and whether

delivering the programme with an occupational focus was meaningful and relevant to the consumers' lives.

Summary

A notable gap exists in the current literature concerning how CRT has been delivered to consumers to meet their wider occupational needs, including productivity occupations such as work, social occupations, and activities of daily living. Details about how the programmes were delivered to support occupational outcomes have been lacking in many reports, and are needed as a basis for supporting their application in real-world settings. There is a noticeable void in the literature regarding how occupation-focused programmes that are delivered in conjunction with CRT should be structured and what they should contain. Additionally, what is known of an occupation-focused CRT programme is limited, targeting specific types of occupation, and does not address consumers' occupations in a holistic manner.

Stakeholders' Involvement in Delivery of a CRT Programme

Within a clinical practice setting various stakeholders are involved in the delivery of healthcare. Introducing a new intervention, such as an occupation-focused CRT programme, is more likely to be successful if a coalition of people from various perspectives share a similar vision (Kotter, 2012). The New Zealand and Australian clinical guidelines for the management of schizophrenia clearly support the delivery of a CRT programme (Galletly et al., 2016). However, guidelines and policies for clinical practice based on research are ineffective on their own, according to implementation research (Fixsen et al., 2005). When delivering evidenced-based interventions into clinical settings it is necessary to consider the wider context of where the programme is delivered; examining issues such as the viability of changing clinicians' behaviours where there might be a lack of knowledge and skills, or dynamics within organisations that discourage innovative practice. According to Greenhalgh et al. (2004), who undertook a systematic review on the diffusion of innovation in health organisations, knowledge of clinicians' behaviours and organisational influences are under-developed in mental health services. However, the need to make changes is widely accepted based on narratives from those with lived experience, the socio-political and economic concerns about the cost of psychosis, and clinicians' ability to offer interventions that make a difference (Castle & Harvey, 2016; Morgan et al., 2017). This next section

critiques the literature to shed light on what is known in relation to the various players associated with the delivery of CRT, including consumers, therapists, and wider organisations.

Impact of CRT on consumer self esteem

The intent in delivering a programme that improves cognition is to ultimately improve the lives of people who undertake the programme. Therefore, it is important to seek consumers' experiences of the programme and to understand what aspects of the programme delivery facilitate engagement and make a difference to their lives. My search of the literature found very little on consumers' experiences of receiving a CRT programme. However, I found studies in CRT literature that report on changes to consumers' self-esteem, perceived benefits of the programme, and therapists' input from consumers' perspectives.

A few studies have sought to evaluate changes to consumers' self-esteem as a secondary outcome in small to moderate RCTs (Au et al., 2015; Garrido et al., 2013; Wykes et al., 2003), as well as one qualitative study via a co-designed questionnaire with 21 participants as part of a larger RCT (Rose et al., 2008). Participants were recruited mainly from community based mental health settings from a range of countries such as England (Rose et al., 2008; Wykes et al., 2003), Spain (Garrido et al., 2013), and Hong Kong (Au et al., 2015). Within the three RCTs, there was some focus on combining CRT with occupations such as work (Au et al., 2015), or studies that compared CRT to a leisure occupation of watching documentaries (Garrido et al., 2013) or occupational therapy interventions (Wykes et al., 2003). However, all studies provided limited description on delivery of either the intervention or control groups.

Self-esteem is a person's perception of their own value and capabilities, and has an impact on a person's health, sense of well-being, and happiness. All four studies reported improvements in self-esteem following participation in a CRT programme (Au et al., 2015; Garrido et al., 2013; Rose et al., 2008; Wykes et al., 2003). All three RCTs used a self-report scale, the Rosenberg Self-Esteem Scale (Rosenberg, 1965), to capture the participants' perspective of their self-esteem and self-worth. Even though these studies used the same outcome measure, there were variations in the results, and variations in how long self-esteem was maintained beyond the programme. Au et

al. (2015) found slight improvement in self-esteem when combining CRT with employment support; whereas Garrido et al. (2013) reported an increase in self-esteem which the authors contributed to improved cognition and gratification from computer feedback. However, it was not known if self-esteem improvements in these two studies were sustained beyond completion of the programme. In contrast, Wykes et al. (2003) reported an improvement in self-esteem in both the CRT group and the occupational therapy only group. Consumers who received occupational therapy continued to have improved self-esteem at six-month follow up, whereas the CRT group did not. The authors suggested that the increase in self-esteem for the CRT group arose as a result of "a significant treatment by visit interaction effect" (p. 170) and surmised that self-esteem was not sustained in the CRT group due to an abrupt stop in intense input from the therapist. However sustained self-esteem for those that received occupational therapy was not accounted for. This type of self-reporting using outcome measures is limited and does not allow for exploration or understanding of participants' views about those aspects of the programme delivery that contributed to their self-worth and self-esteem. The qualitative study by Rose et al. (2008) which aimed to gain consumers' views of the CRT programme, provided some insights, where participants who did not have a good experience of the programme noted a detrimental effect on their self-esteem if there were no self-perceived improvements in cognition. However, the majority of the questions in Rose et al.'s questionnaire were closed questions, making it difficult to further explore why those participants either perceived no improvements, or whether they gained more insights into their cognitive difficulties by participating in the programme which may have had a negative impact on their self-esteem.

Consumer views of CRT and its benefits

I located two qualitative studies which provided some insights into consumers' experience of a CRT programme, with participants in both studies mostly reporting a positive experience and self-perceived benefits (Contreras et al., 2016; Rose et al., 2008). The authors of both studies provided varied descriptions of how CRT was delivered, with very little information in Rose et al.'s (2008) study and some description by Contreras et al. (2016) who explored the experiences of 20 participants accessing community mental health services in Australia. However, there was little

information from the consumers' perspective on how the programme was delivered, little information on what was in the questionnaire or interview questions, and limited quotes from the participants themselves, making it difficult to hear the consumers' voice. Additionally, it was unclear whether there were any functional components to the CRT programmes as neither study had a good description of how the learnt skills and strategies were transferred to everyday life. Over half of the participants in Contreras et al.'s study reported little relevance of learnt skills and strategies to their everyday life. Without understanding how the cognitive skills and strategies were transferred to everyday life, it is difficult to determine the influences that impacted on those experiences. Similarly, the questionnaire in Rose et al.'s study, with mainly closed questions, provided little opportunity to deeply explore participants' experiences. Although these two qualitative studies contribute somewhat towards understanding consumers' perspectives of perceived benefits of a CRT programme, opportunities for participants to talk about their experiences of CRT in more detail is needed to provide richer information and facilitate deeper understanding of those experiences.

I was able to find some studies that shed light on ways the therapists delivered the programme from a consumer perspective (Bowie et al., 2017; Contreras et al., 2016; Reeder et al., 2016; Rose et al., 2008). Consumers in all four studies reported attributes of the therapists that were key elements to support engagement with the programme. These attributes consisted broadly of being non-judgemental, patient, trusting, understanding, positive, helpful, and validating. Other important factors associated with therapists included supporting consumers to develop flexible approaches and assisting them with doing simulated tasks and goal setting (Bowie et al., 2017; Contreras et al., 2016; Reeder et al., 2016; Rose et al., 2008). The studies in this section provide consumers' perspectives on the benefits of undertaking the programme; however, how a CRT programme can be delivered in a way that is relevant to consumers' everyday lives remains largely unknown.

Therapists' influence on delivering the CRT programme

In the literature, the term 'therapist' was used when referring to clinicians who were delivering the CRT programme. I could not locate any studies that captured the experiences of those who delivered the programme; however, a handful of studies

have given account of qualifications of therapists who delivered the programme, while a modest number of studies have offered insights on the CRT training therapists received. Much of the information on the type of clinician that delivered the CRT programme has been derived from studies that have been discussed in previous sections in this review (Bowie et al., 2012; Cella et al., 2016b; Dark et al., 2016; Lindenmayer et al., 2017; Lystad et al., 2017; McGurk et al., 2005; McGurk et al., 2017; McGurk et al., 2010). There was a wide range of therapists, disciplines, and specialists that delivered the CRT programme. These ranged from employment (Lystad et al., 2017) and cognitive specialists (McGurk et al., 2005; McGurk et al., 2010), to people with Master's qualification in rehabilitation (McGurk et al., 2017) and Doctoral degree psychologists or interns (Bowie et al., 2012; Cella et al., 2016b; Lindenmayer et al., 2017), as well as a range of diciplines such as occupaitonal therapists, social workers, and nurses when the CRT programme was delivered within a clinical setting (Dark et al., 2018). Overall, there was limited information on the training these clincians received to deliver the programme, with the exception of three studies (Dark et al., 2018; Dark et al., 2016; McGurk et al., 2017).

In McGurk et al.'s (2017) study, the facilitators received training in two, four-hour workshops, with some overview of content, computer training, and the impact of cognition on community functioning and work. In comparison, the two studies by Dark et al. (2016) and Dark et al. (2018) provided information on staff training within a clinical setting that ran over two-days. The training described provided comprehensive information about cognition and CRT, key supports, and processes which included strategies to support functional transfer of skills; although there is little detail on what these strategies were. The two studies by Dark et al. were implementation studies undertaken in a community mental health service in Brisbane, Australia, and will be discussed in further detail in a later section.

The above studies provided some information on the type of therapists that are delivering CRT within clinical research settings, and limited information on the type of training they receive. To my knowledge, there are no studies to date that seek to understand the therapists' experience of delivering the programme and delivering it within the context of the clinical practice. Cella et al. (2016b) suggested that future research "should attempt to define with ad hoc studies the exact contribution of

therapists to CR programmes" (p. 11). Therapists' experiences can offer unique insights into the contextual challenges that they face in delivering CRT in practice which is a gap in the current literature. In my study it will be important to explore the influences on therapists that support delivery of the programme or not, including influences that support application of training to their practice.

Organisational and leadership influences on delivery of the CRT programme

The context in which a CRT programme is delivered in clinical practice includes organisational factors and leadership, such as the cost to the organisation to deliver the programme, cost to society if the programme is not offered, organisational values, and team culture. This section reviews the emerging literature that has explored cost effectiveness and pays particular attention to a study by Dark (2015) that explored organisational factors in CRT delivery, which is highly relevant to my study.

Four studies across a range of countries endeavoured to explore cost effectiveness or societal related costs of CRT (Garrido et al., 2017; Patel et al., 2010; Reeder et al., 2014; Vita et al., 2016). Garrido et al. (2017) and Vita et al. (2016) undertook their studies in Spain and Italy and found a decrease in acute psychiatric admissions for people who undertook a CRT programme. These findings led the authors to conclude that a consequence of delivering a CRT programme was reduced global cost associated with acute admissions. In addition, Patel et al. (2010) and Reeder et al. (2014), whose studies were undertaken in England, compared the costs of integrating CRT into usual care. They found no significant association with improvements in cognition and economic costs but did find promising indications that changes in cognition may reduce disability cost to society and healthcare systems. Furthermore, Vita et al. found an improved uptake in community rehabilitation services, such as employment support, psychoeducation, and social skills following attendance at a CRT programme; and Reeder et al. (2014) found a correlation between improved cognition and function and improved depression, which the authors considered may translate to reduced disability and costs to society.

The studies reviewed in this section were primarily CRT programmes without an occupational focus; therefore, it is unclear if there are additional cost-benefits to be obtained by including an occupational focus to the CRT programme. Further, financial

costs to deliver an occupation-focused CRT programme is undetermined. Additionally, health costs are context specific depending on how public health systems are funded. The overall cost to services and society of delivering CRT, or not, has not been firmly established in research. Although my research will not be completing a cost analysis, seeking to understand the influence of costs from stakeholders' perspectives on the delivery of the programme in the context of Aotearoa New Zealand's health system will be important in answering my research question.

Dark et al. (2015) explored and profiled organisational factors from two public mental health sites in Queensland, Australia, via a survey, as preliminary work to an implementation trial. Organisational factors were explored using a consolidated framework for implementation research (CFIR) which consisted of five domains; intervention, characteristics of the people involved and the implementation, outer context, inner context, and the implementation process (Dark et al., 2015). Outer contextual factors related to Ministry funding and large-scale reform, which were beyond local control. Internal context focused on quality-of-service provision, resource allocation, leadership, local context, innovation, environment, planning, communication, and socialising of CRT into the workplace, which were all modifiable. The organisation was assessed on inner context and scored well overall on most of the domains except communication, which was taken into consideration for a larger implementation trial. The study by Dark et al. highlighted key organisational factors that need to be explored to better understand how an occupation-focused CRT programme is being delivered in Aotearoa New Zealand. However, the study design did not allow for an in-depth exploration of the perspective of those in leadership positions when introducing a new evidence-based intervention, or their experience of it. Understanding the challenges leaders face in providing access to evidenced based interventions, adhering to policies and organisational values, while managing fiscal resources would be important to understand, as these factors may either support or hinder the delivering of an occupation-focused CRT programme.

Dark et al. (2015) stated that the CRT programmes that were underway in Queensland, Australia, "were the initiative of staff and received little if any funding and passive organisational support without a strategic direction and plan" (p. 5). Therefore, a structured implementation plan was required to improve access to CRT across multiple

sites and a broad geographical area. However, to plan for larger implementation, an understanding of organisational influences was first required.

The study by Dark et al. (2015) was set in a wide geographical metropolitan area in Brisbane Australia, not unlike many areas in New Zealand. Although there are differences in funding of healthcare between Australia and New Zealand, both countries adopt a Western model of healthcare and service delivery. Thus, while some similarities can be drawn with Australia, unique to New Zealand's healthcare system are considerations of the need for policy makers, organisations, and leaders to adhere to the principles of te Tiriti o Waitangi. My search did not locate any CRT research in the context of Aotearoa New Zealand for people with an EPI. However, one study by Kake et al. (2016) demonstrated greater cognitive impairment in Māori diagnosed with schizophrenia, than Māori without this diagnosis. High rates of cognitive difficulties are significant given Māori are three time more likely to be diagnosed with schizophrenia then non-Māori and are less likely to access public healthcare services. Kake et al. recommended some form of cognitive rehabilitation services that address the needs of Māori living with an EPI. I have been unable to find studies that explore or provide information on how to deliver a CRT programme, with a focus on occupation, that addresses cultural considerations, let alone considerations for Māori. Therefore, in gaining understanding how an occupation-focused CRT programme is being delivered in a public mental health system in Aotearoa New Zealand, it will be important to learn how cultural responsiveness and equitable access to the programme for Māori are addressed.

Summary

This section of the review has highlighted that current research does not provide full details of the context in which CRT is undertaken such as funding, managment support, programme content, and outcomes from consumer perspectives. The studies in this review have provided partial perspectives but, without gaining a more comprehensive picture, it remains difficult to fully understand how a programme can be delivered within usual clinical care. Therefore, research is needed that can explore the contextual information to understand the complexities faced by organisations and experiences of those in organisational leadership positions. Additionally, it will be important to understand the various perspectives and experiences of those delivering

and receiving the CRT programme, and the contextual factors that influence each of these stakeholders.

Implementation of CRT in Queensland, Australia

There have been four published studies from the same research relating to a wider implementation of CRT in a public mental health service in metropolitan Brisbane, Australia, which are relevant to my research (Cairns et al., 2013; Dark et al., 2018; Dark et al., 2016; Dark et al., 2015). The initial study by Cairns et al. (2013) described a pilot study of CRT that was trialled in two public mental health services. The subsequent two studies built on the pilot study to provided preliminary exploration of organisational factors (Dark et al., 2015) and staff training (Dark et al., 2016), which informed the final study evaluating a broad implementation trial (Dark et al., 2018). The aim of these studies was to upscale the delivery of cognitive therapies, including CRT, to "enable accessibility to all consumers needing and wanting these interventions and to embed the programme within the organisational plan to promote programme quality and sustainability" (Dark et al., 2015, p. 3). The implementation trial has been reviewed and critiqued in relation to my study, as it is one of the first pieces of research to consider a range of requirements when translating evidence-based research about CRT into clinical practice.

Cairns et al. (2013) provided some key learnings that informed the subsequent studies. CRT had been initiated by staff with no strategic plan and passive ongoing organisational support after receiving initial funding for training on the NEAR programme to run the pilot. The NEAR programme was chosen at it met service needs in terms of cost and supported inexperienced staff with a structured manualised bridging group for transference of skills to everyday life. The group format also addressed perceived problems with staffing efficiency (Cairns et al., 2013).

Following the initial support for training, staff reported ongoing barriers to delivering CRT. These barriers included inadequate outcome measures that captured meaningful changes according to the CRT facilitators; lack of quarantined time, resources, and space; no ongoing funding; inadequate organisational support; and no critical mass of trained facilitators to address staff turnover (Cairns et al., 2013).

These barriers were addressed within the pilot in the following way. First, outcome measures were changed from the Brief Cognitive Assessment (Velligan et al., 2004) and the Life Skills Profile (Rosen et al., 2001) to the Brief Assessment of Cognition in Schizophrenia (Keefe et al., 2004), the Schizophrenia Cognition Rating Scale (Keefe et al., 2006), the Goal Attainment Scale (Kiresuk & Choate, 2014), and the Mental Health Recovery Measure (Young et al., 2005). Furthermore, the initial assessments were undertaken by consumers' mental health clinicians, which resulted in only 50% of assessment completed. The reason for the change in outcome measures was for the CRT facilitators to undertake the assessment "thus reducing reliance on busy clinicians who may not be invested in the evaluation process" (Cairns et al., 2013, p. 479). However, it is unclear what impact this change had on the collection of outcome data. Some consumers did not complete the programme, with no data collected on how many or why. Understanding why people chose not to participate would be valuable information to gather and may reflect aspects of delivery that influenced participation. The lack of funding for ongoing training and staff attrition led to the development of local training covering the core elements of a CRT programme. Additional to local training was the provision of supervision and the establishment of CRT steering group for oversight; all aspects deemed necessary for delivery of the programme. (Cairns et al., 2013).

Cairns et al. (2013) provided some consumers' perspectives collected during an exit interview on completion of the study. The authors reported positive functional outcomes, providing two examples where one consumer gained employment and another gained confidence in conversations; however, consumers' perspectives on their experience of the programme was limited. This article provided valuable information, highlighting the importance of gathering exploratory information as a stepping-stone to inform a wider implementation study, but provided little information on key stakeholders such as organisational leaders' and consumers' experiences of delivering the programme.

Informed by the identified barriers from the pilot study, two more studies were undertaken as part of the exploratory phase which included the use of surveys to identify organisational factors, as reviewed in a previous section (Dark et al., 2015), and upscaling of staff training (Dark et al., 2016). Dark et al. (2016) recommended a

tiered training approach whereby in one tier all clinicians working in mental health received fundamental training on the impact of cognition on day-to-day functioning for people with psychosis, and a portion of clinicians received CRT training to deliver the programme in the second tier. The authors speculated that an increase in staff knowledge about cognition would increase referrals and, therefore, improve access to CRT for those that needed it (Dark et al., 2016).

There was a detailed description of the training in the article which covered all the aspects required of a CRT programme as outlined by the expert working group (CREW, 2012). Of the 50 clinicians who underwent the CRT training, 33% went on to deliver CRT in clinical practice. It is unclear what the clinicians' disciplines were or their backgrounds. The authors suggested that factors that influenced staffs' ability to apply their training were lack of resources such as computers, internet, organisational support, and designated time as found in the initial pilot study by Cairns et al. (2013). The authors also noted a lack of uptake of supervision which was deemed by staff as not meeting their needs, but it is unclear how or why. Similar to Dark et al. (2015), a survey was used to gather information which limited the ability to gain a depth of understanding into people's perceptions or experiences of the training and supervision, or provide adequate information of the context in which the training would be applied in clinical practice. Therefore, it is difficult to ascertain what influences either enabled or hindered application of the training to clinical practice. The use of a survey is limiting in its ability to comprehensively draw out the experiences of key stakeholders involved in delivering CRT.

Following these studies, the authors felt that the exploration phase had been sufficient and moved to the next phase of implementation. Dark et al. (2018) outlined the implementation phase in stages. Initial implementation required formation of an implementation team and champions, referral pathways, acquisition of resources, regular training and supervision. The next stage was full implementation which involved annual audits and fidelity monitoring. The final stage was maintenance which involved regular training, securing of ongoing funding, and ongoing programme improvements (Dark et al., 2018).

Dark et al. (2018) evaluated two programmes being implemented—Social Cognition Interaction Training (SCIT) (Combs et al., 2007) and CRT. For this review I will focus on the CRT aspect of the study which was guided by the NEAR programme and used the computer programme CIRCuiTs (Medalia & Freilich, 2008; Reeder et al., 2017). There was a detailed description of the programme. Transference of learnt skills to everyday life was highlighted, but it is unclear how this aspect of the programme was delivered, although occupational therapists were one of the many disciplines that were trained and delivered the CRT programme. Case load weighting was applied to ensure quarantined time set aside to deliver CRT.

This study by Dark et al., (2018) reported on the implementation outcomes of fidelity, feasibility, reach, acceptability, cost and maintenance at a 3-year point. Key findings indicated that all staff completed a 2-day training and were observed to be competent to deliver the CRT programme. Delivery of CRT was feasible with each study site developing a capacity to run CRT. The establishment of CRT improved reach; however, many people were put on waiting lists indicating an unmet need. The programme was seen as acceptable with only 10% of participants ceasing CRT which was attributed to exacerbation of acute symptoms. Cost was estimated at AUS $32,848 over the three years, although a formal cost analysis was not undertaken. The authors concluded that having affordable transportation supported access to the programme (Dark et al., 2018); however, implementation and maintenance of CRT by smaller, less resourced teams may be a challenge. The authors also recommended that in the maintenance phase, the CRT programme needs to find a way to become part of routine quality practices and suggested embedding the programme into service structures such as clinical governances (Dark et al., 2018).

The 3-year implementation time limit is considered brief given the complexity of the intervention. Further, as the study results are particular to the Australian public mental health sector, and they may not be generalisable to the Aotearoa New Zealand context. Nonetheless, this study provides insights into key factors that are important when planning a larger implementation study, including a robust, preliminary exploration. However, there was little information in these studies about the experiences of stakeholders involved in implementation which is crucial information in understanding the influences on delivery of a CRT programme.

At the time of commencing my study, I was not aware of any other published studies that have investigated key elements for delivery of a CRT programme. I was aware of research underway by Wykes et al. (2018), titled Enhancing Cognition and quality of Life in the early PSychosEs (ECLIPSE), which consists of a range of studies exploring goal setting, quality of life, and acceptability between methods of implementation of CRT. Wykes et al. highlighted the gap in literature stating that "Successful implementation in mental health services has the potential to change the recovery trajectory of individuals with schizophrenia-spectrum disorders. However, the best mode of implementation, in terms of efficacy, service user and team preference, and cost-effectiveness is still unclear" (p. 1). Although these studies by Wykes et al. will provide needed information in the early stages of a psychotic illness, much remains unknown about the delivery of CRT to people with an EPI.

Conclusion

New and emerging studies are exploring the treatment components required to deliver a CRT programme; however, there is little information about contextual influences that may impact how treatment components are applied or why various modes of delivery are chosen There were studies that focused on discrete aspects of occupation such as work, social occupations or ADL's. But none focused comprehensively across consumers' range of occupational needs. Likewise, there are no CRT studies for people with an EPI conducted within the context of Aotearoa New Zealand. More research is needed to deliver a CRT programme with a primary focus on people's occupations and within the Aotearoa New Zealand context. Limited studies have considered the perspectives of consumers, therapists, and leaders; yet all these stakeholders play an important role in the delivery of a CRT programme. The research undertaken by Dark et al. (2015, 2016, 2018) and Cairns et al. (2013) in Queensland, Australia, has emphasised the importance of gathering exploratory information of what is already happening within services including contextual factors that influence delivery as a stepping stone to inform a wider implementation study of a CRT programme Furthermore, what is not emphasised, but is necessary, is exploring what is already known by key stakeholders who hold important information relating to their experiences of the delivery of an occupation-focused CRT programme.

This review has highlighted the many factors that need to be considered when delivering a CRT programme. Hence, it is important to explore the delivery of an occupation-focused CRT programme in detail to understand the specific context and how that might shape the delivery. Gaining such understanding will provide useful base-information to inform future implementation. Therefore, this research will seek to explore and understand how an occupation-focused CRT programme is being delivered within an Aotearoa New Zealand public mental health context. It will provide valuable insights that managers, leaders, and therapists will need to consider when delivering the programme and informing future research.

Chapter 3 Methodology

The current study sought to answer the following research questions. How was an occupation-focused CRT programme delivered in a community mental health setting within Aotearoa New Zealand? What were people'' experiences of the delivery of the programme? What factors influenced the delivery of the programme and how did those factors shape delivery? In this chapter, I highlight the theoretical perspective that I bring to this research as an occupational therapy practitioner and researcher and introduce the philosophical underpinnings of the study. I present the perspectives of constructivist scholars, Egon Guba and Yvonna Lincoln[1], and their key tenets of constructivism in relation to my study; and explain constructivist case study as my choice of methodology in pursuit of answering my research questions as informed by the workings of Robert Stake. In this chapter I also discuss my choice of analysis, reflexive thematic analysis (RTA), which drew deeply from Guba and Lincoln's constructivism and Stake's constructivist case study methodology.

Occupational Therapy Theoretical Perspective: Views of Reality and Knowledge Informing the Study

The research questions were informed by my understandings as an occupational therapist and researcher which were introduced in Chapter One. My theoretical understandings as an occupational therapist influence my view of the world and my understandings about knowledge. Consequently, these understandings shaped the way I approached the study.

I consider myself a holistic clinician and researcher, meaning I consider all aspects of each person and all aspects of their social, political, institutional, and physical environments, and people's perceptions of those environments. Occupational therapists believe that human beings are inherently connected to their everyday environments (Hooper & Wood, 2024). We are not separate biological, neurological, and psychological beings made up of discrete components separated from the contexts in which we live and work. Rather, each human is a unique and cohesive being, fully interconnected with, and part of the world (Hooper & Wood, 2024). The meaning of occupation is dependent on the context in which the occupation takes

[1] For consistency I have written Guba and Lincoln throughout this chapter even though, at times, the reference is Lincoln and Guba.

place and who the occupation is done with. Occupation shows us and others what we are capable of (Reed, 2009). As an occupational therapist, I believe people connect with and shape the world through occupations. Equally, people are transformed through their actions of doing over time; we transform and are transformed by our actions and our environments (Hooper & Wood, 2024). Therefore, the context in which the occupation-focused CRT programme was undertaken was imperative to understand.

Knowledge about occupation is the essence of occupational therapy practice. All the diverse forms of knowledge that inform occupational therapy practice are integrated into what is known about occupation (Hooper & Wood, 2019). In this way, some types of information, such as biopsychosocial knowledge, are relevant and inform how I might approach a situation but are not central to my research and practice. The focus for occupational therapists is, and always will be, on meaningful occupation as essential to health and well-being. As declared by Ruth Weimer (1979), an influential occupational therapist in the mid-20th century, "Ours is, and must be, the basic knowledge of occupation" (p. 43). Therefore, understanding how occupation was incorporated into the delivery of the CRT programme required exploration.

Furthermore, occupational therapists believe that human beings are meaning makers and meaning making constructs our experience of the world. Meanings and knowledge about ourselves and our world are constructed as we engage in occupation (Hooper & Wood., 2024). These understanding have shaped how I have undertaken this research. As such, ideas are consistent with the tenets of a philosophical perspective called constructivism. A philosophical underpinning provides a foundation on which research exists (Reed, 2009). The next section explores the core tenets of constructivism and how it informed my research.

Constructivism

Constructivism is not to be confused with constructionism. Both philosophical standpoints align in the belief that there is no one true reality and move away from the positivist notion that the world is objectively knowable (Lee, 2012). Where they differ, however, is that the constructionism paradigm views reality as based on a collective generation of meaning through interaction with language, artefacts, and social

processes (Charmaz, 2006; Crotty, 1998; Lincoln & Guba, 2013). Therefore, proponents of constructionism believe that the social dimension is centre stage. A constructivist view of reality is that it is constructed by the individual with an emphasis on meaning making through cognitive processes and individual viewpoints. Proponents of constructivism (constructivists) acknowledge social influences on people's beliefs and actions, and the presence of some shared understandings, but focus on the meaning making activity of the individual (Crotty, 1998). In relation to the present study, there were multiple stakeholders involved in the delivery of an occupation-focused CRT programme. While I could see that each stakeholder group might hold some shared understandings, I also foresaw that within and across the groups, people might hold differing views, have different experiences, and build different meanings out of their experiences. In addition, as an occupational therapist and occupational therapy researcher, I brought my own understandings to the study, including that people's experiences and meanings would be shaped, or built, through their occupations. To understand how the programme was delivered, these individual viewpoints were essential to consider and explore and, therefore, guided my choice to underpin my research with a philosophical perspective based on constructivism.

My understanding of constructivism is that people build their own representations of the world based on what they think of their experiences and the meaning they make of those experiences. Prior knowledge, culture, background, values, and beliefs influence how a person interprets their experience and assigns meaning (Lincoln & Guba, 2013; Stake, 1995). Constructivism asserts that people are constantly building new information into pre-existing knowledge to help them make sense of the world around them (Lincoln & Guba, 2013). Therefore, knowledge about the world is not there to be discovered or found but is actively understood and constructed through one's experiences of the world.

Prior to embarking on my DHSc research journey, constructivism was not formally known to me; yet it was innately familiar. During my readings I learnt that there are various scholars who hold similar and differing views to each other on constructivism. Guba and Lincoln's (1981) writings about constructivism resonated with me as they believed that for any individual there are "multiple realities that, like the layers of an onion, nest within or complement one another" (p. 57). Therefore, I could see that

when engaging in inquiry, understandings would come from exploring multiple perspectives from multiple individuals who are influenced by the world around them. Relating to this idea, a core supposition of Guba and Lincoln's view on constructivism is relativism, whereby reality is dependent on the individual person and the specific context they are in (Lincoln & Guba, 2013). I was further drawn to Guba and Lincoln's constructivist philosophical perspective as they also placed emphasis on the interconnectedness between people and their environments, which resonated with my understandings about occupation. As stated by Nayar and Stanley (2023) "within contemporary occupational science and occupational therapy research, new knowledge is often understood to be jointly constructed between researchers' and participants' shared experiences which mirrors the therapeutic encounter which upholds the principles of client/family centered practice" (p. 16). I was also drawn to the way Guba and Lincoln came to their understanding of constructivism in their pursuit of answering research questions relating to programme evaluations within education reforms, not dissimilar to my pursuit in understanding programme delivery within an ever-evolving health system. The next two sections explore in more depth how Guba and Lincoln came to develop their philosophical perspective on constructivism, including their presupposition of reality and knowledge, and describe how their views informed my study.

Development of Guba and Lincoln's constructivist philosophical perspective

Egon Guba and his life partner, Yvonna Lincoln, were scholars in the education sector in the 1960s. They were assigned to evaluate education reform using quantitative methods but were dissatisfied with the methods and the information generated using those methods. By the mid-70s, Guba and Lincoln had developed an alternative approach to quantitative evaluation which they called naturalistic inquiry (Guba, 1978), a qualitative methodological approach used to explore and understand a phenomenon in its natural form and social world (Lincoln & Guba, 1985).

Over time, Guba and Lincoln formed and reformed their views on naturalistic inquiry. Influenced by many, in-depth conversations with their students and other scholars, and they formulated their understandings into what they called constructivism. By evaluating the delivery of various educational programmes within a natural context, for instance the school classroom, Guba and Lincoln were able to gain in-depth

understandings of what was happening within school reform, which provided important information during times of change (Lincoln & Guba, 1985).

The understandings that Guba and Lincoln gained through their application of naturalistic inquiry, and then constructivism, provided a lens through which I could clarify my views about the world and knowledge; and, consequently, provided guidance by which I was able to develop my research questions and research design. I could see that to understand how the occupation-focused CRT programme was being delivered, it would be essential to gain an in-depth understanding of people's experiences of the programme as it was being delivered in its natural context. I also understood that it would be essential to experience the natural context for myself.

Constructivist view of reality and knowledge

Ontology involves the study of existence and refers to an individual's belief about reality (Crotty, 1998). Epistemology is related to ontology and considers what is knowledge or how we come to know what we know (Crotty, 1998). From Guba and Lincoln's constructivist perspective, reality is not out in the world to be found but is constructed based on the encounter between what is to be known, the knowers, and the context in which this encounter takes place (Lincoln & Guba, 2013). As explained by Lincoln and Guba (2013) "Knowledge is not 'discovered' but rather created; it exists only in the time/space framework in which it is generated" (p. 40). Beyond that time and space, new knowledge constructions are created and continuously changing. For my study, the aim of what was to be known was how an occupation focused CRT programme was being delivered in a particular place and in a particular time. The knowers were the various people involved in the decision making and delivery of the programme, as well as tāngata whai ora who took part. The context was the environment in which the programme was undertaken, bounded by time and space.

I needed to explore the perspectives of each of the participant groups (tāngata whai ora, therapists, leaders) involved with the programme to understand what shaped their actions, as each participant was likely to have a particular reality deriving from their own unique experiences and meanings of the programme that was relative to them and needed to be known. Guba and Lincon's philosophical perspective holds that

people's realities are based on the meaning-making activities and on the meaning-ascribed realities upon which they act (Lincoln & Guba, 2013).

Likewise, I understood that I brought my own, and those of my supervisors and cultural advisors, subjective perspectives to the research. "The 'realities' taken to exist depend on the transaction between the knower and the 'to be known' in the particular context in which the encounter between them takes place" (Lincoln & Guba, 2013, p. 40). Constructivists believe that knowledge is founded in transactional subjectivism; in other words, co-constructed between the unique interpretations of the participants and the researchers within the natural context. Lincoln and Guba (2013) stated that transactional subjectivism "delves into the minds and meaning-making, sense-making activities of the several knowers involved" (p. 40). In this way, I understood that as I gathered information from the participants, the interaction would prompt new ideas for them about what they were thinking, and that I might see their views changing as they interacted with me as the researcher. Equally, this applied to myself as the researcher. As I would be part of the same world, my views would also begin to change as I interacted with the participants. These transactions between the knower and the 'to be known', would help construct deepening understandings of the phenomenon under study through the various perspectives.

From Guba and Lincoln's constructivist perspective, it is recognised that through transactions, groups may hold shared understandings which are important to know. Nonetheless, constructivist inquiry is interested in constructs beyond the shared collective because it is acknowledged that each individual will see things differently, given each person brings different knowledge, religion, culture, age, gender, class, values, orientations, social status, and different experiences.

To understand what was real for the particular participants involved in the programme, I needed to understand both the individuals and the context, their view of the context and perceptions about how it affected the delivery of the programme. The knowledge participants had about the occupation focused CRT programme needed to be explored through interviews. Constructivism allowed for recognition of my influences on the research process and supported me to respond to my emergent understandings and those of the participants. I sought a philosophical underpinning

that shed light on shared understandings, but which also valued the unique differences amongst the participants.

Having established a philosophical underpinning that enabled exploration of multiple individual perspectives, I required a methodology that would help me answer 'how' the programme was delivered. Case study methodology is used for 'how', 'why', and 'what' research questions and helps describe 'what is going on here' with a focus on the context to which a problem pertains (Salminen et al., 2006; Thibeault & Hebert, 1997). Case study methodology was the design or map which guided my decisions about specific steps and processes used in the study.

Case Study Methodology

Methodology refers to the overarching approach that is used to acquire knowledge. A researcher's choice of methodology is reflective of their philosophical understandings, and may include particular processes and methods or techniques (Jones & Hocking 2015; Lincoln & Guba, 2013). Methodology has been defined by Nayar and Stanley (2023) as the "theoretical or philosophical orientation of how research should, or ought, to proceed given the nature of the issue it seeks to address" (p. 18). A methodology embodies the theoretical assumptions informing the choice of data collected, and procedure for analysis (Taylor, 2013). This research employed a case study methodology. Case study is often referred to in many ways, including as a methodology, a method, an approach, a research design, a research strategy, and/or a form of inquiry (Baxter & Jack, 2008; Harrison et al., 2017; Merriam, 2009). For the purpose of this research, case study is defined as a methodology because, despite variations in case study perspectives and how case study research is applied, there is agreement in how the research is conducted and communicated (Leadley et al., 2023).

Case study tenets and methods are consistent with the philosophical notions of occupational therapy and constructivism, as case study lends itself to in-depth analysis in a natural context using multiple sources of information. Flyvbjerg (2011) defined case study as "an intensive analysis of an individual unit (as a person or community) stressing developmental factors in relation to environment" (p. 301). When undertaking a case study, the contextual conditions and environment are important because the researcher believes they are critical to understanding the phenomenon

under study (Albright et al., 1998; Hancock & Algozzine, 2017; Kitchenhamm, 2010; Rosenberg & Yates, 2007; Stake, 1995). Case study is a useful methodology in health, education, and social science research due its utility across a variety of disciplines in the search to understand the complexities of institutions, practices, processes, and complex issues (Yin, 1981). Case study is often used in health research to inform professional practice or evidence decisions within real world contexts of health services and recipients (Leadley et al., 2023). To understand case study versatility, it is helpful to understand how case study was developed.

Overview of the foundations of case study research

Case study can be traced back to the 1600s with foundations based in the disciplines of anthropology, history, psychology, and sociology conducted within natural settings resulting in lengthy descriptive narratives (Harrison et al., 2017). These case studies captured people's experiences, and the cultural and societal context in which they lived to shed light on how a person attributed meaning to their experiences and constructed their worlds (Harrison et al., 2017; Johansson, 2013). After the Second World War, in the 1940s, the emergence and dominance of scientific positivism and quantitative research became popular. Surveys, experiments, and statistical methods were considered more rigorous than qualitative designs. Case study research, at this time, was seen as having limited value as a research design and was criticised for its inability to generalise (Harrison et al., 2017). However, in the 1960s, the inclusion of quantitative methods within case study research bridged the gap between post positivism and constructivist philosophical foundations of the social sciences (Miller et al., 2016; Yin, 1981).

There are many approaches to case study research; however, two, well-known scholars in case study research, Robert Yin and Robert Stake, were responsible for methodologically articulating and advancing case study within their fields. Their work is underpinned by differing ontological and epistemological assumptions as summarised in Table 2.

Table 2

Quantitative/Qualitative Continuum of Case Study

	Robert Yin (2014)	Robert Stake (1995)
Paradigm	Post positivism	Constructivism/Interpretivism
Ontology	Realism. Reality is the absolute truth, predictable. Cause and effect explanations of truth	Relative. Reality is known to the person through their interactions with the world and is relative to them. Reality is situated in social and personal context
Epistemology	Search for explanation. Objectivity of the research is required	Search for understandings. Transactional subjectivity is required. Researchers stay close to the case

Sharon Merriam (1998), another prominent case study researcher, also emphasised interpretation, and adopting a flexible and pragmatic approach to data analysis. The influence of each philosophical stance is summed up by Brown (2008) who stated, "case study research is supported by the pragmatic approach of Merriam, informed by the rigour of Yin, and enriched by the creative interpretation described by Stake" (p. 9). Case study has a practical versatility in its application, as it is not tied to a particular methodological, ontological or epistemological standpoint. Therefore, there are multiple ways in which to do case study research (Rosenberg & Yates, 2007). Despite this versatility, and the availability of case study methodologists whose work and guidance reflects varying ontological and epistemological standpoints, there should be congruence between the particular case study methodology chosen for a study, the research questions and the researcher's standpoint.

The development of case study research has meant that case study has grown in sophistication and is now viewed as a valid method of inquiry in broad and complex situations (Simons, 2009). Case study methodology is seen as a suitable methodology for exploring occupational therapy practice (McQuaid et al., 2021) and has been employed in many studies relating to occupation and occupational therapy (Gewurtz et al., 2022; Jones et al., 2017; Leadley et al., 2023; McQuaid et al., 2021). These applications are particularly relevant to my own research, where social interactions and human behaviours of the participants are central to understanding how an

occupation-focused CRT programme is being delivered within the complex context of a public mental health system.

After considering the various assumptions that underpin case study, I determined that Stake's constructivist case study design was a good methodological fit for my research as it aligned with Guba and Lincoln's constructivist paradigm. Lincoln and Guba (2013) stated "If a selected methodology does not exhibit a high degree of 'fit' with the phenomenon studied and with the paradigm within which that phenomenon is defined, useful sense-making cannot result" (p. 65). Stake (1995) provides clear guidance on the methods required to undertake case study within a constructivist paradigm; yet he writes less around the ontological and epistemological position of constructivism. Therefore, I continued to be guided by Guba and Lincoln's assumptions as well as Stake's constructivist case study methodology which are reflected in the methods I used (see Chapter Four).

Stake's Constructivist Case Study Methodology

Similar to Guba, Stake came to his constructivist approach when evaluating educational programmes within school curricula and educational reforms. Stake started his career in a more positivist paradigm having completed his PhD in psychometrics at Princeton University in 1958. By 1963 Stake's focus was on statistical analysis and testing of educational programmes, but he identified that using empirical testing to evaluate curricula did not give answers to his questions asked such as, how are the teachers progressing? What was the emotional feel of the lessons? Are the kids on track or going off on tangents? (Miller et al., 2016). When grappling with answering these questions he would bring people together to discuss the political and social contexts of which the phenomena of interest occurred, gathering various perspectives and brainstorming ideas. He quickly learnt that the focus needed to change from a measurement responsibility toward something that was situated in real world context (Miller et al., 2016), aligning with Guba and Lincoln's view that a phenomenon is better understood, and knowledge is constructed when explored in its natural context and social world.

Case study as defined by Stake (1995) is the "study of the particularity and complexity of a single case, coming to understand its activities within important circumstances" (p.

xi), focusing on inductive exploration, discovery, and, like Guba and Lincoln, placing emphasis on holistic interpretation resulting in thick descriptions of the case (Lincoln & Guba, 2013). Furthermore, Stake saw case study as providing relevant evidence for policy and practice decisions that support social and educational change. For my research, Stake's constructivist case study research enabled me to explore important aspects of the case, such as who was involved, how they went about things, what they used in the delivery of the programme, what influenced decisions, and what got in the way of progress, all of which contributed to a comprehensive and in-depth understanding of how an occupation-focused CRT programme was delivered.

It is understood by Stake (1995) that to get richness of information the researcher needs to be closely linked with the research topic, emphasising "episodes of nuance, the sequentiality of happenings in context, the wholeness of the individual" (p. xii) which is often referred to as transactional subjectivism (Lincoln & Guba, 2013). Stake believed that the researcher needs to be able to interact with the phenomenon. These interactions shape activity, experience, and the researcher's interpretation of the case under study. This is consistent with Guba and Lincoln's epistemological position whereby the production of knowledge can never be free of the researcher's prior experiences and understandings (Guba & Lincoln, 1998; Lincoln et al., 2018). The intent is to lessen the distance between the researcher and the case; therefore, the researcher is likely to have an insider view and a strong motivation to seek deeper understanding of the meaning of the human experience (Stake, 2006). My previous work with CRT and the intimate knowledge that I brought to the study is acknowledged and embraced, and viewed as a strength in constructivist case study research. Thus, in undertaking Stake's case study methodology I was required to stay close to the case and study it within its own context, allowing for my interpreted reality of the case while capturing thick descriptions from various perspectives that helped answer the research question. It was the interconnectedness between the context, the participants, and myself, as the researcher, where the case unfolded and insights were uncovered. Additional to staying close to the case, Stake (1995) highlighted that case study research is informed by a conceptual structure, and this was articulated at the onset of the study.

Conceptual structure

A conceptual structure lays clear the researcher's practical and theoretical understandings in relation to the research questions. A conceptual structure organises ideas, provides a conceptual bridge between what is already known and what unfolds during the study, provides boundaries for the case study, and gives a framework that can guide data collection (Leadley et al., 2023; Stake, 1995). A conceptual structure is comprised of three components. First are issue statements (Stake, 1995, 2006) which Stake (1995) likened to a hypothesis in quantitative research. However, rather than describing issue statements as supporting incremental proof or disproof of discrete knowledge, Stake emphasised them as a basis for gradual and progressively more nuanced and focused understandings that relate to the research question(s). Issues focus on the concerns that highlight the complexity and contextuality of the phenomenon under investigation: "issues are not simple and clean, but intricately wired to political, social, historical, and especially personal contexts. Issues draw us toward observing, even teasing out, the problems of the case, the conflictual outpourings, the complex backgrounds of human concern" (Stake, 1995, p. 17). Second, the conceptual structure involves defining the case with clear boundaries. Bounding the case enables distinction between conditions that fall within as opposed to outside of the case. These can include periods of time, and various spaces such geographical areas or organisational spaces (Stake, 1995; Yin, 2014). Third in the conceptual structure are topical questions which are needed to provide description of the case (Stake, 1995). The issue statements and topical questions enable the researcher to be directed to the type of data sources required and guided by the types of questions or observations required. The conceptual structure for this study is presented in Chapter Four Methods.

Issues relating to the case

Identifying issue statements surrounding the case provides key insights about the case. Issues are written into questions or statements that draw the researcher's attention to problems and concerns relating to the case (Stake, 1995). At the outset of the present study, I developed five main issue statements that related to the research questions which were informed by my theoretical and practice perspectives, and presuppositions:

- After the delivery of and engagement with an occupation-focused CRT programme tāngata whai ora will experience positive changes in their occupational performance (Kielhofner, 2009; Law et al., 2005; Townsend & Polatakjko, 2007).
- It is important that the delivery of an occupation-focused CRT programme involves a process which allows flexibility while maintaining fidelity and managing organisational constraints (Cella & Wykes, 2017; Wykes et al., 2018).
- Team members' and management's view of practices, personal attributes, attitudes, vision, and drive influence delivery of the programme and outcomes for tāngata whai ora (Galletly et al., 2016; Mental Health Commission, 2012).
- Therapists' delivery and training will influence tāngata whai ora experiences of the occupation-focused CRT programme (Cellard et al., 2016; Dark et al., 2016; Reeder et al., 2017).
- Te Tiriti o Waitangi commitment will influence delivery of an occupation-focused CRT programme (Kake et al., 2016).

The degree of focus that the researcher places on issue statements is determined by the type of case study design used (Stake, 1995).

Instrumental case study research

Case studies have various designs depending on what form of inquiry is undertaken by the researcher and what knowledge they wish to generate (Merriam, 1998; Stake, 1995; Yin, 2018). Stake (1995) focused on using collective, intrinsic, or instrumental, case study designs. Collective case study involves investigating multiple cases simultaneously or sequentially providing a deep appreciation of the phenomenon with a focus on transferability; whereas an intrinsic case study is used when a deep understanding of a person, or organisation, or a single instance is of interest. Intrinsic designs are useful when the concern is about the particular case itself and includes a single case or a small number of cases. Instrumental designs are used when the particulars of a case are explored to provide information that may be useful to other situations.

The decision to undertake an intrinsic or instrumental case study is made depending on whether the researcher is more interested in the case itself or on the issues that

surround the case (Stake, 1995). An intrinsic case design is useful if the researcher wants to learn more about a unique phenomenon distinguishable from all other phenomena; therefore, the focus is more on the case itself rather than the issues. Instrumental designs, in contrast, put an emphasis on the key issues surrounding the case; therefore, certain generalisations can be drawn that might be relatable in other situations (Stake, 1995).

An intrinsic or instrumental case study design would have been appropriate for my research; however, the issues surrounding the case were essential to understand when answering the research questions and I was interested in findings that may be useful to other settings. Therefore, instrumental case study design was chosen as it enabled an in-depth exploration of how the programme was being delivered, people's experiences of that delivery, and the influences on delivery. My decision not to use collective case study was purely pragmatic—there were not enough services delivering the programme for the study.

The following section discusses the rationale for my choice of data analysis. I explain how the analysis aligns with my chosen philosophical and methodological underpinnings of this study.

Rational for choosing Reflexive Thematic Analysis (RTA)

I considered carefully the data analysis methods of the case study and chose to use Braun and Clarke's (2022) RTA, which I believe aligns with the philosophical underpinnings of Guba and Lincoln's understanding of constructivism and Stake's case study methodology. This section explains my rationale for using RTA, and how it is consistent with constructivism and case study. Chapter Four, Methods, outlines the steps I took to do the analysis.

RTA is an analytical method that is flexible and supports the researcher to construct themes from meaning-based patterns that were generated from their interpretation of the qualitative data, emphasising researcher subjectivity. It is representative of both qualitative techniques and philosophy (Braun & Clarke, 2022; Terry & Hayfield, 2021). It is important to recognise that there are various schools of thought regarding thematic analysis.

Central to RTA and what sets it apart from other thematic analysis is reflexivity. Braun and Clarke (2019) emphasised the active role of the researcher in knowledge production that reflects the developing understanding of the data. Analysis of the data occurs because of, or in spite of, the researcher's interpretations based on their preunderstanding, beliefs, values, and experiences (Terry & Hayfield, 2021). The researcher uses a narrative approach and is actively engaged in interpreting the data through their own theoretical assumptions, philosophical lens, and ideologies (Braun & Clarke, 2006, 2019). Comparatively, the epistemological underpinning of constructivism, according to Guba and Lincoln, and central to Stake's case study methodology, is transactional subjectivism, whereby the researcher and participants co-construct understandings of the phenomenon (Lincoln & Guba, 2013; Stake, 1995). As the researcher I have made my assumptions and pre-understandings clear in Chapter One as a basis for my own reflection during data analysis, and for showing readers how these pre-understandings contributed to my interpretations.

To analyse case study data, Stake (1995) proposes the use of direct interpretation and/or categorical aggregation. Direct interpretation considers unique circumstances of individuals or individual instances. In contrast categorical aggregation involves a collection of instances that can be said about a particular group or circumstances (Stake, 1995). In instrumental case study design categorical aggregation is more helpful as it helps readers gain understanding of a phenomenon, including the connections with inherent contextual factors (Stake 1995). Similar to Stakes' (1995) categorical aggregation, a core aspect of RTA is the conceptualisation of themes as patterns of shared meaning across data that are underpinned or united by a core, central concept (Braun & Clarke, 2019).

The writings of Braun and Clarke, and Stake, reflect a qualitative paradigm with an emphasis that themes are constructed from the data, they do not emerge from the data. Qualitative research is often about understanding how things happen, how things are working. As Stake (2010) stated, "Happenings are experienced" (p. 63). The happenings that occur within the delivery of the occupation focused CRT programme and its context had different meaning and experiences for each of the participants and participant groups.

Both Stake, and Braun and Clark's RTA methods emphasise the need to search for meaning and patterns (Braun & Clarke, 2022; Stake, 1995; Terry & Hayfield, 2021) to support construction of themes that are more interpretive and creative than a straight description of what people have said. Each constructed theme captures implicit meaning and has a central organising concept, a pattern of shared meaning that tells a story (Braun & Clarke, 2006, 2019; Stake, 2010). The emphasis that both Braun and Clarke, and Stake place on co-construction of themes between the participants and the researcher is essential to answering the complex and contextual aspects of research questions. Constructing patterns and themes from the interviews involves careful, systematic and ongoing attendance to the data, searching for meaning or searching for patterns in regard to the particular phenomenon. During this process the researcher will often ask, when doing the analysis, what did that mean? (Braun & Clarke, 2022; Stake, 1995). By way of contrast, RTA is not underpinned by any philosophical stance, and unlike Stake, Braun and Clarke do provide a guiding structure from which to undertake the analysis.

My decision to use Braun and Clarke's RTA was twofold. First, the analysis is in keeping with Stake's constructivist methodological framework whereby themes are constructed using an iterative systematic process with constant reflection and acknowledgement of what I bring to the data from my own experiences. As Stake (1995) wrote, "researchers have certain protocols that help them draw systematically from previous knowledge and cut down on misperception. Still there is much art and much intuitive processing to search for meaning" (p. 72). Second, as I was new to qualitative research, Braun and Clarke's RTA provided me with more structure to undertake analysis than was provided by Stake.

Summary

In this chapter I have reflected on and described the key decisions made in consideration of the research methodology. To answer my research question, I needed to gain a deep understanding of the various experiences of those involved in the occupation-focused CRT programme and the context in which their involvement took place. I needed to acknowledge my own occupational therapy theoretical influences in undertaking the study. Therefore, I chose to underpin my study with Guba and Lincoln's constructivism, which shares a similar philosophical view that people's

understandings of the world are shaped and reshaped through the interconnectedness between the person, their actions, and interactions with that world. I required a methodology that would uncover how the programme was delivered within the natural context and take into consideration people's experiences and the influence of contextual factors. Stake's case study methodology was a suitable choice to explore the contextual factors and issues that surround the programme delivery. Furthermore, an instrumental case study design was chosen so that understandings of the issues related to delivering an occupation-focused CRT programme could be generalised to other settings within mental health services. In Chapter Four, Methods, I outline, describe, and explain how the case was defined and how the study was undertaken in accordance with Stake's constructivist instrumental case study methodology.

Chapter 4 Methods

In the previous chapter I explored the philosophical perspective and methodology that underpinned this study. It was important to ensure the key elements of Lincoln and Guba's (2013) constructivist philosophical underpinning, and Stake's (1995) constructivist case study methodology, were evident and reflected in the methods used. The data sources in this study were transcripts from 13 semi-structured interviews with four organisational leaders, five occupational therapists, and four tāngata whai ora who could shed light on the delivery of an occupation-focused CRT programme from various perspectives and experiences, as well as 16 documents. The interviews were analysed using RTA (Braun & Clarke, 2006, 2022), and the documents were analysed using direct interpretation (Stake, 1995). The following sections in this chapter firstly, describe the reflexive nature of the research and the key ethical principles that were addressed. I then define the case and describe the recruitment process for each participant group followed by how I sourced the organisational documents. Data collection and the analysis process is then described concluding with the steps taken to ensure rigour and trustworthiness.

Reflexivity

A key tenet of constructivist case study methodology is the reflexive nature of the research methods. Reflexivity involves reflecting on one's own assumptions relating to political, historical, social, gender, and cultural views which may shape how the research is undertaken and data are interpreted (Lincoln & Guba, 2013). Reflection is crucial throughout the entire study. Therefore, at the onset of the study I undertook a presuppositions interview with one of my supervisors to bring to light the influences that shaped my perspectives as a middle aged, female Pākehā New Zealander. The purpose of the presuppositions interview was to help me reflect and gain understandings into my own beliefs, biases, opinions, and interpretive lens (Goldspink et al., 2024). With my prior, in-depth knowledge of the occupation-focused CRT programme, it was important to bring my opinions and prejudices into awareness, so I was able to see what was influencing my decisions and analysis. For instance, the interview prompted me to be aware that my world view valued independence, whereas a Māori world view values whānau and a collective view. Whānau centred care was subsequently an aspect of the research which I grappled with and, prompted

by awareness of my own world view, sought advice from a kaumātua. In addition to the presuppositions interview, I continuously examined my own understandings during the research process and how my understandings might be shaping my thinking and actions through the use of a reflective diary and regular sessions with my supervisors. Below I have provided a summary of part of my reflective journey that describes some of the process and discussion that were had with my supervisors.

> *August 2023. My initial thoughts when I first started with the therapist data was that the therapists were needing to weave occupational and CRT together. I drafted up my initial themes and sent them to my supervisors for feedback. In supervision we discussed whether the therapists were expressing the idea of having to splice many aspects of the programme in order to deliver it, not just occupation and CRT. I relooked at the themes and worked with them, creating one overarching theme with four subthemes. I sent this revision back to my supervisors but I wasn't convinced that this was right stating in my email "I'm concerned each subtheme is quite long so will be interested to hear what you think". In our next supervision session, we felt that I was trying to force the data into a particular theme, as opposed to letting the data speak for itself. I sat with the data for a few more weeks and went back to my initial thoughts around keeping splicing/weaving to one particular theme.*

Supervision was where my understandings were challenged and discussed to ensure that what I was interpreting came out of what the participants were saying or not saying. Supervision sessions were recorded, and I regularly revisited the recordings and reflected on key points discussed that became more relevant as I progressed through the study.

Ethical Principles

When doing any research, it is important that the study is undertaken in an ethical way and protects the rights of those who choose to participate. The following ethical principles shaped how my study was designed and undertaken.

Cultural responsiveness to te Tiriti o Waitangi

As a tauiwi (non-Māori) researcher of New Zealand European descent, I was aware that I brought my own worldview to the research which differs from those from other cultures and could affect the research process. An important ethical principle when conducting research in Aotearoa New Zealand is to honour the principles of te Tiriti o

Waitangi and ensure the needs and rights of both tāngata whenua and tāngata tiriti are respected. I also understood that I needed to conduct my research in a way that was responsive and sensitive to those from other cultures. At the onset of the study design, I sought guidance from two South Central Health Board (SCHB) kaumātua. I already had an established relationship with one of the kaumātua. This kaumātua has been influential in helping me to understand the importance of being culturally responsive to Māori in both my personal and professional life. They respectfully informed me if I got something wrong and offered guidance to me as a te Tiriti partner and ally. The second kaumātua was not initially known to me but was invited to join the project by the kaumātua I knew. I sought their advice to ensure te Tiriti of Waitangi and Māori worldview were captured throughout the study and that cultural considerations were respected in my ethics application. Examples of cultural considerations were having te Tiriti embedded in the conceptual structure via issue statement 5 (discussed later in the chapter) and seeking cultural support for any potential Māori participants.

Consent, confidentiality, and anonymity

Given the limited number of potential participants and the small size of the service, multiple strategies were considered and employed to maintain privacy and confidentially. Pseudonyms were used for participant and organisational names, with minor changes to contextual details for the report of the findings. The roles for the leaders were unable to be de-identified as this information was important to the case. Although all steps were taken to maintain anonymity, full confidentiality of the participants' identities could not be guaranteed, this was outlined in the information sheet provided to each participant. Participants were given copies of the transcripts to review and were offered the option to have any information removed that they felt had identifiable features such as events described or organisational information or anything else they did not wish to include in the study. No information was requested to be removed.

There were considerations specific to participant groups relating to informed consent. Stake's (1995) methodology highlights the importance of remaining close to the research. I was known to leaders and therapists and had trained the therapists in CRT. Therefore. I needed to ensure there was no coercion or conflict of interest in the

recruitment process. This was addressed by using neutral intermediaries in the initial recruitment phase to ensure participant autonomy when deciding whether or not to participate. I also did not work directly with any potential participants within my practice role. The participants were informed in the participant information sheets that I would be undertaking the interviews but were offered the option of an alternative interviewer if they preferred. No leader or therapist participant requested an alternative interviewer.

Vulnerable populations

People living with an enduring mental illness are a vulnerable population. The Ethics Guideline and Procedures document (Auckland Universtiy of Technology, 2023) highlights that amongst other reasons, potential participants may be vulnerable due to health status, and that all practical steps need to be taken to address particular needs of vulnerable individuals or groups. People with an EPI are, therefore, considered a vulnerable population, particularly when experiencing an acute episode with positive symptoms such as hallucinations. Thus, people who were determined by the clinical team via a mental state exam (Martin, 1990), to be acutely unwell, were excluded from participating. To have been accepted into the CRT programme, tāngata whai ora had to have been determined by clinicians to be cognitively able to participate and to have the cognitive ability to be able to consent to participating. Functional cognition was determined by the evidence-based assessments: Assessment of Motor and Process Skills (AMPS) (Fisher & Jones, 2012) or the Allens Cognitive Level screen (ACL) (Allen et al., 2007), which were undertaken by an occupational therapist at Vocational Futures as part of routine care. Potential participants were given four weeks to consider the invitation to participate and were encouraged to talk with a support person to ensure all participation in the study was voluntary.

Ethics approval was granted by Auckland University of Technology Ethics Committee (AUTEC) on March 14, 2019 (ethics approval number 19/15; refer, Appendix C). Following AUTEC approval, I obtained locality approval from SCHB as part of their process for conducting research within their organisation. This process required completion of a SCHB Māori review form to be submitted with the AUTEC application. The locality agreement was approved on March 28, 2018 (Registration number RM14267; refer Appendix D). The locality agreement allowed for recruitment of staff

and tāngata whai ora, as well as review of documents from within the SCHB and access to clinical files.

The following sections define the case for the research, along with the research process. This includes recruitment, data collection, analysis, and concludes with rigour and trustworthiness of the study.

Defining the case

Cases are selected for what they can reveal about a topic of interest or phenomenon (Stake, 1995). Instrumental case study design considers the unique and complex particularities and issues surrounding the case as a way of coming to understand the case activities within important circumstances and contexts. First, it was important to clearly define the case (Stake, 1995), which, for this research, was defined as 'the delivery of an occupation-focused CRT programme'. The case needed to be further defined by determining what was relevant and what was not; therefore, parameters needed to be established which is known as bounding the case (Stake, 1995; Yin, 1989). This case study was undertaken within the boundaries of one service. For confidentiality purposes the name of the service and the organisation within which the service is situated, have been anonymised using pseudonyms. The service, 'Vocational Futures', is a mental health vocational service within a larger mental health service at SCHB. Vocational Futures was chosen for its context given it was one of the first services that had started delivering the programme at the time the current research was undertaken.

This case is also bounded by time and encompassed an 18-month period from March 2018 to September 2019. This time frame was chosen for two reasons. First, over this period, two programmes were implemented which increased the possibility of recruiting from a limited pool of participants. Second, changes in staff and training requirements over said period would impact on how the programme was delivered—important information to capture in the research. Additionally, my case was further bounded by a conceptual structure based on five issue statements, as outlined in Chapter Three.

I considered various conceptual structures that some studies have utilised when conducting instrumental case study informed by Stake (Boblin et al., 2013; Jones &

Hocking 2015; Robertson, 2015). I decided to be guided by a conceptual structure described by Jones and Hocking (2015) as it was developed directly from the issue statements that surrounded a case. Bounding the case at the onset using issue statements is recommended by Stake (1995), as it shows the conceptual linkages between what was understood at the outset of the study and decisions relating to data collection. Therefore, in accordance with Stake, and in collaboration with my supervisors, I developed a conceptual structure to guide data collection based on the five key issue statements which reflected my theoretical and experiential understandings as I commenced my study. Table 3 is the conceptual structure used to guide the study (Jones & Hocking 2015). Describing the Table, the bottom section lists the five issue statements pertaining to my research questions, the second section from the top describes the topic information sought, which includes consideration to te Tiriti o Waitangi as discussed with the kaumātua. The top line indicates which issue statement the topic information relates to. The third section lists the data sources, and the ticks indicate which topic information the data source relates.

Table 3

Conceptual Framework Matrix

Issue Statements	1	4,3	1.2.3.4.5	1,2	3.4.5	2.3,4,5	2.3.4,.5	5	2.3.4.5.	4
Topic information sought	Client demographics, illness impact	Family attributes	Current structures/central process to application of the programme	Desired need for change in occupational performance and actual change	Perceived understanding and adherence to CRT principles	Perceived facilitators to implementation and outcomes	Perceived barriers to implementation and outcomes	Perceived application of te Tiriti o Waitangi	Key points of tension encountered by therapists delivering the programme and how they managed it	Key influences on staff training of CRT
Tāngata whai ora Perspective	✓			✓	✓	✓	✓	✓		✓
Family Perspective		✓		✓	✓	✓	✓	✓		
Therapists' Perspective			✓	✓	✓	✓	✓	✓	✓	✓
Leaders' Perspective			✓		✓	✓	✓	✓		✓
Document Analysis			✓		✓				✓	✓
Outcome Measures				✓						
Clients' File	✓	✓	✓	✓	✓	✓	✓	✓		

Issue Statements

1. After the delivery of and engagement with an occupation-focused CRT programme tāngata whai ora will experience positive changes in their occupational performance (Kielhofner, 2009; Law et al., 2005; Townsend & Polatakjko, 2007)
2. It is important that delivery of an occupation-focused CRT programme involves a process which allows flexibility while maintaining fidelity and managing organisational constraints (Cella & Wykes, 2017; Wykes et al., 2018)
3. Team members' and management's view of practices, personal attributes, attitudes, vision, and drive influence delivery of the programme and outcomes for tāngata whai ora (Galletly et al., 2016; Mental Health Commission, 2012)
4. Therapists' delivery and training will influence tāngata whai ora experiences ((Cellard et al., 2016; Dark et al., 2016; Reeder et al., 2017)
5. Te Tiriti o Waitangi commitment will influence delivery of an occupation-focused CRT programme (Kake et al., 2016)

Note: Adapted from Jones & Hocking (2015)

Having developed the conceptual structure, my next step was to recruit participants and identify documents relating to the case.

Sampling Strategy

For this case study I chose to use a purposive sampling strategy to recruit participants and ensure the various perspectives relating to the case were captured. Stake's case study methodology and a constructivist approach embody an understanding that multiple truths exist from differing perspectives (Lincoln & Guba, 2013; Stake, 1995). Therefore, it was important to attend to and gather multiple perspectives from those involved in the case. Purposive sampling enables the researcher to identify and select people or groups that have knowledge and experience about the phenomenon of interest and may be able to provide rich information (Creswell & Plano-Clark, 2011).

Tāngata whai ora and their whānau or significant other, and staff at mental health services (leaders and therapists) were selected due to meeting the case definition, and for their ability to provide insights from a wide range of perspectives about the case. The conceptual structure provided guidance for sampling selection which was facilitated through SCHB.

Recruitment Process

Recruitment ran from April 2019 to October 2019, starting with the leaders and therapists. The decision to recruit leaders and therapists first was twofold. First, I wanted to get an understanding of the broader context in which the delivery of the programme was undertaken, and to get insights into the tensions faced by decision makers and those delivering the programme within the confines of those decisions. These collective insights were then used to further guide the interview questions for the tāngata whai ora and significant others. The second reason for recruiting the leaders and therapists first was more pragmatic. The scope of the study gave limited time frames for recruitment, and I wanted to capture two cohorts of potential participants. I was able to interview leaders and therapists while the second cohort of participants were still undertaking a CRT programme specified in the inclusion criteria. Participants who identified as Māori or Pasifika were encouraged to have a cultural advisor present, and all tāngata whai ora participants were offered to have a support

person present during the consent process. All participants declined this offer. The analysis started at the point of recruitment and ran until December 2023. Appendix E provides an overview of the research process.

Data Gathering Plan

In accordance with Stake (1995), it is recommended that a data gathering plan be generated to organise and protect time and to allow for unexpected data sources to inform any new issues that might be interpreted from the data. Stake (1995) suggested that a good data gathering plan should have key elements which include "definition of the case, a list of research questions, identification of helpers, data sources, allocation of time, and expenses" (p. 51) as a way of displaying progress. An overall data gathering plan was created at the start of recruitment (see Appendix F). Furthermore, a separate data gathering plan for the documents and each group of participants was created to keep track of when request for documents were made and date received, participant recruitment started, information sheets were provided, consent gained, interviews booked and undertaken, transcription completed, and the transcripts returned to the participants for review with a 2-week period (refer Appendix G). As I undertook the case study and wrote up the analysis, I became aware of new documents that could inform the research which were not captured in the initial data gathering plan, and these were requested as I became aware of them.

The Recruitment Process for the Leaders

Inclusion criteria

Leaders were invited to participate if they held a Level 1, 2, 3, or 4 designated leadership position at the SCHB Mental Health and Addictions (MH&A) division, (see Figure 5 in Chapter 5 for the leadership structure). These leadership roles involved decision making regarding the delivery of cognitive remediation therapy. The positions occupied could be either managerial or clinical leadership. Through the ethics application process there were no identifiable exclusion criteria required.

Recruitment

Recruitment was undertaken between April 13, 2019 and August 20, 2019. Six people occupying leadership roles were identified through the organisation's website and the

knowledge I had of the organisation as a staff member. These people occupied positions that have decision making capacity regarding how services are run, including interventions and programmes offered such as an occupation focused CRT programme. Potential participants' email addresses were given from the researcher to an administrator who was my supervisor and who made initial contact via email with a flyer about the research designed specifically for the leaders (Appendix H). Leaders' names, positions, and emails are publicly available. Potential participants could contact the administrator to express interest or more information via email, phone call, or face to face meeting via contact details at the bottom of the flyer. Three potential participants emailed back confirming their interest in the study. An in-depth information sheet and consent form were then emailed to the potential participants by the administrator (refer to Appendix H). No further follow up was required, and the participants returned the signed consent form via email to the administrator. Two potential participants declined to take part stating they had nothing to offer the research. The sixth potential participant was sent a reminder email as there had been no response. They subsequently expressed interest and the information sheet and consent form were emailed. The consent form was signed and returned with no further follow up required. All consent forms were emailed to me from the administrator to proceed with contacting the participants to arrange a time to meet and conduct the interview. Four leaders took part in the study, all of European or New Zealand European descent.

The Recruitment Process for the Occupational Therapists

Inclusion criteria

Occupational therapists were invited to participate if they were registered occupational therapists who had received formal training in CRT and had delivered the programme at Vocational Futures. Similar to the leaders, there were no identifiable exclusion criteria. It was disclosed in my ethics application that I would be known to the therapists as I offered the training; however, I did not work directly with them or have any leadership influence over their roles. This issue was addressed in my ethics application which resulted in no requirements for exclusion criteria.

Recruitment

Recruitment was undertaken between April 14, 2019 and May 28, 2019. I sent an email to the manager of Vocational Futures with a copy of the research flyer for the recruitment of CRT therapists (see Appendix I). I requested the flyer be presented at the upcoming business meeting and put on the staff notice board. Potential participants were asked to contact a study administrator, who was my supervisor and whose details were on the flyer, if they were interested in taking part in the study. Initially there was no expression of interest, so a reminder email was sent on May 6, 2019 to the Vocational Futures manager to put the flyer on the staff notice board and to mention it in the staff meeting. Subsequently, five therapists trained in CRT contacted the administrator expressing their interest in the study. Potential participants' contact details were collected by the study administrator and an in-depth information sheet with the consent form was emailed to them with an offer of a phone call or face to face meeting with the administrator if they required further information (see Appendix I). Three participants returned the signed consent form to the administrator via email without requesting any further follow up. The remaining two participants were sent a reminder email via the administrator 2-weeks later to see if they required more information, at which point the two participants returned the signed consent form. All consent forms were emailed to me from the administrator in order to proceed with contacting the participants to arrange a time to meet and conduct the interview. Five occupational therapists, all female of New Zealand European and Asian New Zealand descent, participated.

Recruitment Process for Tāngata Whai Ora

Inclusion criteria

Tāngata whai ora were invited to participate in the study if they were attending Vocational Futures, and were aged between 18 and 65 years, with a diagnosis of schizophrenia. Additionally, they needed to have either completed or partially completed at least 60% of the occupation-focused CRT programme.

Exclusion criteria

Tāngata whai ora were excluded if they, their whānau, or significant other were known to me. This exclusion criterion was applied to protect the participant's privacy and

prevent any influence to participate. Additionally, tāngata whai ora who were acutely unwell were excluded as it may have had an effect on the study outcomes and could have caused potential harm at a time when they needed to focus on recovery. Vocational Futures were informed if tāngata whai ora were acutely unwell via the clinical notes or by the SCHB clinical team, who carried out regular mental state examinations (Martin, 1990) and observed for the presence of positive symptoms. The occupational therapists at Vocational Futures also observed and assessed the mental state of the tāngata whai ora while working with them, and did not put them forward for the study if any signs of a relapse were present.

Recruitment

Recruitment was undertaken between September 5 and October 29, 2019. I visited the site and dropped off a flyer requesting tāngata whai ora participation in the study (see Appendix J). I asked the site administrator to put the flyer up on the Vocational Futures notice board and leave copies on the counters and communal areas. The manager of Vocational Futures also offered to put the flyer in the Vocational Futures newsletter that went out to all tāngata whai ora attending the service. My contact details were on the flyer for potential participants to make contact, but they were also encouraged to talk with their therapists if they were interested in participating. Six potential participants expressed interest in participating to their therapists and all six requested their therapist contact me on their behalf for further information, giving their details to the therapist to pass on to myself. I contacted the potential participants, and four requested to meet with me and be given the information sheet (see Appendix J). A site meeting was arranged individually with each of the four participants to discuss the information sheet and any other questions they had. The information sheet outlined three aspects of the study to which the participants could choose to consent. First, an interview with the researcher; second, access to their CRT report in their clinical file; and third, consent to contact their whānau member or significant other to see if they were also interested in taking part in the study from a whānau perspective. The information sheet for whānau was explained to participants at that time (refer to Appendix K), as was the tāngata whai ora consent form (Appendix J). The consent form enabled the participants to choose which aspects of the study they wished to consent to. Two of the participants signed the consent form at the meeting and consented to

the interview and access to their CRT reports but declined access to approach whānau. The other two participants took the information sheet away for further consideration and we met 5-days later to go over any further questions they had. The consent forms were signed for the interview only. I provided the information sheet and the consent form to the remaining two potential participants who expressed interest via their therapist. They declined to participate in the interview or to approach whānau to participate in the study, but they did consent to access to their clinical file to see their CRT report. The consent form was returned to me via their therapist. Six tāngata whai ora took part in the study. Two were interviewed and shared their CRT reports. Two were interviewed only, and a further two shared their CRT reports only. Four were Māori and two were of Pasifika descent; four were male and two were female.

Recruitment Process for Whānau or Significant Others

Inclusion criteria

Family members or support people of tāngata whai ora, who had completed or partially completed at least 60% of the programme and were taking part in the study, were invited to attend.

Exclusion criteria

Without tāngata whai ora consent, whānau or significant others were excluded from the study.

Recruitment

I sought to recruit family members/whānau or significant others; however, participants who consented to the study, did not consent to their whānau or significant other to take part. The design of the study only enabled access to significant others with tāngata whai ora consent, so no other recruitment process was able to be undertaken.

Potential reasons for tāngata whai ora reluctance to consent to whānau or significant other involvement and the significance of not obtaining this perspective will be explored in the findings within the case study report and the discussion chapter.

Study numbers

Fifteen participants took part in the study offering three different perspectives of the case—four leaders, five therapists, and four tāngata whai ora who consented to be interviewed and two further tāngata whai ora who consented to access to their CRT report. I sought information about appropriate sample size for qualitative case study research; however, the question of sample size in qualitative research is not often discussed in the literature (Boddy, 2016), and there was no mention of sample size by Stake (1995, 2010). Sample size consideration is often associated with science-based positivist approaches which many qualitative researchers reject (Braun & Clarke, 2021; Lincoln & Guba, 1985; 2000). A constructivist approach to research is concerned with depth of understanding; therefore, a large sample may not permit an in-depth analysis of a case and may not adequately encompass all the contextual factors (Boddy, 2016). A review of qualitative sample size was undertaken by Boddy (2016) who stated that "the issue of what constitutes an appropriate sample size in qualitative research is only really answerable within the context and scientific paradigm of the research being conducted. In constructivist, in-depth qualitative research, a single example can be highly instructive" (p. 430). The decisions about sample size in case study research is pragmatic, based on the number of participants that meet the inclusion criteria, the scope of the study, and whether the information gathered is rich enough to generate meaningful patterns (Stake, 1995). For my research it was important to make sure that the sample was able to convey the multiple views relating to the case. My decision to not seek further participants beyond those who provided informed consent was discussed with my supervisors and was pragmatic in that there were limited numbers of participants to recruit from, and the data retrieved provided rich in-depth information. I also checked whether RTA had any guidelines regarding sample size and found that if data are generated from interviews, then each participant will have likely contributed considerable data, indicating that six to 10 participants would be sufficient (Terry & Hayfield, 2021).

Sourcing Organisational Documents

The purpose of gathering data from documents or archival records, according to Stake (1995), is to find information that either corroborates, augments, or contradicts other

sources of information. Often the recorder of the information is an expert observer of the event but also comes with their own perspective and agenda (Stake, 1995). In my study, the document information helped to provide contextual information about the case, and augmented other data by providing insights into the organisational context, including the central structures, processes, and activities of the programme in practice; key influences on staff training and delivery of the programme; barriers and facilitators into the delivery process; and key considerations relating to te Tiriti o Waitangi in programme delivery.

Inclusion criteria

I became aware of various documents through my discussions with the therapists and the leaders, as well as my own knowledge through my involvement in the pilot of CRT. The documents I decided to include needed to shed additional light on the issue statements within the conceptual framework specifically relating to how an occupation focused CRT programme was being delivered, and the influences on delivery, with a particular focus on Vocational Futures. These documents ranged from 2016 to 2019 and were obtained via the CRT Steering group at SCHB and the manager at Vocational Futures on request. A range of 16 documents and archival records were chosen and obtained as they related to the conceptual structure. These documents were a SCHB pilot evaluation report (related to Issues 3 and 5); Vocational Futures service description and group feedback form (Issues 1, 2, 3, 4); SCHB CRT pamphlet for service users (Issues 1 and 2); the training manual for therapists, CIRCUITs information, training register, and training slides (Issues 1, 2, 4); and minutes and terms of reference (TOR) from the CRT steering group (Issues 3, 4, 5). I also drew information from the SCHB internal website and documents (Issues 3 and 5). The CRT report documents from Vocational Futures relate to Issues 1 and 2. The documents I refer to will not be listed in the references due to the document names and authors requiring anonymity. The documents used in this case study are outlined in Table 4.

Table 4

Documents Retrieved for the Case Study

Document	Type
SCHB* CRT Pilot Report	Evaluation Document
Vocational Futures** Service Description 2018	Business Document
Vocational Futures Thinking skills for mahi feedback form	Survey
SCHB CRT. Service User Pamphlet	Pamphlet
SCHB CIRCuiTS Therapy Info	Pamphlet
SCHB CRT Steering Group Minutes 2017	Meeting Minutes
SCHB CRT Steering Group Minutes 2018	Meeting Minutes
SCHB CRT Steering group Minutes 2019	Meeting Minutes
SCHB CRT Steering Group ToR	Terms of Reference
SCHB Cognitive Remediation Therapy for Psychosis 2017	Therapist Manual
SCHB CRT two-day training slides 2017	PowerPoint,
SCHB CRT one-day training slides 2018	PowerPoint
SCHB CRT training register	Excel Spread Sheet
SCHB CRT Reports	Clinical Document
SCHB website 2018	Website
SCHB Digital Health Strategy 2017	Business Document

Note: *SCHB; **Vocational Futures; Due to the documents being anonymised they are not listed in the References

Tāngata whai ora CRT report in clinical file. Access to tāngata whai ora occupation-focused CRT reports, were obtained from the Vocational Futures manager via email. As mentioned, four tāngata whai ora consented to sharing their CRT report. A small but critical aspect of this case was the outcome measure which attended to occupation-focused outcomes, and which was documented in each of the four participants' CRT reports in their clinical file (Issues 1 and 2).

Data Collection

Data Security

Maintaining data security is an essential aspect of research. All my research records were kept in an organised, secure and confidential manner approved by the AUTEC. The ethics application also included a Sensitive Data Safety Management Protocol to ensure all aspects of data security were considered (see Appendix L). According to

Stake (1995), “the most important thing is to have a personal diary or log in which everything is kept … Increasingly this information is kept in electronic files which facilitates categorizing and editing information” (p. 55). Participant information was not discussed with anyone other than my supervisors. Participants’ information was kept in a password protected computer and physical data were kept in a locked cupboard that only I could access. Each participant had their own folder containing their transcripts and audio files.

The audio files were downloaded from the audio recording device and saved in each participant’s electronic folder. The audio files were sent, using a secure link, to a professional transcriptionist who signed a confidentiality agreement (see Appendix M). Once the transcripts were returned I relistened to the audio files checking the transcripts for accuracy, and made notes in the transcripts of expressive tones to capture some of the participants’ communication not detailed in words. The audio files on the recording device were then deleted and pseudonyms were assigned.

The transcripts were emailed to the leaders and therapists using my work email. Tāngata whai ora were given a hard copy of their transcripts to avoid sharing work or personal emails and maintain confidentiality. The transcripts were deleted from my sent box.

On completion of the study, the data were downloaded onto a USB memory stick and given to my primary supervisor to be stored in a secure cabinet at Auckland University of Technology (AUT) along with the consent forms to be kept for 6-years and then destroyed by deleting the memory stick and shredding the consent forms.

Semi structured interviews

In answering my research question, I was not interested in just describing how an occupation focused CRT programme was being delivered. I was interested in people’s experiences of the way the programme was delivered, and in understanding the complexity, nuances, and shared meanings, and the contextual factors that either got in the way or supported how the programme was delivered. Participant interviews are a core feature of case study methodology (Stake, 1995). The interviews in my study sought to gain and aggregate multiple perspectives and knowledge relating to the case

and aimed to support thick description, discover linkages, and obtain explanations. Those involved in the case had their own experiences and stories to tell. Stake (1995) recommended semi-structured interviews. The value of semi-structured interviews is that they allow for participants to share what is important to them, with guiding questions to return the conversation back to the topic if it goes too far off track (Stake, 1995). Therefore, in accordance with Stake (1995), it was important to be prepared with indicative questions (see Appendix N). The indicative questions for each of my participant groups were based on the issue statements and topical information that formed the conceptual structure. The semi-structured nature of the interview allowed for flow so participants could tell their stories. Additionally, Stake highlighted the importance of the researcher staying close to the case; therefore, I conducted participant interviews. The interview questions were posed as open-ended; however, the interview was more like a conversation and did not follow the questions in order, which enabled the interview to be co-constructed between myself and the participants (Braun & Clarke, 2022; Lincoln & Guba, 2013; Stake, 1995). The very nature of the semi-structured interviews undertaken was complex and co-constructed and depended on the participant's perspective; my skill as an interviewer; and the direction, flow, and orientation the interview took (Braun & Clarke, 2022; Terry & Hayfield, 2021). On entry into the study, cultural support was offered again to the Māori and Pacifica participants which was declined.

As part of my ethics approval, a Safety Protocol was written (see Appendix O). Researchers need to assure their own safety as well as that of the participants. The safety protocol was developed because the participants had a choice of where the interviews took place which may have involved a community setting or a setting unfamiliar to me. I informed my supervisor when I was proceeding to the interview and again when I left.

For tāngata whai ora interviews, if any of the participants became unwell, I could draw on my knowledge and skills as a mental health clinician and I had immediate contacts on hand for the crisis team if required. I checked on the participants throughout the interview to ensure their wellbeing and that they were willing to continue, and if they

required any follow-up post interview. All the participants conveyed that they enjoyed the interview process.

The interviews were conducted at participant preferred sites and took between 40 and 70 minutes. Towards the end of each of the interviews, I checked through the interview guide to ensure the topic questions had been addressed. At the end of each interview, I asked participants if they were agreeable to me contacting them if there were any follow up questions required, or clarification needed. All participants gave consent. The interviews were digitally audio-recorded and transcribed. Initially I transcribed the audio recordings myself as a way of staying close to and familiarising myself with the data. However, it became apparent that this was going to take a considerable amount of time and given the scope of the research a professional transcriptionist was employed.

The participants were provided with copies of the transcripts to check for accuracy and to provide an opportunity to add any further information or remove anything they did not want included. Participants were also offered the opportunity to contact me after the interview if there was anything they wanted to add. The interview process will be explained for each group separately to capture their different requirements.

The leaders' interview process

All interviews were conducted at the participants' work site, in the executive office space, in a separate geographical area to the Vocational Futures site. The interviews took place either in the privacy of personal offices or in a prearranged meeting room. The interviews aimed to reveal information about key points of tensions in the delivery process, current structures, and central processes relevant to the application of the delivery of the programme including application of the principles of te Tiriti o Waitangi. The interview also sought to gain information regarding perceived facilitators and barriers to delivering the programme The leader's data helped generate information relating to all five issue statements (refer Table 3).

One of the participants, Anna, contacted me after reading the transcripts and wished to add further information which she emailed. I also contacted the participants after the interviews to clarify demographic details.

The therapists' interview process

Four interviews were conducted in meeting rooms at Vocational Futures. The fifth interview was conducted at a satellite office at a community mental health site as this was closer to where the therapist worked. The indicative questions sought information around processes and structures that either facilitated or created key points of tension experienced by the therapist delivering the programme, along with how they managed any perceived barriers. I also wanted to know how a CRT programme was delivered with an occupational focus and whether there were any perceived benefits of delivering such a programme. Additionally, I wanted to know if the principles underpinning te Tiriti o Waitangi and the principles underpinning CRT were embedded within the programme; and, if so, how. I was keen to understand the key influences that the training provided had on being able to deliver an occupation-focused CRT programme and whether any personal attributes, attitudes, and outlooks influenced programme delivery in clinical practice. This data source helped generate information relating to all issue statements (refer to Table 3). No follow up information was sought or follow up information given or changed from the therapists following provision of the transcripts.

Tāngata whai ora interview process

All the interviews were conducted in a meeting room at Vocational Futures. In line with the conceptual structure topics, indicative questions sought to reveal information about tāngata whai ora demographics, their motivation to get involved with the programme, their engagement and their experiences, to gain insights into how the programme was being delivered from their perspective. I was also interested in finding out whether the delivery of the programme influenced a self-perceived change in tāngata whai ora occupations and whether the programme was culturally responsive; and, if so, how. This data source generated information particular to issue statements 1, 2, 3, and 5 (refer to Table 3).

For this participant group, whose majority identified as Māori (n=3), considerable time was taken at the beginning of the interview to build relationships through the process of whakawhanaungatanga (process of getting to know each other and building relationship). This involved sharing information about myself such as where I am from,

important people in my life, and how long I had been working as an occupational therapist. In return, participants shared information relating to their family, where they were from, and information about how long they had been living with an EPI. They also shared information about the things they enjoyed doing.

Often people living wtih an EPI have difficulty with communication; therefore, special attention was given to how the interview was conducted. To this end, the interview required active listening, being patient during conversations, allowing time to process information, simplifying information whenever possible, providing encouragement, and allowing space (Gepp & Cassata, 2021; Pawelczyk et al., 2015). There were many times that I needed to ask clarifying questions to get the participants to expand on their answers. I also needed to reword the questions in different ways and check for understanding. Further, I needed to allow time for the participants to think about the question and formulate a response, resulting in long pauses on the audio recordings. At times, I needed to change the topic and talk about general every day things to give the participants a break and then bring the interview back to the indicative questions; this happened quite often for one participant in particular. I took notes if the interview had moved on as I did not want to interrupt the participant's story telling. This way I was able to refer back to my notes to follow up on previous information given during the interview that I wanted find out more about. Stake (1995) recommended this line of inquiry, where the interviewer needs to mostly listen, take notes, "and stay in control of the data gathering" (p. 65). No follow-up information was sought from participants and no follow-up information given or changed following review of the transcripts.

Document retrieval

As I was already familiar with the organisation, I was aware of many of the documents pertinent to the case. However, I did not want my prior knowledge to cloud any opportunity to uncover relevant documents not already known to me. I made notes of any mention of unknown documents during the interviews, which is how I found the Vocational Futures service description. I was aware that I had authored some of the documents, such as the training slides. Although I knew some of the documents well, it was important for me to examine each document thoroughly and not to 'lift' words off

the documents and place them in the final report. Rather, I focused on interpreting the information. It was also important to consider the documents as they related to the issues being explored within the conceptual framework whilst still remaining open to new understandings. The document review occurred throughout analysis of the interviews and was an iterative process where I would often go back to the documents, including when writing the case study report.

Analysis

The interviews and documents were analysed in different ways. For the participant interviews I conducted analysis using Braun and Clarke's (2006, 2019, 2022) RTA (see rationale in Chapter Three). For the documents I used direct interpretation (Stake, 1995). Using abductive reasoning I then analysed information from the RTA and from the direct interpretation of the documents resulting in assertions (Stake, 1995, 2010). The findings from the analysis are presented in four chapters, (Chapters 5-8), which is the case study report, followed by Chapter Nine which contains my assertions about the case and my research question. In this next section I explain the steps taken to conduct RTA with participant interview data. I then describe my document analysis, and lastly discuss the final analysis undertaken to reach my assertions.

Engaging with the interview data using Reflexive Thematic Analysis (RTA)

Braun and Clarke (2022) refer to six phases that support the analytical procedure: 1) Familiarising oneself with the data and noting down initial ideas; 2) Generating initial codes of interesting features in a systematic way; 3) Searching for themes within the codes; 4) Reviewing themes by checking and creating a thematic map of the analysis; 5) Defining and naming themes; and 6) Producing a report, similar to case study research where a case study report is also created. The case study report is in the findings section of this thesis. Braun and Clarke explain that these phases are not linear but are an inductive process of visiting and revisiting the data, initial ideas, codes, and initial themes.

To capture the various stakeholders' perspectives, I undertook three separate analyses comprising of the data from the leaders, therapists, and tāngata whai ora. I analysed the data one group at time. I undertook the leaders' analysis first to gain an

understanding of the service and the leaders' perspectives within the wider context. I then undertook tāngata whai ora analysis to find out their perspective as recipients of the programme. I consulted with kaumātua at SCHB regarding my initial interpretation and tentative findings of the tāngata whai ora analysis. The kaumātua read over the transcripts from the Māori participants as well as my initial constructs. Having the kaumātua lens changed my initial interpretations which is reflected in the case study report. Finally, I undertook the therapist analysis. The therapists are the conduit between the leaders and tāngata whai ora, as they interact closely with and between both groups, so I considered analysis of their data useful to do at the end. Even though I analysed each group separately, the process was the same. I considered utilising computer software for data management to support this process; however, upon reflection, I thought a computer programme ran the risk of being too restrictive and potentially losing contextualised meaning which are important for instrumental case study research (Stake, 1995).

My analyses started at point of my first interview. Throughout each interview I took a few notes but wrote a brief summary within a few hours of finishing the interview in order to immediately capture key thoughts. Stage one of RTA requires the researcher to become familiar with the data. After checking the transcripts against the audio-recordings for accuracy, I read and re-read the individual transcripts for each group, making initial notes about the data, and relistening to the recorded interviews to capture tone and expressions in participants' voices. I then made initial codes in the transcripts which I transferred to post-it notes (Braun & Clarke, 2022; Stake, 1995).

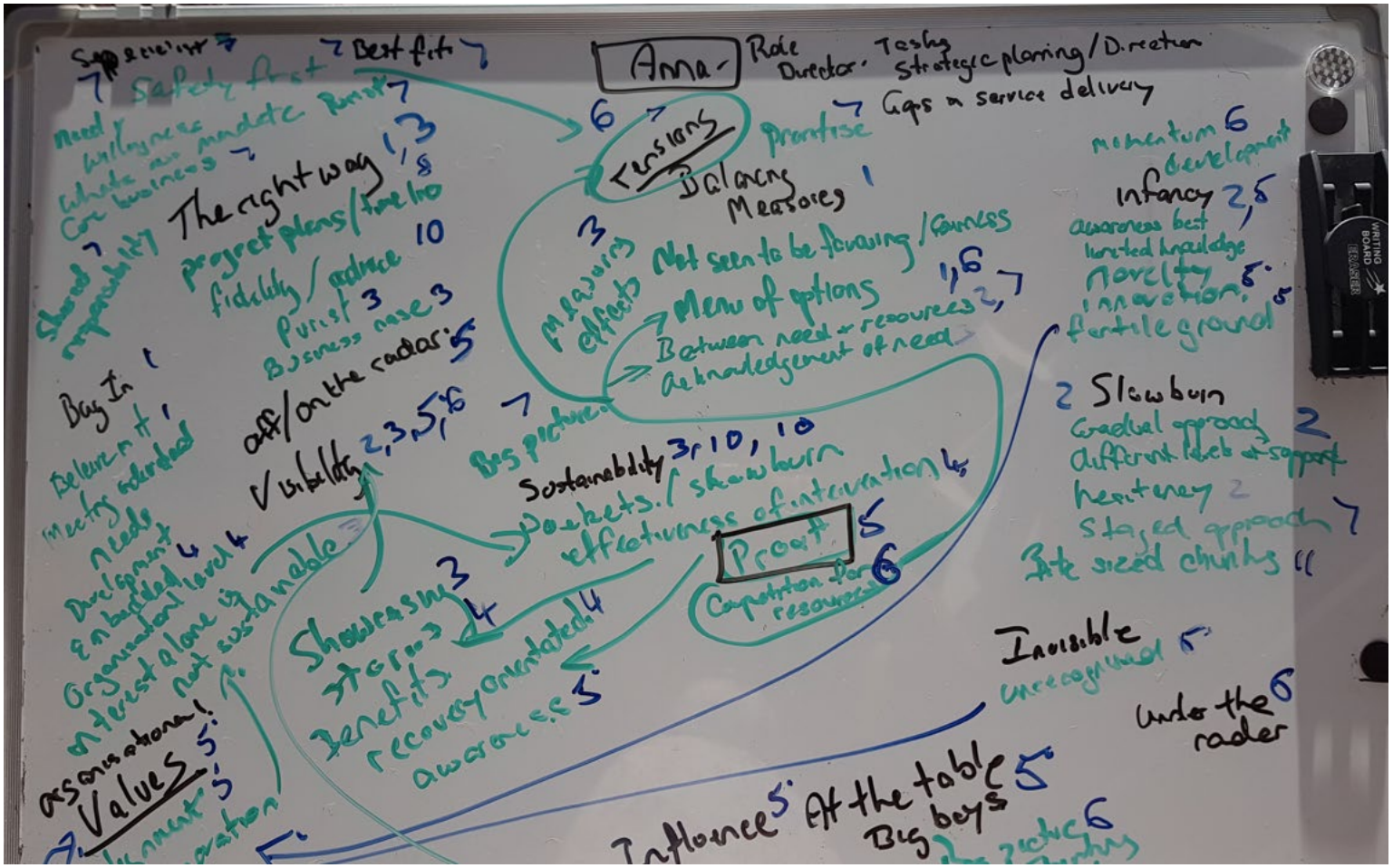
Stage two of RTA requires the researcher to generate codes in a systematic way. Themes do not emerge from the data but are constructed from smaller units, from codes, which evolve, change, are split and collapsed together, and renamed before being constructed into initial themes. Coding was fluid and aimed to reflect how I was conceptualising the data and how that conceptualisation grew, developed, and deepened (Braun & Clarke, 2022). I utilised a variety of ways to work with the data to generate codes which involved writing initial codes on the manuscript, utilising a interactive computer based whiteboard called Miro (Miro, 2024), jotting down codes

onto online post-it notes, keeping a reflective diary, and mind mapping on paper to visually explore the data and construct ideas and potential links (Lauckner et al., 2012).

Stage three of RTA is constructing initial themes from the codes. This phase involved clustering similar codes together within each individual transcript, a process that aligns with Stake's (1995) idea of categorical aggregation, where similar ideas are grouped together. I then identified and wrote down the central organising ideas that characterised each theme. I did this for each individual participant by moving the codes from their data onto a whiteboard or using a large sheet of paper and markers. Figure 1 is an example from Anna's transcript. The words in green are initial codes, the blue numbers are the transcript page numbers, and the black words demonstrate the central organising idea of each theme.

Figure 1

Anna: Clustering Initial Codes into Tentative Themes

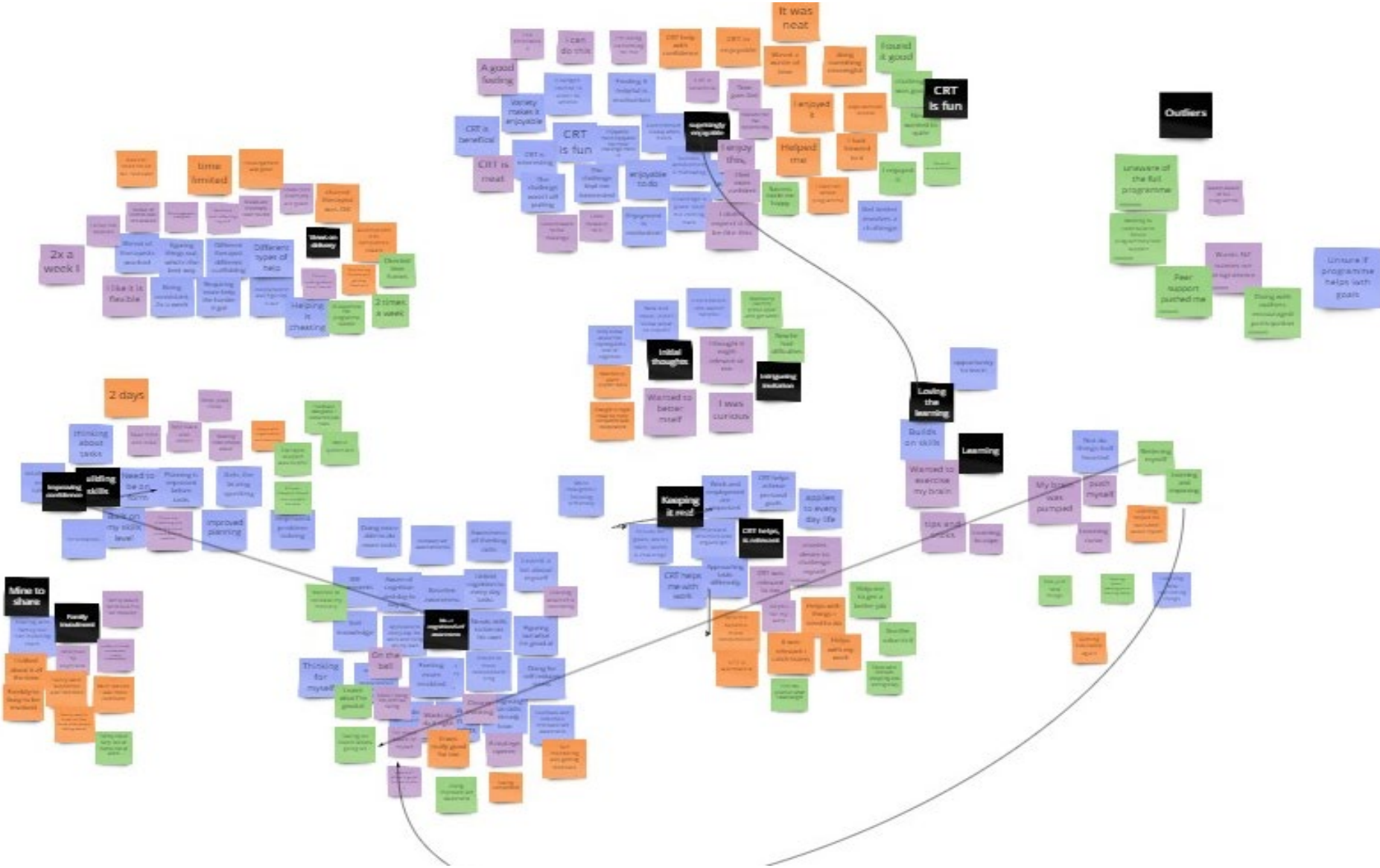


I did this process for each participant in each group, and then searched relationships across the group data sets. Stake emphasises the idea of relationships within the data, suggesting researchers search for correspondence and patterns which, broadly speaking, are similarities between things and their occurrence in particular conditions or contexts (Stake, 1995,2010). Having clustered codes together through categorical aggregation, I was able to construct initial themes and give them an initial name. There were often quite a few themes that were constructed at this point. I kept track of the themes that corresponded with particular codes by creating a Microsoft Excel spreadsheet with initial themes in one column, the codes beside in another column, and the corresponding data across the groups' collective dataset in another column.

Although Braun and Clarke (2022) described six data analysis phases individually, they also highlighted that it is important to use the phases interactively and recursively to guide thinking and engagement with the data. In line with the iterative process, I then reviewed my initial themes by moving them onto Miro (Miro, 2024), and creating a thematic map of the analysis, which is stage four of RTA. Each initial theme from each participant's data was clustered alongside those from other participants and reviewed. In this stage the initial themes were often revised, deconstructed, and reconstructed. Figure 2 is an example of workings to define the themes. The coloured boxes are initial themes/ideas from individual participants, each colour representing a different participant within the same group, the black boxes were main names for ideas of a central organising concept which may have ended up being a main theme or subtheme.

Figure 2

Thematic Map: Revised Tāngata Whai Ora Themes on Miro



During this process I was able to set aside some direct interpretation of individual instances that were of interest, as well as continually reviewing the themes. For example, one individual instance was from a tāngata whai ora participant account of a therapist working simultaneously with him and another person, which differed from all other accounts where the programme was delivered on a one-to-one basis. This instance was preserved and ended up in the case study report. As Stake (1995) stated "Sometimes we will find significant meaning in a single instance, but usually the important meanings will come from reappearance over and over" (p. 78). When creating a thematic map, step four in RTA, I continued the active process of the previous phase which enabled a deeper understanding. Actively moving back and forth between the phases enabled me to gain a deeper understanding every time the themes were reviewed. During this process I also wrote up my initial themes and understandings in preparation for writing the case study report and would check and discuss my interpretations and ideas with my supervisors. This writing and discussion would generate new ideas, reflections, and thinking, including at times the need to go back and review initial codes and themes. Braun and Clarke (2022), and Stake (1995) emphasise the importance of meaning-based patterns, and constructing themes based on interpretations that focus on sense making. Stake described this interactive and recursive process based on sense-making and meaning-making of the participants' account as necessary to formulate interpretations, and to produce the understandings required to answer the research question. As Stake stated "by reading and rereading the accounts, by deep thinking, then understanding creeps forward" (1995, p. 73). I found on occasions that I needed to step away from the data for periods of time in order to be able to come back to it with fresh eyes and a fresh perspective.

In line with stage five, the themes were defined and refined through the process of writing up my interpretations and having them peer reviewed. Once again, this was an interactive process with my supervisors, with many versions before the final case study report (stage six) was created.

In order to establish meaning from a Māori perspective, I consulted the kaumātua to provide a Māori lens through which the tāngata whai ora transcripts could be better understood. We sat together and had a kōrero (conversation) about my initial themes.

Based on kaumātua input I revised the themes and sent them back for confirmation that I had captured the essence of our kōrero. Consulting with the kaumātua resulted in further interpretations which influenced the co-construction of the final themes that are presented in the case study report. The participants' perspectives make up three chapters of the case study report with each participant group having their own chapter.

Document analysis

Most of the documents were analysed using direct interpretation, with information from only one of documents, the CRT report, presented thematically. Direct interpretation is a specific approach used in constructivist inquiry and is useful in case study research to help the researcher understand the unique context of the case with an emphasis on inductive reasoning (Guba & Lincoln, 1981; Stake, 1995). Direct interpretation enabled me to examine and interpret contextual information about the case, as well as use data drawn from documents to contextualise data collected during the interviews. The documents analysed provided background information, historical insights, and bore witness to past events of the case (Guba & Lincoln, 1981). Furthermore, Bowen (2009) stated that "such [document] information and insight can help researchers understand the historical roots of specific issues and can indicate the conditions that impinge upon the phenomena currently under investigation" (p. 29).

I first familiarised myself with the documents, although several of them were already known to me. Within the documents I searched for frequencies and contingencies, such as how often people were required to attend sessions, and what principles of CRT were expected to be applied by the therapists when delivering the programme (Stake, 1995). The document analysis is presented in the first chapter of the case study report, Chapter Five, providing contextual information about the case.

The CRT report was also analysed using direct interpretation but was arranged into initial codes and then themes. The CRT report was written from the therapist's perspective but also contained subjective information from tāngata whai ora in a measure of their occupational performance. I initially found it difficult not to analyse the content of the report and to shift my focus to the purpose of the report and what

its content might mean in terms of my research question. It was tempting to focus on the recorded benefits of the programme, as opposed to the delivery of the programme which I discussed with my supervisors. I put my research question at the top of my white board and mapped out the key points of the report that provided meaning and understandings in terms of the delivery of the occupation-focused CRT programme. As Merriam (1988) pointed out, "documents of all types can help the researcher uncover meaning, develop understanding, and discover insights relevant to the research problem" (p. 118). The thematic analysis of the CRT report is presented in the therapists' experiences chapter. Finally, documents are an important aspect of case study research as they provide triangulation which contributes to rigour and trustworthiness of the case study, which will be discussed shortly.

Case study report

The analysis of data from both the participants' interviews and the documents is presented in the findings chapters of this thesis as a case study report. My decision to present the analysis in this way is informed by Lincoln and Guba (2013) who stated that "the report of a constructivist inquiry is most usefully made in a case study format" (p. 79) and "case study is perhaps the only format that can remain true to the moral imperatives of constructivism" (p. 80). The case study report is also a key design element in Stake's case study methodology (1995). It was important that I wrote the case study report in a way that a reader could easily understand and draw their own conclusions about the case and be able to apply aspects of my case study naturalistically to their own context (Lincoln & Guba, 2013; Stake, 1995). Drawing one's own generalisations about the case is described by Stake (1995), who stated "Naturalistic generalizations are conclusions arrived through personal engagement in life's affairs or by vicarious experience so well constructed that the person feels as if it happened to themselves" (p. 85). Consistent with Stake's case study methodology, I have included sections of narrative description in the case study report to support readers' vicarious experience of the case and, hence, naturalistic generalisations. Although this study is just one case, a lot can be learnt from the depth of the analysis and the context provided within a single case (Stake, 1995). In line with Stake, the case study report is a combination of descriptive details to provide contextual aspects of

the case and an in-depth analysis of data from those involved in the case. The final chapter of the findings consists of my assertions based on the findings of the case study report.

Assertions

On completion of the data analysis from the participants and the documents, a final analysis was undertaken across all the findings of the case study report using abductive reasoning to establish assertions. Assertions are the conclusions that a researcher makes closely related to the research question or key issue relevant to the case (Stake, 2010). Guided by Stake (1995), the final analysis searched in a systematic way for connections, linkages, patterns, consistencies, and correspondence across the entire data sets. This involved systematically reading and re-reading the case study report and highlighting patterns, connections, linkages or factors in different colours to differentiate the potential assertions. The process also required interpretation of these core issues and factors in relation to my research questions to construct the assertions. Fourteen assertions were constructed based on this final analysis and consist of both particularistic assertions and general assertions (Stake, 2010). Particularistic assertions were claims made specific to the particular case in this study; whereas general assertions derived from this case could apply to various contexts and services beyond this case.

Rigour and Trustworthiness

To produce rigorous and trustworthy qualitative case study research, discipline and protocols are required. Triangulation (Stake, 1995) is used in case study research as a way to enhance rigour and trustworthiness of the study through multiple data sources, methods, or perspectives. There were four ways I followed triangulation protocols for this study: data source triangulation, investigator triangulation, theory triangulation, and methodological triangulation.

Data triangulation involved gathering data from multiple sources and perspectives about the case which included the leaders, therapists, and tāngata whai ora who all had valuable perspectives that needed to be uncovered and explored to answer the research question (Stake, 1995). I also chose various documents as data sources which

included minutes from meetings, training manuals, and reports. I chose not to carry out observations, as my presence observing a session may have influenced how the sessions were delivered. Additionally, I was already aware of how the sessions took place due to prior knowledge of the occupation-focused CRT programme.

Investigator triangulation involves other researchers looking at the data and discussing alternative interpretations (Stake, 1995). I regularly took my interpretations to my two supervisors which often resulted in considering alternative ways of interpreting the information, with changes made to my initial codes and themes.

Theory triangulation includes the theoretical perspectives of other researchers (Stake, 1995). Both my supervisors were occupational therapists; however, drew on different paradigms of clinical practice and research lenses. One was familiar with my methodology; the other was familiar with the context of my case. This provided discussion and debate where differing understandings were expressed and discussed.

Methodological triangulation involves use of multiple qualitative research methods to study the case (Stake, 1995). These methods included a conceptual structure, semi-structured interviews, reviews of various types of documents, and member checking. The methods used were consistent with qualitative research and constructivist case study in that my understandings and research question were refined as I engaged with the case and data iteratively throughout the study.

Member checking, or participants' validation (Stake, 1995), occurred by sending the transcripts to the participants so they could check for accuracy with the options to add or remove information. Peer review occurred through supervision by checking and rechecking my interpretations with my supervisors during supervision sessions. Decisions, reflections, and thoughts about my research were also discussed and debated in supervision. Additionally, I sought consultation with cultural advisors in relation to the data from Māori participants, as a way of member checking the Māori worldview to mitigate my own biases that I might have brought to the study as a tauiwi researcher.

The use of a conceptual structure further supports rigour and trustworthiness by lending transparency to the understandings held about the research questions at the outset of the study, and show the connections of these understandings to the information sought and to the data sources. A clear data gathering plan, and a clearly documented process for my analysis based on issues relating to the case also added rigour to the research (Stake, 1995).

Finally, rigor and trustworthiness are established by being transparent about the researcher's connections with the case. Stake (1995), and Lincoln and Guba (2013) require the researcher to stay close to the case, journal experiences and assumptions during data collection and analysis and reflect on those experiences and assumptions. Reflexivity was applied with the presuppositions interview making clear at the outset of the thesis the bias laden presumptions that I brought to the research, by keeping a reflexive journal, and choosing to use RTA for participant interview data analysis.

Summary

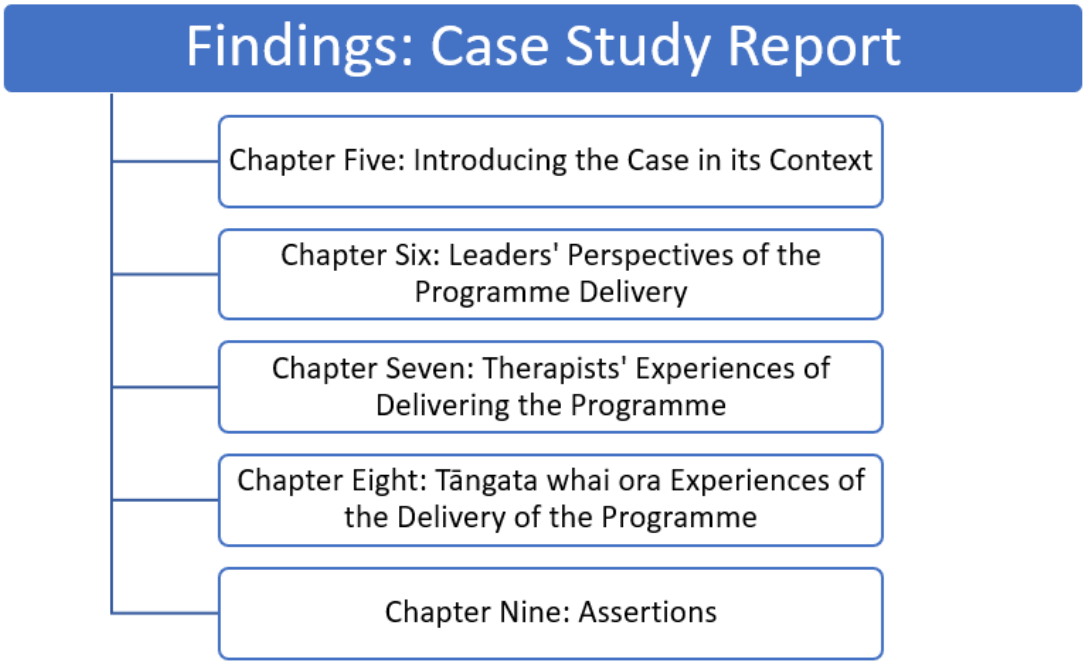
This chapter has provided a description of my research methods which included addressing ethical principles, the sampling strategies, inclusion/exclusion criteria, the recruitment process, and the data collection process. I have described how I applied RTA to analyse participant interviews. I further recounted the analytical process used to analyse the documents and established my assertions, and concluded with the ways in which rigour and trustworthiness were ensured. I wanted to construct a holistic understanding of the case, therefore it was important that the varying perspectives and experiences of the different stakeholders were conveyed. To achieve this, I chose to present the findings in the case study report with each key stakeholder group having its own chapter with assertions from the case study in a separate chapter (Nine) concluding the case study report.

Chapter Five: The Case Study Report

Chapter Four outlined the methods used to answer my research questions, how was an occupation-focused CRT programme delivered in a community mental health setting within Aotearoa New Zealand? What were people's experiences of the delivery of the programme? What factors influenced the delivery of the programme and how did those factors shape delivery? Consistent with case study methodology, the findings from my analysis of the data have been formulated into a case study report which consists of four chapters followed by a separate chapter that states the assertions from the findings. The outline of the findings chapters are summarised in Figure 3.

Figure 3

Content and Sequence of the Case Study Report



Chapter Five introduces the case and its context. Chapter Six provides the mental health and addiction divisional leaders' perspectives of the delivery of an occupation-focused CRT programme. Chapter Seven provides the therapists' experiences of delivering the programme, and Chapter Eight offers tāngata whai ora experiences of the delivery of the programme. The concluding chapter, Chapter Nine, presents assertions derived from the analysed data, and conveys my conclusions in relation to

the research questions. I chose to separate the participants' perspectives into their respective affiliations because, although all the participants in this research were involved in the case, each group offered valuable and distinct perspectives. I present the leaders' perspectives first, as they had the overall say in funding allocation and service delivery which may have influenced how the therapists delivered the programme and how tāngata whai ora received the programme. I also chose to have tāngata whai ora perspectives last, as I wanted their voice to be most present when reading the assertions and heading into the discussion chapter.

The documents referred to in this case study report have been listed in Table 4, Chapter Four. Participants' quotes are presented with participants' pseudonyms, which are listed in a table at the start of each of the participant group chapters.

Introduction to the Case and its Context

The case that is the focus of this report is an occupation-focused CRT programme in a mental health, vocational rehabilitation service in an urban, community setting in Aotearoa New Zealand, delivered over an 18-month period from March 2018 to September 2019. The programme was delivered in the context of a publicly funded mental health vocational rehabilitation service—Vocational Futures, which is part of a larger, publicly funded health organisation called South Central Health Board (SCHB). This chapter introduces the case and context in four sections. The first section provides an overview of the SCHB service and organisational structure, and conveys the stated values and purpose of SCHB; thus describing the broad context in which Vocational Futures was operating. This section also provides an overview of the SCHB leadership structure. The second section describes the SCHB CRT Steering group and the SCHB CRT report, and their functions relating to delivery of the programme. The third section describes the CRT training that was offered at SCHB during the time the research was conducted. The last section provides information about Vocational Futures service, including an outline of its purpose; a description of the team; and a brief overview of the occupation-focused CRT programme that was delivered.

South Central Health Board (SCHB)

SCHB provides health care to tāngata whai ora living in a large geographical area located mid-south of the country, which includes urban and rural/semi-rural areas. SCHB consists of four divisions: Hospital Operations, Community Health, Mental Health and Addictions (MH&A), and Child and Women's Health. Each division provides specific types of clinical services. For instance, Hospital Operations Division provides medical, surgical, and emergency services; whereas Mental Health and Addictions Division, the division relevant to this case study, provides specialty mental health and addiction services (SCHB website, 2018; Table 4). A SCHB executive leadership team provide leadership, fiscal distribution, and oversight of the four divisions.

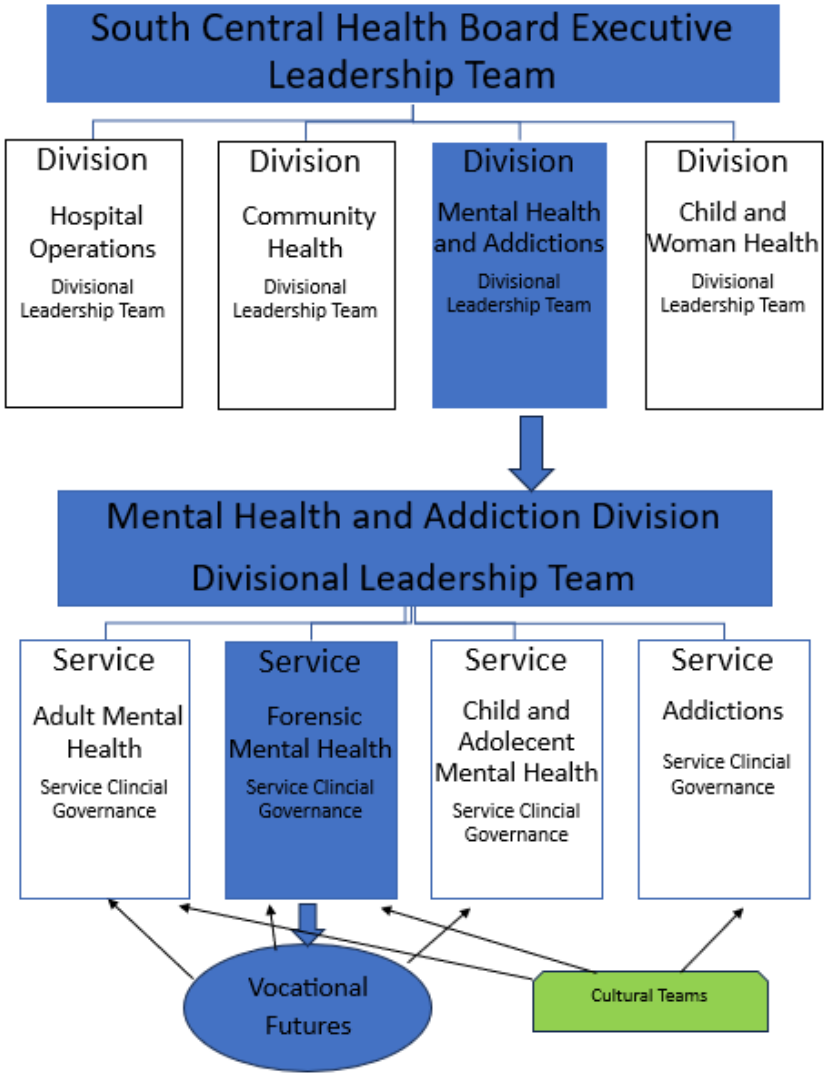
The MH&A division consist of four separate service areas: Adult Mental Health Services, Forensic Mental Health Services, Child and Adolescent Mental Health Services, and Addiction Services. MH&A also has three cultural services: Asian mental health, Māori mental health, and Pasifika mental health. The cultural services have their own dedicated teams, as well as providing cultural and clinical support to tāngata whai ora who are Asian, Pasifika, or Māori and accessing care from the wider SCHB MH&A services. The Māori cultural team is made up of clinicians, cultural advisors, and kaumātua. Each of the three cultural teams has their own operations managers.

Vocational Futures is part of Forensic Mental Health Services which provides clinical care to tāngata whai ora with a serious mental illness who have criminally offended (SCHB website, 2018; Table 4). Although Vocational Futures offers vocational rehabilitation to tāngata whai ora receiving Forensic Mental Health Services, they also provide vocational support to tāngata whai ora who have not offended and are accessing Adult Mental Health Services, and to youth who are accessing Child and Adolescent Mental Health services (Vocational Futures Service Description, 2018; Table 4). Figure 4 provides a brief overview of the organisational structure and shows where Vocational Futures is positioned as part of the SCHB organisation (SCHB website, 2018; Vocational Futures Service Description, 2018; Table 4). The blue shapes demonstrate the division and service in which Vocational Futures is situated. The black arrows pointing upwards from the Vocational Futures oval illustrate the services to which Vocational Futures provide vocational rehabilitation. The green box demonstrates the

cultural teams, and the arrows pointing upward from the green box shows the services that the cultural teams in-reach to.

Figure 4

SCHB Organisational Structure



SCHB consists of four main layers of leadership which are responsible for the overall running of the organisation. Level one is the Executive Leadership team (ELT), which holds the highest level of responsibility for the entire organisation and includes clinical directors and general managers of each division. Level two consists of everyone in the ELT, and discipline-specific leads such as heads of divisional medicine, associate directors of nursing and allied health, and professional leaders. Level three consists of the service-specific operations managers, unit managers, and medical directors who sit

within each division. Level four consists of service managers, charge nurse managers, and clinical leads also within each division. There are further leadership structures that sit below Levels one to four, such as team managers and senior nurses and allied health senior clinicians. Positions within the four layers of leadership structure provide guidance and fiscal support regarding how services are run; thus, it was important to interview leaders within this structure who held relevance to the delivery of the CRT programme (SCHB website, 2018; Table 4). See Figure 5 for a summary of Level one to four SCHB leadership structure.

Figure 5

SCHB Leadership Structure

Each division at SCHB has a divisional leadership team which consists of the general manager, clinical director, clinical leads, associate director of nursing, and members of finance, lived experience and cultural advisors. Each service also has a clinical

governance group which consists of operation managers, unit managers, medical directors, clinical leads, and team managers.

For this study, I interviewed four leaders who had knowledge of the occupation-focused CRT programme delivery, including one leader from each of the four levels. Interviews were conducted with the clinical director for MH&A division (Level one); the psychology professional leader (Level two); the operations manager for one of the MH&A services (Level three); and the occupational therapy clinical lead for the MH&A service (Level four). Further information about the leaders is presented in Chapter Six 'Leaders' perspectives of the programme delivery'.

Organisational Values and Purpose. On the SCHB website there is a clear statement which promises to provide the best care for everyone. The organisation's core values are listed as being connected, having compassion, ensuring excellence in health care delivery, and recognising that everyone is important. The website also outlines the SCHB purpose which is to "relieve suffering, promote wellness, prevent, cure, and ameliorate ill health and to prioritise patient experience and better outcomes" (SCHB website, 2018; Table 4). Furthermore, there is an acknowledgement that recognises te Tiriti as the founding document of Aotearoa New Zealand and the commitment of the SCHB to work with Māori to improve Māori health outcomes (SCHB website, 2018; Table 4).

While adhering to their values, promises, and purpose, the SCHB is "required to budget and operate within allocated funding and to identify specific actions to improve year on year financial performance in order to live within their means" (SCHB website, 2018; Table 4). At the time this case study was undertaken, I could not find any national, regional, or sub-regional initiatives on the SCHB website to improve mental health and well-being. However, there was a stated focus for services to work closer with social sectors, such as the Ministry of Social Development, as well as with non-government organisations (NGOs) to achieve sector goals. The Ministry of Social Development provides strategic social policy advice to the government and delivers income support and employment services to New Zealanders such as the tāngata whai ora participants in this study. NGOs are not for profit, independent community

organisations that, although not affiliated with the government, often receive financial support from the government. Sector goals included reducing inequities in health status; improving, promoting, and protecting the health of communities; integrating health services; and promoting effective care or support for those in need of personal health services or disability support. (SCHB website, 2018; Table 4). Given the stated sector goals, I was interested to know how or if SCHB, the Ministry of Social Development, and the NGOs worked closely together to deliver the programme. Additionally, the SCHB Digital Health Strategy outlines a vision that clinicians and tāngata whai ora will utilise digital technologies and online platforms and "grow awareness of digital health opportunities among staff and patients" (SCHB Digital Health Strategy, 2017; Table 4). This Digital Health Vision is generally consistent with the delivery of the occupation-focused CRT programme which utilises a computer-based programme as part of the intervention.

SCHB: CRT steering group

The CRT steering group grew out of a 2016 CRT programme pilot with a focus on occupation led by two occupational therapists and undertaken at SCHB MH&A Division. The steering group played a key role in promoting delivery of the CRT programme at Vocational Futures, supporting an occupational focus, and ensuring that delivery adhered to best practice. The sponsors of the pilot (those that had oversight of the project) were the Occupational Therapy Clinical Lead for MH&A (Level four of the leadership structure) and the Psychology Leader for SCHB (Level two) (SCHB CRT Pilot Report, 2016; Table 4). Following good pilot outcomes, particularly employment outcomes, the CRT steering group was established to "provide oversight and monitoring of ongoing delivery of CRT at SCHB" (SCHB CRT Steering Group ToR, 2018; Table 4). The steering group had representation from the Forensic, Adult, and Youth Mental Health Services but consisted mainly of occupational therapists and one psychologist (SCHB CRT Steering Group minute 2017, Table 4). Vocational Futures' team manager, who is an occupational therapist, along with one of the occupational therapists I interviewed, attended the SCHB CRT steering group as representatives for Vocational Futures. They updated the steering group on what was happening at Vocational Futures in terms of delivering the programme, as well as getting guidance in

delivering the programme, such as training and purchasing of computer licences (SCHB CRT Steering group minutes, 2018; Table 4).

Terms of Reference (ToR) were established for the SCHB CRT steering group that indicated that the steering group would be accountable to the MH&A Divisional Leadership Team, specifically the Psychology Professional Leader and the Occupational Therapy Clinical Lead. In the CRT steering group minutes (2018), there was significant emphasis on making sure those delivering the programme included an occupational focus and were capturing outcomes that could be fed back to management. It was noted in the steering group minutes that the ToR should have upper management sign off and be stored in a controlled document file. However, I was unable to find the ToR in the controlled document file suggesting that it was never signed off and remained in the Cognitive Remediation Steering Group folder, which may indicate that the CRT steering group were able to function relatively autonomously in shaping the delivery of the programme.

The CRT steering group had several responsibilities such as ongoing development of CRT, support for services wanting to deliver CRT within SCHB, and ensuring principles of the programme were upheld when the programme was delivered. The ToR state

> A CRT programme will be delivered in line with the following principles. Setting person centred goals, remediation of cognitive difficulties, acquisition of cognitive skills and strategies, transfer of cognitive improvements, skills, and strategies into everyday life, and best implemented alongside a rehabilitation plan, e.g., social skills group of vocational rehabilitation. (SCHB CRT Steering Group ToR, 2018; Table 4)

The CRT Steering group was also tasked to ensure training techniques specific to CRT were applied: “A CRT programme will incorporate the following training techniques, errorless learning, scaffolding, positive reinforcement and mass practice” (SCHB CRT Steering Group ToR, 2018; Table 4). The steering group ToR document did not specify which computer programme was to be used; however, it was noted in the CRT steering group minutes (2018) that the strategy-based CIRCuiTS programme (Reeder et al., 2016) was the preferred programme due to two occupational therapists having been

trained by Kings College, London in the CIRCuiTS programme. CIRCuiTS broadly stands for Computerised Interactive Remediation of Cognition – Training for Schizophrenia and was created by Clare Reeder and Tilly Wykes at Kings College with input from consumers and therapists (Reeder et al., 2016; Wykes et al., 2018). The CIRCuiTS website, established more recently, has a slightly different title called Computerised Interactive Remediation of Cognition and Thinking Skills (The CIRCuiTS Team, 2024a), reflecting that ideas around cognitive remediation programmes continue to develop.

The CIRCuiTS programme. The CIRCuiTS programme that was used at Vocational Futures is based around a virtual village and uses abstract tasks to practise a particular strategy or improve a particular cognitive component but supports application of these within occupations. For example, the CIRCuiTS programme also includes exercises that require more complex and multiple thinking skills such as planning a meal, catching a bus, or going to the supermarket in the programme's virtual village (SCHB Cognitive Remediation Therapy for Psychosis, 2017; Table 4). Tasks requiring metacognition are built into the CIRCuiTS programme. For instance, before each task commences, the CIRCuiTS computer programme provides a prompt that asks the consumer to rate how difficult they think the task will be on a scale of one to five. On completion of the tasks, the programme asks the consumer to rate how difficult the task actually was. The consumer can then see if the tasks were as difficult or as easy as they initially thought. Likewise, the CIRCuiTS also ask consumers to rate how long they think it would take to do the task, and then provides feedback on how long it actually took them. CIRCuiTS also prompts consumers to consider what strategies might be used (SCHB CIRCuiTS Therapy Info; Table 4). Figure 6 provides examples of the computer programme. The picture on the left shows the virtual village. The two pictures to the right show an abstract task where consumers are asked to choose which pictures on the far right have been rotated by 90 degrees to match the picture to its left (SCHB Cognitive Remediation Therapy for Psychosis, 2017; Table 4).

Figure 6

Pictures of the CIRCuiTS Programme

(The CIRCuiTS Team, 2024b)

SCHB CRT Report. Gathering data to feedback to leaders was also a role for the CRT steering group. A CRT report was designed to report on individuals engagement and achievements with the view to collate individual reports into an overall summary of the programme for the MH&A leadership group. The CRT report was also designed to seek and capture tāngata whai ora engagement in the programme from various stakeholders perspectives, and share with various stakeholders recommendations documented in the report. Stakeholders included tāngata whai ora whānau, key workers, community support workers, and therapists who delivered the programme` (SCHB CRT training slides, 2017, 2018; SCHB CRT Steering Group minutes, 2017, 2019; Table 4). The individual CRT reports were kept in tāngata whai ora electronic clinical files. Access to a report could only be obtained by clinicians working directly with the tāngata whai ora. Four tāngata whai ora at Vocational Futures agreed to share their CRT reports and this information provided the knowledge about the report format (SCHB CRT Reports, Table 4).

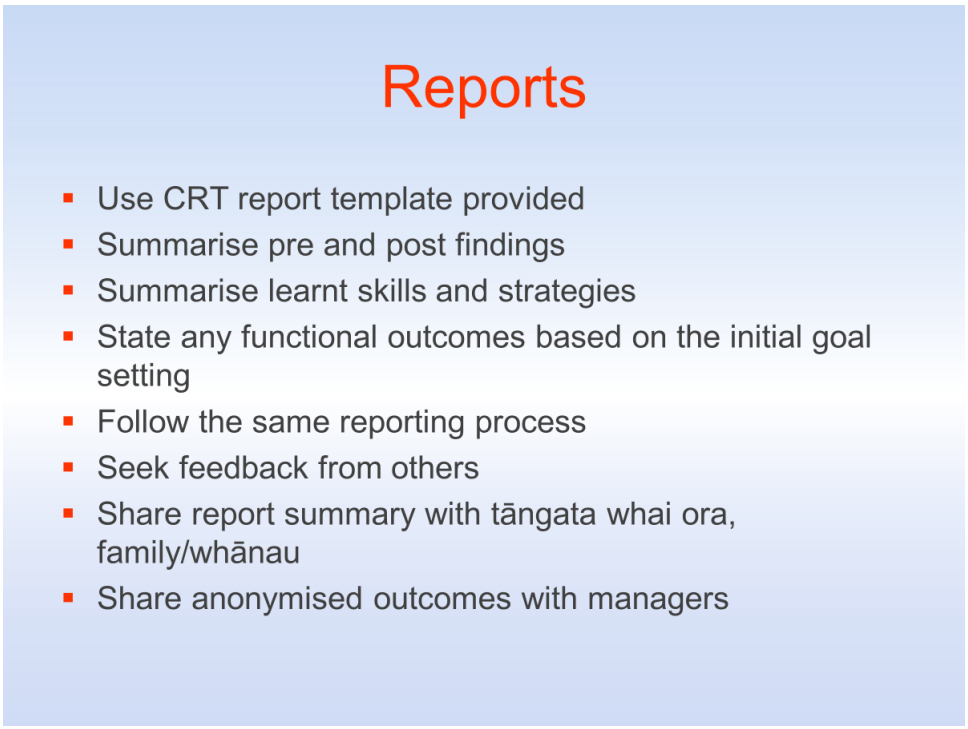
The CRT report had multiple sections for the therapists to complete and included 1) background information of tāngata whai ora and how they came to be on the programme; 2) a section to record measureable outcomes, such as cognitive assessments and meaures on occupational performance; 3) a section for therapists to write their perspectives on the quality of participation and engagement that tāngata whai ora had with the programme; and 4) a section for therapsits to record any

feedback about the programme from tāngata whai ora, their whānau, or signficant other. The four CRT reports obtained for this study were written by three occupational therapists at Vocational Futures.

Collecting and reporting outcomes and feedback on the programme was dicussed in the CRT Steering group (CRT Steering Group minutes, 2017, 2018; Table 4) and explained in CRT training delivered at SCHB (CRT training slides 2017, 2018; Table 4). It was expected that the main therapist who was working with each tāngata whai ora completed a CRT report (CRT training slides 2017, 2018; Table 4). A summary of what was covered in the training regarding the CRT reports can be seen in a training slide in Figure 7.

Figure 7

CRT Training Slide: CRT report



Training staff at SCHB to deliver the occupation-focused CRT programme

To be able to deliver the programme at SCHB, staff needed to be trained in CRT. The leaders within the MH&A division at SCHB offered support by putting CRT training on their training register and providing in-house resources, such as funding, time, and

training materials (SCHB CRT Steering group minutes, 2017; Table 4). Initially, two occupational therapists who led the pilot project were supported and funded by SCHB to receive CRT training from Kings College, with the view to them delivering CRT training to clinicians at SCHB Mental Health and Addictions division (SCHB CRT training slides, 2017). The two occupational therapists learnt about the core principles and learning techniques as agreed by the CRT expert working group which consists of international researchers and clinicians with expertise in the area of cognitive remediation for people who are living with an EPI (Bowie et al., 2020). From June 2017 when the first training was delivered, to September 2019 when the case study timeline ended, three different types of training were offered to therapists within the SCHB who were interested in the programme. The choice to attend was optional for most staff; however, at Vocational Futures it was expected that staff would receive the training. The first training was in-person 2-day training delivered at SCHB, the second training was online delivered by Kings College London, and third was a 1-day, in-person follow-up training delivered by SCHB.

The in-person, 2-day training. The first two SCHB CRT trainings delivered by the occupational therapists occurred in June 2017 and February 2018, taking place over 2-days in person (SCHB CRT 2-day training slides, 2017; Table 4). The training was delivered during normal working hours at no financial cost to the clinicians or the organisation. Clinicians had to obtain approval to attend from their team manager (who did not occupy a Level 1 to 4 leadership role) and be released from clinical work for 2 days to attend the training. Each training had approximately 18 clinicians attend from across various teams at SCHB; mainly occupational therapists, with a small number of nurses and social workers (SCHB CRT training register, Table 4).

The first day of the 2-day training covered what CRT is, and the evidence that supports CRT. It also taught the CRT principles and training techniques that were outlined in the CRT Steering Group ToR. The first day also included information about relevant occupational therapy assessments and identified examples of meaningful occupations to work on with tāngata whai ora throughout the programme. Further, the training included setting goals with tāngata whai ora that focused on occupations, and breaking broad goals down into smaller goals that included a cognitive aspect. For instance, a

broad occupational goal may be reading a novel; a smaller goal with a cognitive aspect may be able to concentrate to read four pages of a book and remember the story line (SCHB CRT 2-day training slides, 2017; Table 4).

The second day introduced various computer programmes used in CRT programmes, including CIRCuiTS (The CIRCuiTS Team, 2024a), Happy Neuron Pro (Scientific Brain Training, 2021), and Brain HQ (Posit Science, 2020). The clinicians spent time with the computer programmes being shown how to use the programme, sign in, set up and go through a session. It provided an opportunity for the clinicians to experience what was involved with using the computer programmes and to get familiar with them (SCHB CRT 2-day training slides, 2017; Table 4).

The training was specific, familiarising clinicians with the programmes and teaching them how to develop tāngata whai ora cognitive skills in the context of an occupation. Metacognition (awareness and knowledge of one's own thought processes) and its relationship to occupation were of particular focus on day two (SCHB CRT two-day training slides 2018, Table 4). Clinicians were taught how to develop tāngata whai ora metacognition within sessions using a three-stage process called PriME (Cella et al., 2015). In the first stage, for each task that was undertaken on the computer programmes, the clinicians learnt to work with tāngata whai ora on how the task could be approached, what strategy might be used to support the task, how long they thought the task would take, and how difficult they thought the task would be. This stage was called Planning. The second stage, called Monitoring, involved clinicians learning how to encourage tāngata whai ora to check in on how they were doing during execution of the task. In the third stage clinicians were taught that on completion the task should be discussed and tāngata whai ora encouraged to reflect on whether it took as long as they thought, was as difficult as they thought or if the chosen strategy worked. This stage is called Evaluation. The concept of planning, self-monitoring, and evaluation would then be discussed with tāngata whai ora in the context of their everyday lives and tasks. The computer programmes themselves did not have an occupation-focused approach; therefore, this second day training also had a focus on teaching clinicians how to generalise what tāngata whai ora had learnt on

the computer into everyday life with the aim to improve participation in meaningful occupations (SCHB CRT 2-day training slides, 2018; Table 4).

Additional training on day two, demonstrated how to run a social cognition group. The facilitators role-modelled how to teach social skills such as understanding non-verbal communication and eye contact. Finally, the second day also included a brainstorming session on how to run an occupation-focused CRT programme within the context of clinicians' specific service areas and clinicians were encouraged to collect and record outcomes in a CRT report template to feed back to tāngata whai ora and other stakeholders. Figure 8 is a slide from the training package that outlines the topics covered over the 2-days.

Figure 8

Training Slide: Topics Covered Over the 2-day Training Period

The online training. The second type of training that became available was a 20-hour online training led directly by Kings College, London. Ten therapists from SCHB were able to access the online training free of charge as part of Kings College trial of the programme. This training was introduced in August 2018, 14 months after the first, in-person, 2-day training in June 2017. The online training did not replace the already established 2-day training. However, following the online trial, a few months later

there was a cost attached to access the online training which team managers had to fund. The online training was specific to the computer programme CIRCuiTS (The CIRCuiTS Team, 2024c), so was only necessary to undertake if CIRCuiTS was the preferred computer programme to use. The online training provided a foundational understanding, background, theory, and evidence related to CRT, and supported therapists to learn and use the CIRCuiTS computer programme. On completion of the online training, Kings College recommended in-person follow-up and supervision which was put in place by the CRT Steering group at SCHB. The online training modules could be worked on at any time but needed to be completed within a 3-month time limit.

The in-person 1-day follow up training. The third type of training, the in-person 1-day follow up training was developed by the two therapists who received the training directly from Kings College and who developed the first 2-day training at SCHB. The in-person 1-day follow up training was developed in response to the recommendations for follow-up from the 20-hour online training. It was also decided by the CRT steering group that because the online training was particular to CIRCuiTS not all aspects of a CRT programme were covered, such as the use of assessments, establishing occupational goals, completing a report of the training for tāngata whai ora, running a social cognition group, and brainstorming ways to deliver the programme within clinicians' services (SCHB CRT 1-day training slides, 2018; SCHB CRT Steering Group Minutes, 2018; Table 4). The 2-day training package was, therefore, adapted to create a 1-day follow-up in-person training which also recapped the core principles of CRT and training techniques.

Over the period of the case study, all three trainings were happening simultaneously, providing multiple opportunities for learning and support with delivery. Table 5 outlines the training offered.

Table 5

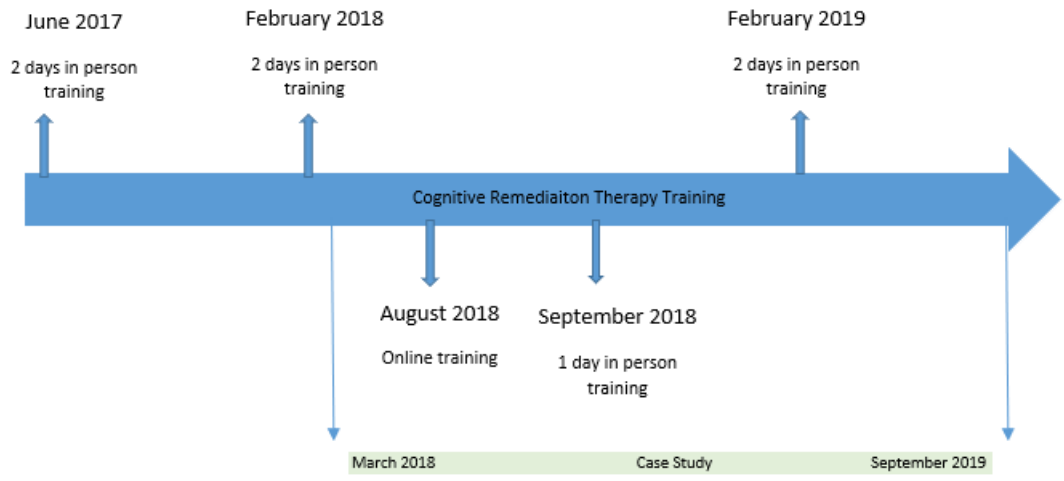
Training Options Offered Over the 18-month Period

Training	Facilitated By	Facilitation type	Days/Hours	Organisation Delivering the Training
First training	Occupational therapist	In person	16 hours over 2-days	SCHB
Second training	Psychologists	Online. Pre recorded	20 hours over 2-weeks; self directed	Kings College
Third training	Occupational therapist	In person	8 hours	SCHB

Figure 9 provides a timeline of when the different trainings were offered in relation to the case study timeline.

Figure 9

Timeline of CRT Training



The clinicians that I interviewed for the study all took part in at least one training but had varied exposure to the trainings that were offered (see Chapter Seven, 'Therapists perspectives of the programme delivery').

At the end of the training, regardless of the modality, there was an expectation that any clinician who had undertaken training would be able to go into their workplace and deliver an occupation-focused CRT programme that broadly consisted of:

- Identifying tāngata whai ora suitable for undertaking the programme
- Identifying and setting occupation-focused goals
- Measuring changes in performance of, and satisfaction with, meaningful occupations from the beginning to completion of the programme
- Providing two to three sessions a week to undertake a computer-based CRT programme at a SCHB community building (or a community building like a library if possible)
- Using each session to work on improving cognitive ability and learning cognitive strategies
- Using each session to generalise learnt cognitive skills into everyday life and to improve meaningful occupations. This was done in conversation with tāngata whai ora in both the computer sessions and social cognition group.
- Running a 16-week social cognition group programme that taught social cognition skills (SCHB CRT training slides, 2017, 2018; Table 4)

A monthly supervision group was set up by the steering group for clinicians who had completed the training to support them to apply their training and continue to develop their skills in delivering the programme (SCHB CRT Steering Group Minutes, 2018; SCHB CRT training slides, 2018; Table 4). The following section describes the Vocational Futures service, and how the manager of Vocational Futures and the occupational therapists who had received the training proposed to run their CRT programme.

The Vocational Futures rehabilitation service

Vocational Futures' main base is located in a 2-storey warehouse/factory type building in a built-up, community suburb on a main train and bus route. Vocational Futures provides employment support to adult and youth tāngata whai ora with severe mental illness who are living in the community or in secure forensic residence (Vocational Futures Service Description, 2018). Vocational Futures also provides outreach services to community mental health teams across the large SCHB geographical area and

utilises MH&A community facilities that are located across the SCHB region to meet with tāngata whai ora to support them with their employment goals (Vocational Futures Service Description, 2018),

Vocational Futures is a holistic service addressing a range of needs towards employment for tāngata whai ora. The Vocational Futures team philosophy is founded on a belief that employment is a meaningful occupation and a protective factor to the well-being of tāngata whai ora (Vocational Futures Service Description, 2018; Table 4); therefore, the service is focused on supporting tāngata whai ora to either gain employment or get ready to gain employment while recovering or learning to live with a mental illness. The team at Vocational Futures work closely with social services from the SCHB region, such as work and income services, to help tāngata whai ora move from government benefits to paid employment. Vocational Futures runs an affirmative business, meaning it holds contracts with local community businesses to provide services such as putting labels on products and wrapping products for distribution. Fulfilling these contracts offers part-time employment to tāngata whai ora as a way of gaining work experience and work skills while providing a stepping-stone to competitive employment.

Vocational Futures had one team manager, Amberlea. The team manager reported to the Forensic Service Operations Manager from MH&A who is a member of the Forensic Service Clinical Governance group. Amberlea's team manager role was not part of the divisional leadership team and did not sit within the Level one to four leadership structure within the SCHB; however, she was responsible for Vocational Futures staff, recruitment, budget, tāngata whai ora attendance at the service, and overall running of Vocational Futures. Amberlea worked in collaboration with the professional and clinical leads regarding discipline specific interventions.

The team at Vocational Futures consisted of numerous contract support workers, one literacy tutor, nine occupational therapists, and the team manager (Vocational Futures Service Description, 2018; Table 4). All staff were employed by SCHB with the ultimate goal of supporting tāngata whai ora; however, each staff group role had a different focus. The contract support staff had a primary focus of ensuring contracts were met

and jobs ran smoothly to sustain the service, while the other staff members had a primary focus on improving employment outcomes for tāngata whai ora. The literacy tutors assisted tāngata whai ora to improve their literacy where needed; for example, by helping with reading, writing, and comprehension. The occupation-focused CRT programme was being delivered to some of the tāngata whai ora attending Vocational Futures alongside routine care.

The occupational therapist's role consisted of undertaking work assessments, career counselling, education, and psychiatric rehabilitation with a focus on employment (Vocational Futures Service Description, 2018). In addition, the occupational therapists were the ones responsible for delivering the occupation-focused CRT programme at Vocational Future in addition to their usual work. All occupational therapists working in Aotearoa New Zealand are required to be registered with Te Poari Whakaora Ngangahau o Aotearoa: The Occupational Therapy Board of New Zealand (OTBNZ) and have a current Annual Practising Certificate (APC) (Occupational Therapy Board of New Zealand, 2015). There are five competencies set by OTBNZ for registration and continuing practice for occupational therapists: 1) Applying whakaora ngangahau occupational therapy knowledge, skills, and values; 2) Practising appropriately for bicultural Aotearoa New Zealand 3) Building partnerships and collaborating; 4) Practising in a safe, legal, ethical, and culturally competent way; and 5) Engaging with and being responsible for your profession. Unique to the Aotearoa New Zealand context is Competency 2 where occupational therapists "understand the effects of Te Tiriti o Waitangi The Treaty of Waitangi on Māori health and social outcomes" (OTBNZ, 2015, p. 7). Occupational therapists at Vocational Futures were required to adhere to Competency 2 as part of their obligation to practice in Aotearoa New Zealand.

Because Vocational Futures is a specialty vocational rehabilitation service, many of the tāngata whai ora who attended Vocational Futures also intersected with other mental health services provided by SCHB, such as community mental health and forensic mental health teams, as well as with external organisations such as supported accommodation providers, and NGOs (Vocational Futures Service Description, 2018; Table 4). I interviewed five occupational therapists for the study. Further information

about the occupational therapist participants is provided in Chapter Seven, 'Therapists experiences of delivering the programme'.

The occupation-focused CRT programme at Vocational Futures

The occupation-focused CRT programme was delivered twice at the Vocational Futures main building over the period of March 2018 to September 2019. Therefore, the programme was delivered to two cohorts of tāngata whai ora over the case study timeframe. The first cohort was in March 2018, the second cohort was in March 2019. One of Vocational Futures occupational therapists whom I interviewed was delivering the programme at a satellite community building simultaneously alongside the second cohort.

Pamphlets about the programme were left on display at Vocational Futures for tāngata whai ora or whānau to see, or were given to tāngata whai ora attending Vocational Futures (SCHB CRT Steering Group Minutes, 2017; SCHB Service User Pamphlet, Table 4). Tāngata whai ora who were receiving vocational rehabilitation at Vocational Futures had undergone cognitive testing either by a psychologist or an occupational therapist through various evidence-based assessments, such as the ACL Screen (Earhart et al., 2022), AMPS (Fisher & Jones, 2012), or the Addenbrooke Cognitive Exam (ACE) III (Hsieh et al., 2013) (SCHB CRT report: Table 4). The ACL consists of a visual-motor task and assesses a person's global cognitive processing capacity, potential to learn, and performance and problem-solving abilities (Earhart et al., 2022). The AMPS is a measure of performance in activities of daily living through observation of tasks undertaken by the person in the context of their natural environment (Fisher & Jones, 2012). The ACE III is used to detect cognitive impairment in various cognitive domains such as memory and attention (Hsieh et al., 2013). Understanding how tāngata whai ora were identified and how the pamphlets were utilised is an important aspect of delivery to understand from the therapists' and tāngata whai ora perspective.

The programme started with an initial session with an occupational therapist to identify occupational performance goals. Once goals were established tāngata whai ora were assigned to an occupational therapist who had received the training. The

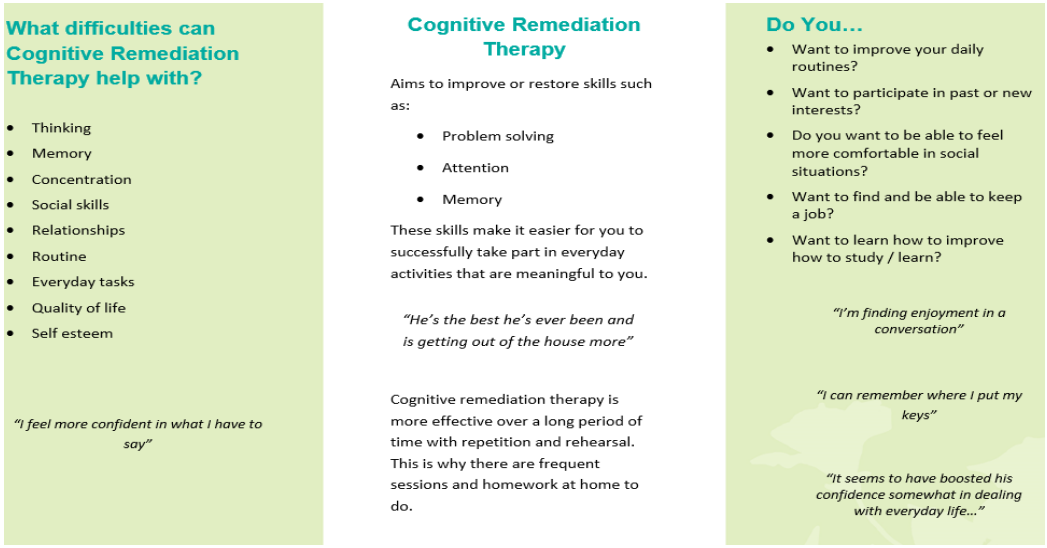
occupational therapists and tāngata whai te ora worked together on the CIRCuiTS programme. At times, the sessions were taken by other occupational therapists who had also undertaken the training. The entire occupation-focused CRT programme consisted of two components, computer-based sessions with an occupational therapist and the social cognition group.

Computer-based sessions. The computer-based sessions occurred two to three times a week for 4-6 months with an occupational therapist who had received the occupation-focused CRT training (SCHB CRT Service User Pamphlet, Table 4). As above, the CIRCuiTS programme is one of many computer programmes used in CRT programmes but, from the therapists' interviews, CIRCuiTS was the only computer programme mentioned and utilised at Vocational Futures over the time of the study.

In the computer sessions, the therapists spent time helping tāngata whai ora think about how they might use learnt skills and strategies from the computer programme in their everyday lives and connecting learnt strategies to tāngata whai ora occupational goals (SCHB Cognitive Remediation Therapy for Psychosis, 2017; Table 4).Tāngata whai ora were given homework tasks which might have included independent sessions on CIRCuiTS if they were deemed ready to work independently and had access to a computer. Similarly, homework included applying learnt strategies to their everyday life. A pamphlet was created to give to tāngata whai ora who expressed interest in the programme, summarising the programme and highlighting the importance of working towards meaningful occupations (see Figure 10).

Figure 10

CRT Tāngata Whai Ora Pamphlet



The social cognition group. This group occurred weekly for 2-hours over 16 weeks and was facilitated by two occupational therapists who had skills in running social skills groups (CRT SCHB CRT. Tāngata whai ora Pamphlet; SCHB CRT Steering Group Minutes, 2017; Table 4). The social cognition group at Vocational Futures is called 'Thinking Skills for Mahi' (Mahi means work in Te Reo Māori). 'Thinking Skills for Mahi' was created in line with work by Susan McGurk, a Professor of Occupational Therapy based at the Centre for Psychiatric Rehabilitation at Boston University, and was designed to focus on work (McGurk et al., 2010). Michelle, an occupational therapist who was interviewed for this research, was the consistent and primary facilitator of the group. Michelle was assisted by a second facilitator, also an occupational therapist, who rotated in and out. By attending the group, tāngata whai ora were expected to learn social skills required for work, such as reading body language and starting, maintaining, and ending conversations (SCHB CRT Steering Group Minutes, 2018; Table 4). Resources required to run the entire programme (computer-based sessions and social cognition group), were noted as computers or iPads, licences for computer programmes, private space to conduct the one-to-one computer sessions, a meeting room to run the group, group plans, and goal-setting assessments (SCHB CRT Training Slides 2017, 2018; Table 4).

Tāngata whai ora could attend the occupation-focused CRT programme with Vocational Futures staff at various locations. The main location was at Vocational Futures affirmative business site, where some tāngata whai ora were already participating in vocational work-related tasks. Other locations included the multiple community mental health buildings across the SCHB region, where the programme would be delivered to tāngata whai ora by Vocational Futures therapists alongside community-based clinicians who had received training in the occupation-focused CRT programme. Sessions that were undertaken in community mental health buildings were done so in clinic rooms that had computers installed. The social skills group was only running at Vocational Futures affirmative business site. All tāngata whai ora who were undertaking CRT were expected to attend the social skills group. This meant considerable travel for those that lived some distance away from where the social skills group was run, and due to lack of public transport and the distance required to travel, those receiving the programme in the rural and community sites were unable to participate in the social group sessions but did continue with the computer-based sessions.

Four tāngata whai ora agreed to take part in this study. Further information about these participants is provided in Chapter Eight, 'Tāngata whai ora experiences of the delivery of the programme'.

The Vocational Futures affirmative business site

Most of the therapist and all the tāngata whai ora interviews were undertaken at the Vocational Futures warehouse/factory. One therapist interview took place in a small rural community mental health site in a clinic room.

I arrived at Vocational Futures to start the first of my interviews. On arrival I observed the Vocational Futures site was in a well-kept 2-storey building that looked typical of a small industrial/warehouse type facility. Upon first entering the building on the ground floor I noticed long tables set up and boxes stacked around them. There was a large notice board on the wall covered in brochures, flyers, and notices, including worksafe posters. Tāngata whai ora and contract support workers were going about their work-related tasks and there was a general hive of activity. I was guided upstairs into a

reception area, where I was greeted by a friendly person behind the desk. The public-facing area of the building which was the downstairs factory/warehouse area and the upstairs reception area looked typical for this type of workplace. The team manager, Amberlea, who was already familiar to me, escorted me to an area on the second floor that was separated from the reception area. There were no signs that separated the two areas but I was informed that this was where the occupational therapists, team manager, and literacy tutor were located and did their work. It was also the staff cafeteria. The area consisted of a kitchen and a large spacious dining area with a few cordoned-off cubicles containing computer work stations. It was difficult to ascertain what areas were allocated for clinical work, and what areas were allocated for staff to relax and take a break. I was later to learn that these cordoned off cubicles were where the therapist and tāngata whai ora undertook their one to one CRT computer sessions. I was led down a corridor to where a couple of offices and meeting rooms were located. One of the smaller meetings rooms were where I was able to conduct interviews with tāngata whai ora and most of the therapists. I also learnt that these interview and meeting rooms were where the therapists would often meet with tāngata whai ora to undertake assessments and run groups. So although tāngta whai ora spent most of their time downstairs in the factory/warehouse, coming upstairs to meet with the therapists was a familiar occurance. Everyone who took part in the interviews were enthusiastic and keen to share their experiences.

Over the course of interviewing tāngata whai ora and the therapists, I came to the worksite a few times. Each time I had a sense of cohesiveness, famliarity, and industry amongst tāngata whai ora and staff. I also noticed a layer of caution towards me from the contract support staff working downstairs and sensed my coming into their space was a potential distraction for tāngata whai ora from their work tasks.

Summary

This chapter has set the scene for the case study by highlighting contextual factors that influenced the delivery of the programme. Contextual factors included a description of the organisation (SCHB) in which the case took place including the leadership structure, organisational values, a summary of the CRT Steering group purpose,

reporting requirements, and training that was provided. An overview of the Vocational Futures rehabilitation service was provided including an explanation of the occupation-focused programme that was delivered there. The following three chapters delineate the perspectives and experiences of the leaders, therapists, and tāngata whai ora regarding the delivery of the occupation-focused CRT programme.

Chapter Six: Leaders' Experiences of the Programme Delivery

Four people with leadership positions within the SCHB organisation were interviewed: Anna, Jane, David and Matt. Their roles spread across Levels one to four of the SCHB leadership structure. All the leaders interviewed were members of the Mental Health and Addiction (MH&A) divisional leadership team which consists of clinical and operational leadership. All were based in the Adult Mental Health Service community building in an urban area approximately 25 kilometres from Vocational Futures. The interviews took place in rooms located in a well-appointed, spacious, and quiet area in the building. I obtained demographic information regarding the leaders' roles at the start of the interviews and from the organisational website (SCHB website, 2018).

Anna was the clinical director for the MH&A division. She held a Level one position in the leadership structure (refer Figure 5, SCHB Leadership Structure) and was a member of the ELT reporting to the Chief Executive Officer for SCHB. In her role, she held the most responsibility for how services within the MH&A division were run from both a clinical and operational perspective, and worked closely with the general manager of the MH&A division in advising allocation of resources. Anna could seek advice from members of the MH&A divisional leadership team in making decisions; her support was required to ensure implementation of any new initiatives.

Jane was the professional leader for psychology. She held a Level two position in the SCHB leadership structure and was also part of the divisional leadership team for the MH&A division. Jane's role included advocating for the provision of psychological services to anyone accessing psychological services across SCHB which required her to be up to date with evidence-based practice and to ensure a competent workforce to deliver evidence-based psychological interventions. Jane reported directly to Anna.

David held a Level three position as an operations manager for one of the mental health services. David's role included responsibility for operationalising the divisional leadership team's decisions within a particular service, with a focus on policy, pathways, and processes. David reported to the general manager of MH&A division and was also part of the divisional leadership team for MH&A.

Matt held a Level four position as clinical lead for occupational therapy for the MH&A division. His role was similar to Jane's in terms of professional leadership, but he focused solely on the MH&A division, not the entire SCHB, and specifically the occupational therapy profession. Matt reported to Anna and was also a part of the divisional leadership team for MH&A.

All four leaders were of European and New Zealand European descent. All had many years of experience working across a variety of mental health services in leadership positions. Table 6 summarises the leaders' relevant details, including level of leadership, their role, and years of experience in mental health leadership.

Table 6

Leaders' Demographic Information

Name	Level of Leadership	Role	Years of Experience in Mental Health Leadership
Anna	1	Clinical Director	15
Jane	2	Professional Lead	10
David	3	Operations Manager	18
Matt	4	Clinical Lead	8

I constructed two themes relating to the delivery of the occupation-focused-CRT programme from the data gathered with the leaders. The first theme is Managing Tensions and the second is Embedding CRT. Both themes consist of subthemes which draw out the detail of the themes. The themes and subthemes are shown in Table 7.

Table 7

Leaders' Themes and Subthemes

Theme	Subthemes
Managing Tensions	Noisy end and quiet end of service provision
	Juggling competing demands
	What is in. What is out
Embedding CRT	Needing visibility
	Having a trailblazer
	Sustaining momentum

Managing Tensions

This theme was constructed from the leaders' accounts of fulfilling work roles that they perceived as complex and challenging within the mental health and addiction division. They often expressed experiences of managing multiple tensions in their roles, described as a feeling of being constantly stretched, "*we're doing the best we can, but we don't have any more to give*" (Matt). The leaders felt a moral dilemma between a personal commitment to deliver the best service they could, which included providing CRT; while managing various tensions such as risk, resources, funding, and access. "*Unless the organization can value the intervention and give staff time, the service users don't have access to it in the way that they should; you're stretching people*" (Matt).

There were three distinct tensions that required managing which make up the three subthemes. 'Quiet versus the noisy end of service provision', were words used by some of the leaders to illustrate different levels of service provision perceived as needed from the service which had to be managed. 'Juggling competing demands' conveys the difficulty the leaders experienced managing multiple demands on them to provide a service. The final tension the leaders struggled with was understanding 'what is in. What is out', regarding what aspects of service delivery came under their jurisdiction and what aspects other organisations were responsible for providing within the spectrum of mental health service provision. Each subtheme posed a barrier to the delivery of CRT.

Noisy and quiet end of service provision

The words *"noisy end of the service*" (David) described service provision for tāngata whai ora who required a rapid response and received intense input and contrasted with the "*quiet end of the service*" (David) where minimal services were provided. Tāngata whai ora deemed to be at the noisy end of the service often required acute and immediate care; whereas those considered to be at the quiet end of the service, such as tāngata whai ora with an enduring mental illness, received minimal attention from managers and leaders. The leaders felt stretched enough as it was to meet the

needs of those at the noisy end of the service let alone to address those at the quiet end through provision of services such as the occupation-focused CRT programme.

The leaders explained how they viewed both the noisy and quiet ends of service provision. The noisy end of the service was described by the leaders as the area of service provision where most of the acute work was undertaken, where the most demand and risk was. They described feeling the tension of having to distribute most of the services provision resources to the noisy end of the service. Matt described the noisy end of the service as "*They are up in arms saying we demand this, and we demand that*". Matt worked clinically alongside his leadership role and was in touch with the overwhelming pressures the service was under to meet the needs of tāngata whai ora who were seen to occupy the noisy end of the service: "*I feel like I'm constantly putting out fires all the time*" (Matt). David had another way of describing the noisy end of service provision, as a "*place where people tended to shout the loudest*". Constant services were provided to tāngata whai ora at the noisy end of the service through avenues such as home visits, talking with whānau, arranging additional supports, and repeated phone calls, to name few, to try and reduce the risk of tāngata whai ora hurting themselves or becoming acutely unwell.

Matt and David's responses reflected the immediacy and considerable risk they were managing, both to tāngata whai ora well-being and the leaders' and the organisation's reputation, with most of the service discontent coming from those at the noisy end, as David revealed: "*The more acute aspect of the service is where there's a lot of risk, where there's a lot of um, discord, where there's a lot of concerns, those sorts of things kind of sit up in the noisy end of the service*". The leaders signalled a need for a lot of service provision at the noisy end to reduce risk to the tāngata whai ora receiving services, and uphold the organisational values which are in the public domain, open for scrutiny and what complaints are measured against. As Anna pronounced, "*the values of the organisation are very much focused on patient experience, this is the promise of the DHB [District Health Board], you know, good patient experience, patient satisfaction*". Given these concerns were always at the front of the leaders' minds, it appeared necessary to prioritise the needs of those at the noisy end to mitigate any

downfalls and to be perceived as managing the service well and avoid scrutiny from their superiors and the public.

The other group of tāngata whai ora receiving services were those positioned at what was described as the quiet end of the service. Tāngata whai ora viewed at the quiet end of the service were those people on a clinician's caseload who were not acutely unwell but required follow up, maintenance, and recovery work. These tāngata whai ora placed minimal risk and minimal demand on the service. As Matt put it, they *"tend to not shout loudly*". This group of tāngata whai ora are those with an enduring mental illness, often with a diagnosis of schizophrenia "*who have negative symptoms*" (Matt). When positive symptoms are minimised and negative symptoms are present, the leaders suggested that service provision to these tāngata whai ora are rationed to the bare minimum. Matt described rationing of service provision as, "*I guess there is a sense that those service users are quiet, so let's just give them the medication and leave them alone*". The leaders felt that when only negative symptoms were present, tāngata whai ora with an EPI put little demand on staff and there was minimal risk to the organisation, "*there's not a lot of attention focussed there*", the quiet end "*often goes unnoticed*" (David). Therefore, the leaders indicated that tāngata whai ora positioned at the quiet end of the service received minimal resources to support positive outcomes for their recovery needs.

The lack of service provision to those at the quiet end of the service was accounted for in a way that suggested low expectations of improvement for tāngata whai ora with an enduring mental illness. As David disclosed

> *with mental health there's a stigma and the stigma is you've got a mental health disorder, well you're bound to be a bit impaired so we can't expect much from you. I mean that sounds gross, but actually that's often how lay people will think.*

David went on to say that those with an enduring mental illness also had low expectations of their own ability to improve. The self-imposed stigma was not just having a mental health disorder, but a perception that problems with thinking are inevitable and cannot be changed:

> *Even people with illnesses will think, well you know I have this illness I can't expect to be as crisp, or I can expect there'll be some problem with my thinking. So, I think that there is a kind of acceptance that it is just part of it rather than something that could be improved and sharpened.* (David)

What might appear to be a usable rationale for providing limited resources, such as CRT, this perspective sat uncomfortably with the leaders who acknowledged that they could be doing better for this group of tāngata whai ora:

> *They are just sitting at home watching tele, isolated but then we are kind of ignoring the fact that they are deteriorating and they're having so many losses, we have a duty to do something about that.* (Matt)

They were also aware that the lives of tāngata whai ora would improve if they were provided with the right kind of intervention.

> *Often these are the people that have been in the service for a long period of time, who could be doing better if there were the right kinds of intervention, such as CRT, but they're not necessarily creating urgency.* (David)

Given tāngata whai ora at the quiet end did not make a fuss and the risk was low, shifting resources and clinical time to this group to identify and address their needs was seen as a luxury, "*We can't get to the 'nice to have' because we are dealing with all the other problems over here, the noisy bits*" (David). The stretch of these two, contrasting ends of service provision experienced by the leaders left them feeling like they were unable to meet the needs of all who accessed their service and, therefore prioritised service provision based on risk or who was provoking the most concern. As Matt explained, "*it's a tension thing, and we are currently ignoring a huge group of people*". Due to the noisy end of the service taking up all their time and resources there was not enough time to strategically plan and operationalise services for those at the quiet end of service provision. David felt that this was "*short sighted, just focusing on one end of the service*"; yet, felt resources were already stretched to meet the needs of tāngata whai ora at the noisy end of the service where there was most risk.

The noisy versus quiet end of service provision, highlighted the tension expressed by the leaders to meet the demands and expectations of tāngata whai ora at the noisy end of the service. However, they did acknowledge that tāngata whai ora at the quiet end of the service, those with an EPI, were in services for long periods of time with unmet needs, and expressed a willingness to do better by them if they could: "*we are all just wanting to do the best for consumers*" (Jane). The concept of noisy versus quiet, conveys the constant strain the leaders experienced in responding to the demands of the noisy end, all the while feeling a moral dilemma in not committing time and resources to meet the needs of those at the quiet end. The noisy end exerted the most stretch and had the greatest pull.

Juggling competing demands

The leaders also conveyed difficulty managing the multiple demands around time, money, and resources, such as balancing a budget, all-the-while figuring out where to direct resources and simultaneously trying to prioritise interventions to support tāngata whai ora. CRT was an intervention to be considered by the leaders but was competing with the many demands the leaders were juggling.

The leaders found it difficult to be constantly responding to competing demands and keeping all the demands (like balls) in the air to prevent them from dropping. The leaders' roles were situated in the context of national directives, organisational structures, and service policies, all of which have their own set of demands: "*the mental health inquiry[2] has been a big one… to deliver interventions that make a difference and not just medication, you know*, *delivering the right intervention to the right person at the right time*" (Matt). These demands created "*opposing forces*" (Matt) such as managing findings from the recent mental health inquiry while simultaneously trying to figure out which interventions to prioritise, and needing to find time, money, and resources to deliver interventions at the same time as balancing a budget.

[2] The mental health inquiry which preceded the largest health reform in Aotearoa New Zealand due to widespread concern about the state of mental health and addiction sector. The inquiry resulted in the He Ara Oranga Report (Pathways to wellness) (New Zealand Government, 2018).

The findings from the mental health inquiry, He Ara Oranga (New Zealand Government, 2018), called for services to do better; yet, there was a sense that the leaders just did not know how to keep all the balls in the air. Matt uttered with exasperation, "*we want to do things better to make services better for service users that need them, but on the other hand, we've got no money and we're losing staff all over the place, so how do we juggle that?*" Matt described his experience of juggling competing demands as a combat or battle.

> *CRT is fighting its way through even though it's not being given the resources it needs, and I think there's a worry from a lot of the senior management team that there's too many things that are fighting through and competing for resources and we don't have resources.* (Matt)

Out of the four leaders, Anna felt there was an expectation to be able to provide a suite of interventions; yet, at the same time, was concerned that not everything could be offered "*We need to be providing a menu of options, and there are pockets of money and where do you put it, who is going to get the most benefit. that's the sort of tensions that we have*". Anna proclaimed that "*I'm a great believer in cognitive remediation therapy*" but admitted that her knowledge was limited and that "*it is still not clear in my head who it is suitable for*". The provision of CRT was one of many balls that Anna was juggling.

In her director role, Anna talked about offering levels of support as a strategy to juggle her competing demands ranging from verbal support for investigating whether something is worthwhile, through to complete backing with financial and resource support. Regarding CRT, she provided verbal support.

> *There are different levels of support. From memory, I don't think we said right, we are going to provide this across the board! I think we said let's look at a graded approach to implementing it, looking at some of the people who might need it and wanting to understand what the extent of people who might need it might be. So, I think that was the support that was provided.* (Anna)

To be able to give full support to an intervention would mean having to provide that support with resources and funding as Matt declared, "*I think verbal support is very*

easy, it's the money that's the hard bit". The lack of resources created a tension for the leaders to deliver an effective service, as directed by He Ara Oranga, but they had scarce resources to do so: "*funding is a really big barrier. Having enough people trained, having some dedicated time, um, prioritising it, um, I think all of those things are a challenge but um the biggest one's really funding*" (David). This dilemma was also spelt out clearly by Anna "*The biggest barrier would be resources, you'd need money to make it happen, you'd need staff, you'd need to train staff, you need to ensure the fidelity of something, you'd need to focus some energy onto it*". There was a sense of resignation amongst the leaders that it was just not possible to juggle all the demands, all the time, and that something must give. They were left wondering whether interventions like CRT could be offered by their division.

What is in. What is out.

The leaders felt that they were operating without a clear mandate which created a vacuum in service provision that could be filled with a multitude of options that were constantly being presented to the leadership team. They expressed needing clear direction for service provision and were left wondering whether CRT should be offered by a mental health service or by another service such as a NGO. They were also uncertain whether NGOs had the remit to provide interventions such as CRT. With limited resources to meet the demands of tāngata whai ora accessing their services, the leaders were left grappling with having to decide what is in and what is out, in terms of what they could and could not provide. The leaders felt they were having to prioritise without a clear mandate to help them decide.

> *It's unclear from a national directive how much sits in the mental health arena, how much sits with other agencies…. does CRT sit in several different places and sectors? I don't know what the possibilities for that are.* (David)

Deciding what is in and what is out was difficult without a clear directive. The lack of clarity from a national strategic perspective created blurred boundaries and tensions around what they should or could be providing and leaders were questioning if they had the authority or mandate to choose. The vacuum of uncertainty left them

pondering what responsibilities belonged with them and what would fit best within the NGO sectors.

Matt provided, with disappointment, a perspective around where CRT might be delivered.

> *The DHB mental health services seem to be moving towards a more of assessment/medication because that's all we are going to have time for, I think it's probably going to find more support in the NGO sector eventually than in the DHB mental health service.* (Matt)

Anna was more pragmatic in her view but still wondered what the service could offer: "*we can't do everything, but we can recognise the need, advocate for it, but whether we provide it or not, that's a different question*" (Anna).

Operating without a clear mandate, and not knowing what is in and what is out, made it difficult for the leaders to utilise the skills and expertise of their specialist workforce. As Matt frustratingly expressed, *"clinicians are wanting to work at top of scope doing the intervention and therapy that you're trained to do rather than key working-type activities such as monitoring and dishing out medications*". The leaders recognised the importance of using a specialist workforce to deliver CRT effectively, "*it's an intervention where there will be expert practitioners who will deliver it in a way that it will be much more um, purist and much more successful if you like*" (David). They also had thoughts on which discipline had the specialist skills: "*the most obvious disciplines being occupational therapist and psychologist as they have specific training in cognitive functioning*" (Jane). Despite wanting to utilise a specialist workforce, they questioned whether they had the authority to decide whether CRT fitted within specialist mental health services and who was making the decisions about how the mental health sector was being responsive to the needs of their communities.

Given the uncertainty around what is in and what is out, it was interesting to hear the leaders questioning ways the uncertainty could be negotiated. Suggestions by Jane and David were to combine the NGOs and the mental health workforce in the district health boards to deliver the interventions together. *"Working more with NGOs, that is where the interventions need to be focused*" (David). "*I can see potential to have some*

other professional groups involved and working together with community support workers and peer support workers" (Jane). Although this sounded good in theory, the leaders were uncertain around whether the NGO sector agreed, were equipped, and funded to do this work now or in the future. With no clear directive, they were left with questions.

Operating without a clear mandate created a space where multiple options were presented to the leaders, constantly creating tensions around what they could and could not do. Given the uncertainty and no clear direction, it was difficult to commit to supporting CRT which posed a barrier to CRT delivery; leaving CRT, to some extent, in limbo.

The theme, Managing Tensions, highlights the tug of war the leaders experienced when considering the delivery of CRT. Attending to the noisy end of service provision, juggling competing demands with limited resources, and uncertainty around what is in and what is out, posed obstacles for leaders when considering delivery of CRT.

Embedding CRT

The theme, Embedding CRT, was constructed from the leaders' knowledge through experience around what was needed to help get CRT firmly established as an integral part of the service. "CRT *needs to grow … we need to develop this…. we need plans*" (David). It was apparent that there was a genuine and informed desire to embed CRT into services. "*I am on board with CRT*" (Matt); "*hearing about the benefits of CRT has clinched it for me*" (David). The leaders had given much consideration about the elements required to embed CRT into services, help it grow, and give CRT traction. These elements were constructed into the following three subthemes offering potential facilitators to embed the delivery of CRT. 'Needing Visibility' conveyed the idea that CRT lacked visibility and was not in the forefront of the leaders' minds. 'Having a Trail Blazer' described the type of person the leaders wanted to lead the way in getting CRT embedded into existing and established services. The third subtheme, 'Sustaining Momentum', was a key factor to the leaders for embedding CRT. The leaders expressed that CRT needed to keep moving forward within services as services moved forward.

Needing visibility

The leaders were of the view that all staff, including themselves, needed to be constantly reminded what CRT is, what benefits it creates, and what change it will bring about, as David noted, "*its not on my radar*". Therefore, the leaders felt that CRT needed to be more visible by having a good reputation and hold a place of significance and importance. The leaders indicated that CRT lacked visibility for staff, managers, and even those at a ministerial level who set the strategic vision for mental health services.

> *Part of the problem is it's under recognised, it's really not in people's thinking and because people aren't aware of it and don't see it as important um it's not been a focus. So, it's easy for people to say well that's not important, that's not what we do, and um miss the boat entirely.* (David)

On a personal level, CRT had a good reputation amongst leaders based on their knowledge of the CRT pilot. The leaders were on board with the intervention, and they had "*clicked the ticket*" as Jane put it. However, the leaders felt CRT needed more visibility, similar to other therapies offered in mental health, "*I know it's relatively new compared to other therapies like CBT so there is not much known about it*" (Anna). Most of the information the leaders had about CRT came from the initial pilot study and there had not been a lot of information to keep CRT visible since then. As Matt articulated, *"since the pilot we're not getting the stories, there's not the information coming through about service users having good outcomes*".

The leaders were forthcoming with ideas they thought would "*raise the profile*" (David) and make CRT more visible. One suggestion from David was to mount a "*marketing campaign to get the message across*". Marketing to raise the profile of CRT was seen as a way of building resonance, clarity, and trust for the intervention. Getting the message out into the mental health sector that CRT is beneficial, was seen as a useful way of getting people talking about CRT and integrating CRT into the thoughts and language of the clinicians that this is what we do now. The more poeple hear the messaging that CRT is beneficial, the more people will wonder what it is and what is being done about it. The leaders expressed that they had so much to think about in

their day-to-day work, that a marketing campaign would keep CRT visible to them because the messaging that CRT is beneficial would permeate through the services. Mark suggested that a successful marketing campaign "*involves others to carry the message, that message will start flowing through the organisation get a wider audience and start to embed CRT*". The suggestion of a marketing campaign seemed to be a key idea to getting it on staff, managers', and leaders' radar, making CRT more visible "we *will start to see more service users getting referred to do it, and once we get more referrals, managers are more likely to say, yes, I'll make space for it*" (Matt). The leaders expressed an expectation that someone other than themselves needed to raise the profile, present evidence, and raise the demand before they were ready to commit to resources.

There were suggestions from the leaders on how to take action to promote CRT and get the message out that CRT is evidence-based and beneficial. Suggestions included doing presentations and showcasing the value of CRT in various forums, including team meetings "*getting on the agenda here, getting on the agenda there,* and *using the organisations magazines and sending reports to the Director of Allied Health*" (Matt). Another suggestion by David was pressing CRT into service structures "*a good way to raise the profile is to get it into service plans and create an implementation plan around it*". A good implementation plan would provide opportunity to assess the needed resources as well as provide a higher level of visibility. What was clear from the leaders' perspective was that for CRT to have a chance of being embedded into mental health services it needed to be more visible; and to achieve visibility, a key person was needed to act as a trailblazer.

Having a trailblazer

The leaders talked about the importance of having a key person with dedicated project leadership time. "*CRT is in its infancy*" and needs a "*dedicated project lead*" (Anna). Moreover, they described some of the key personal attributes required to pioneer CRT into services. They felt it was important to have someone with a passion for CRT to lead the project. They described having someone who was willing to go first and carve the path. The leaders felt that embedding CRT required a leader with dedicated time. Moreover, it required a leader with passion, resilience, determination, grit, and

vision—attributes of a trailblazer. David vividly described an encounter with a therapist when he first heard about CRT after the pilot was completed which resonated with him,

> *I think it's always that thing tapping into people's passions, and you know she was very passionate about this. When she spoke about CRT it came alive so that's absolutely key in terms of influencing people and it's certainly influenced me.* (David)

It seemed from David's account that a trailblazer with a passion for CRT was able to bring a certain energy to CRT, breathe life into the intervention, and make it real for others. *"Hearing her talk about CRT and, what it could offer and the work that they have been doing, um, I got pretty excited thinking oh my goodness I can see the absolute benefit*" (David).

Passion was one key attribute outlined. Other key attributes of a trailblazer described by Matt were resilience, grit, and determination due to the challenges and pushback when introducing something new into services "*when fronting a project, you get really knocked around and a lot of people choose to challenge you because they are uninformed*". Matt acknowledged that knockbacks can be "*really exhausting and frustrating and at times you can feel quite defeated*". Hence, it seemed a necessary personal attribute for a trailblazer to be able to withstand criticism, knockbacks, and challenges. The leaders expressed that they "*value people who put themselves out there*" and do a "*good job*" (Matt).

A trailblazer forges a new path and can take people along with them. Therefore, another key attribute the leaders identified was having a flexible communication style and the skill of knowing the audience.

> *Being able to talk at different levels like at an academic level and a level that makes it so simple that everyone can understand it. There's a real art to being able to do all of those things and everything in between, the conversations with managers are different than your conversations with doctors that are different with your conversations with clinicians and occupational therapists.* (Matt)

It seemed important to the leaders that a trailblazer could flexibly tailor their message to various people and groups to address "*what's in it for them*" and "*tell them what they need to hear*" (Jane). They needed to be able to shape their language and messages to connect with the various people. Some people may be driven by hearing about outcomes for tāngata whai ora; for others, such as managers, they may be "*thinking with their fiscal hat on and thinking how can we save money here?*" (David). For some, it may be about the experience and requirements of delivering CRT. Being able to deliver a message in a way that responded to the situation, was seen as a necessary skill for someone driving and leading the delivery of CRT. Matt also wondered about the support and structures that someone leading a CRT programme might need from the organisation and whether there needs to be more than one person and draw on the skills of service users "*maybe a small group of people is needed*".

The leaders suggested that a dedicated project lead with dedicated project time was necessary to get CRT embedded into services. They also suggested that the best project lead was someone who held the attributes of a trailblazer.

Sustaining momentum

Sustaining momentum was important to leaders to keep CRT connected to the services as they moved forward. The leaders felt that CRT needed to be constantly "*refreshed*" and "*reinvigorated*" (David) to sustain energy and keep driving forward at a steady pace and in line with services to reduce the risk of CRT lagging and drifting away. Often new interventions get introduced but the impetus is lost, and the intervention does not get anchored into services. Collectively, the leaders had three suggestions for sustaining momentum to keep CRT moving forward. These were implementation plans and frameworks, linking CRT to broader national directives, and constantly refreshing and energising CRT.

David and Anna were both advocates for integrating development frameworks and "*business cases*" (Anna) as a way of keeping momentum. "*I think implementation plans are fantastic because you're looking to see how we can we grow this; how can we develop this? And I think doing it um in collaboration with managers and setting the*

framework" (David). Without a structure to embed CRT into services, the leaders saw the possibility of the programme becoming and remaining someone's pet hobby, as Anna expressed "*If it's not structured, if it's not done in the right way it will just remain somebodies' interest and yes, you are interested in it, so you want to do it, but it's not sustainable*". The leaders' perspective indicates that it takes interest to get something started, but that structure is needed to set the pace and keep it growing.

Matt felt that there was an opportunity to latch onto what was happening in the big picture as a means to sustain momentum "*There's a huge demand from the Ministry of Social Development for employment as an outcome, so that's something we can measure, employment and quality of life, that's a biggy I think*". Matt appeared strategic in his thinking by linking CRT into Ministry-level drivers to get attention and resources by demonstrating good employment and quality of life outcomes for tāngata whai ora who traditionally have poor outcomes in these areas.

The need to constantly "*refresh*" (Jane) and "*re-invigorate*" (David) CRT was an important aspect to Jane and David for sustaining momentum. New innovations can become stale over time and constantly need a "*refresh resurgence*" (Jane). How CRT is at the early stages of delivering it in services, is not how CRT will be 2, 5, or even 10 years down the track; and, therefore, needs stimulus and drive to keep CRT up to date. David used the words needing a "*fresh coat of paint*" *to* illustrate the point that CRT needs regular refreshing to sustain momentum and keep CRT embedded. Having turnover of "*new players*" (David), was one way of injecting new inspiration, energy, and driving force. Insights from the leaders suggested that to embed CRT into services requires 1) CRT to be visible with constant messaging around the benefits of CRT; 2) a leader with attributes of a trailblazer to share the messaging; and 3) the ability to sustain momentum so CRT has the impetus to move into the future within services.

Summary

This chapter consisted of two main themes Managing Tensions and Embedding CRT which shed light on the complexities the leaders needed to consider and the tensions they needed to manage when making decisions around supporting interventions such as the occupation-focused CRT programme. Organisational values influenced the

leaders' tension relating to service delivery and distribution of resources. The leaders felt they needed to put most resources towards acute needs of people accessing the services all the while knowing that people with an enduring psychotic illness were being underserved. The leaders also expressed the tension experienced by juggling competing demands, and uncertainty around what they were to provide or what may be provided by other mental health providers. Countering this, the leaders also acknowledged the benefits of delivering the occupation-focused CRT programme and expressed what was needed, from their perspective, to embed the programme into their services. The programme needed to be visible. Information about the programme was not reaching the leaders. Subsequently at a wider level, CRT was not on the leaders' radar and, therefore, was not a priority of the suite of interventions requiring their support. Programme delivery required a designated leader who had a passion for the programme to roll out the programme, and a clear implementation plan that would sustain momentum. The following chapter consists of the perspectives of the therapists regarding delivering the occupation-focused CRT programme to tāngata whai ora at Vocational Futures.

Chapter Seven: Therapists' Experiences of Delivering the Programme

I interviewed five occupational therapists, Sarah, Leah, Pam, Melanie, and Michelle. Occupational therapists were the only clinicians delivering the occupation-focused CRT programme at Vocational Futures at the time the research was undertaken. All the occupational therapists were of New Zealand European or New Zealand Asian descent and their occupational therapy experience ranged from new graduate status (Leah) to 20 plus years (Pam and Michelle). Melanie, Michelle, and Pam had experience working within vocational rehabilitation settings. Michelle was the only occupational therapist at Vocational Futures that had been involved in some part in the initial pilot programme and, therefore, had some experience of an occupation-focused CRT programme. Other than that, the therapists were all relatively new to CRT. Throughout the remainder of this case study report, the occupational therapists who took part in this study are referred to as 'therapists' to make the distinction between the occupational therapists who have taken part in the study from those that have not. Table 8 summarises the therapists' years of experience as occupational therapists and their years of experience working in vocational rehabilitation settings.

Table 8

Therapists' Demographic Information

Name	Years of experience as an occupational therapist	Years of experience working in vocational rehabilitation
Sarah	8	Nil
Leah	New Graduate	Nil
Pam,	20 plus	20 plus
Melanie	5	2
Michelle	20 plus	20 plus

The therapists' perspective of the delivery of an occupation-focused CRT programme drew from two different data sets which were analysed separately. The first data set discussed is from the therapists' interviews, followed by the second data set which comes from four tāngata whai ora CRT reports written by three therapists. Except for one, the therapists who were interviewed are not the same as the therapists who

wrote the tāngata whai ora CRT reports; however, perspectives on the CRT report from those interviewed are woven into this section.

From the interview data I constructed four themes 'Splicing Occupation and CRT' 'Taking the Lead', 'Strong Relationships: Essential to Delivery', and 'Enhancing Future Delivery'. Three of the themes also contain subthemes as shown in Table 9.

Table 9

Therapists' Themes and Subthemes from the Interviews

Theme	Subtheme
Splicing Occupation and CRT	Learning to Splice
	Doing the Splicing
Taking the Lead	
Strong Relationships: Essential to Delivery	Fostering a Relationship Between Person and Programme
	Working in Tandem with the Manager
	Pulling Together as a Group of Therapists
Enhancing Future Delivery	Responding to Te Tiriti o Waitangi
	Working to Include Whānau
	Building Connections Beyond the Programme

Throughout the interviews the therapists often referred to tāngata whai ora as 'client' or 'service user'. Throughout this case study, I refer to client or service user as tāngata whai ora, but I have kept the direct quotes and terminology used by the therapist.

Splicing Occupation and CRT

'Splicing Occupation and CRT' captures the therapists' accounts of weaving their occupational therapy knowledge with new knowledge about CRT to deliver an integrated programme, "*I think that is something that comes across really strongly in the programme is linking CRT with an occupation that's meaningful to them* [Tāngata whai ora]" (Melanie). Splicing requires the intertwining of two or more strands to strengthen and create a unified whole. The therapists conveyed that splicing occupation and CRT together bolstered the programme and made it more effective.

> *Well, I guess from an OT point of view I would see it as, it's all well and good to have good concentration but if you don't use it what's the point. I know that that is not a very good example, but do you get my point? Yeah, it's more about using CRT in a meaningful way for the client*. (Michelle)

Two subthemes make up the overall theme of 'Splicing Occupation and CRT': 'Learning to splice' and 'Doing the splicing'. Learning to splice describes the therapists' experience of the formal training they received so they could deliver an occupation-focused CRT programme. 'Doing the splicing' captures how the therapists wove their existing knowledge of occupation with their newfound knowledge of CRT when they delivered the programme at Vocational Futures.

Learning to splice

'Learning to splice' describes how the therapists needed to gain knowledge about CRT and then learnt to link CRT knowledge with their existing knowledge about occupation. The therapists had a good understanding of occupation and the interconnection between the person, occupation, and the environment. However, they needed to learn CRT, then learn to weave the core tenets of CRT and the core tenets of occupational therapy knowledge together, as Melanie explained "*what I liked about it* [the training] *was that I could see the occupational focus of it, um and the emphasis on drawing things back to how clients can use that, CRT, in their meaningful occupations*".

The five therapists interviewed attended various forms of CRT training. Michelle and Sarah attended the 2-day in person training in June 2017 and Leah attended in February 2018. Sarah and Leah also did the online training when it was introduced in August 2018 (Refer to Figure 9 p. 137 showing the training timelines; Table 5, p. 137 showing the different types of training). Sarah, Leah, and Michelle were first to deliver CRT at Vocational Futures with the first cohort of tāngata whai ora commencing participation in the April 2018 programme. Pam and Melanie undertook the online training with the 1-day, in-person follow-up training. Pam and Melanie, once trained, joined Sarah, Leah, and Michelle in delivering the programme to the second cohort of tāngata whai ora. The trainings attended by the therapists are summarised in Table 10**.**

Table 10

Training Modalities Attended by Therapists

2-days in person training	20-hour online training	1-day in person follow up training
Michelle		
Sarah	Sarah	
Leah	Leah	
	Pam	Pam
	Melanie	Melanie

Michelle had the longest exposure to the delivery of the CRT programme. She was part of the pilot, attended the first training, and was involved in the two programmes that were undertaken over the course of the case study. However, her training was not to the same extent as the other four therapists. Michelle appeared to have more involvement in the 'Thinking Skills for Mahi' group, being the main facilitator rather than actually working one-to-one in the delivery of the computer aspect of the programme. Having less training than the others may have shaped her confidence in delivering the actual computer aspect of the programme.

Despite the variations in training that the therapists experienced, coming to understand CRT happened for them regardless of the modality. Sarah voiced that "*I found the online training quite good for the theory behind it all*" but also stated "*the first training I did was the 2-day [in-house/face to face] training*. *It broke down all this information of learning what cognitive remediation therapy is*" (Sarah). Similarly, Leah found she learnt the key principles and techniques that underpin delivery of CRT from both the online training and in house face to face 2-day trainings.

> *They are both quite beneficial because it really gives you more in-depth understanding of, of how um, you should implement the principles setting up the client to succeed and really, incorporating all those different techniques, like the scaffolding, errorless learning, positive reinforcement.* (Leah)

Receiving CRT training helped the therapists gain a deep understanding of the cognitive difficulties that tāngata whai ora with an EPI can experience. Leah and Pam

depicted this understanding as "*it puts you in the shoes of a client, what it's actually like*" (Pam) and "*it's really given me that insight as to why it's necessary to have CRT*" (Leah). The therapists seemed grateful for learning these insights.

> *I was aware of the cognitive difficulties that they had, but I found doing the training it really educated me a lot more, I have more understanding now about cognition and metacognition, so I feel that my understanding of the challenges that they have are much clearer now. I feel that I'm able to um provide clients with a higher quality support so I'm really glad to have the opportunity to have done the training and to be a part of CRT.* (Melanie)

Gaining knowledge of CRT occurred regardless of the training modality. However, learning to weave together occupation and CRT and deliver them in concert as strands of a whole programme, only occurred during the face-to-face training. As Sarah revealed, "*it kind of put it all in perspective of this is how and what it would look like if you were to implement CRT with occupation, which following that I obviously did get it up and running*". The other therapists also thought that the online training on its own would not have provided them with the knowledge needed to deliver the programme as a whole, "*the in person training was I think quite crucial in just kind of consolidating all of those learnings from online training*" (Melanie), and "*it did help bring it all together and just listen to other peoples' experience as well, it was brilliant. I think that's essential*" (Pam).

Overall, the therapists expressed that the training was an enjoyable experience. Leah expressed with enthusiasm *"I was kind of like oh wow this is so exciting learning about this whole CRT and what it can do to the clients and the benefits of it*". Pam thoughtfully stated that "*it's really good*". Melanie disclosed in a reflective manner that "*it was a really positive experience*" and Sarah just stated that she "*really enjoyed it and got a lot out of it*". However, the therapists did express some concerns about delivering the programme on completion of the training.

> *I was a bit anxious about starting out with that first clients, and the reality of just doing it. I was aware that when I finished the training that I wanted to start doing the practical quite soon afterwards, before I forgot what I had learnt, or kind of lost the enthusiasm, and*

> *momentum that I got from the training. I feel that if I had of left it too long that I might not have had the confidence to do it.* (Melanie)

The therapists were confident with delivering the practical, occupation-focused aspect of the programme, but delivering a blend of occupational therapy and CRT was "*a little bit daunting*" (Melanie) as there was a lot to learn with CRT. "*It wasn't too long until I got nervous that I think I've forgotten what I've learnt and then put it off because I wasn't confident with it*" (Sarah). To counter such qualms, Sarah felt the time from completing the training to getting started needed to be short "*I think 1 month would be within that timeframe most ideal to get started".* One month provided enough time to "*consolidate my learning and process what I had learnt and think of how I was to implement it*" (Sarah). Once underway with delivering the programme nerves dissipated, as Leah asserted, "*once I started doing it then I felt more confident*". Overall, the therapists conveyed that being trained in CRT added a further strand to their occupational therapy practice, "*while some of the core principles of CRT might need learning I think it's a good opportunity for the occupational therapist to develop cognitive rehab skills*" (Sarah).

Doing the splicing

The second subtheme, 'Doing the splicing', captures the therapists' view on what it meant to them to deliver the CRT programme while weaving in their occupational therapy knowledge. Having received the training, the therapists described four ways that they actively interwove occupation and CRT throughout the delivery of the programme: 1) identifying tāngata whai ora suitable for the programme, such as those whose occupations would improve if cognitive difficulties were addressed; 2) goal setting based on personalised occupations; 3) integrating occupation into the CRT sessions; and 4) the CRT programme became a meaningful occupation for tāngata whai ora.

The interweaving process began with recognition of occupational needs. The therapists explained that tāngata whai ora came to be considered for the programme because they were struggling with their work tasks at Vocational Futures and their difficulties were surmised as involving cognitive limitations. As Michele explained

"*service users who had schizophrenia who we felt within our service were not possibly completing their tasks that they had to do*. *We just thought well, maybe building up attention and concentration might really help with completing those task*". Moreover, having a willingness to seek employment and the presence of formalised cognitive issues was the benchmark, "*The criteria is those who have identified that they really want to find work in the community, who are struggling with cognitive issues*" (Michelle). Tāngata whai ora at Vocational Futures were approached by therapists and invited onto the programme.

> *My understanding is that the therapists put forward clients that they feel would be a good fit for the programme and that the programme would support them in addressing cognitive difficulties which are maybe being a barrier for them for getting or maintaining work.* (Melanie)

The therapists spent time with tāngata whai ora explaining to them how the programme would help with the occupations that were important to them and needed improving. Melanie explained how the occupation aspect of the programme prompted motivation to attend "*because they could see how it was going to be benefiting them, I really do think it meets their needs, and I think just having that real relevance is a good way of getting their buy in as well*".

Once tāngata whai ora were identified as having needs that fitted with the programme, the therapists utilised occupational therapy assessments "*to support the clients to identify meaningful goals*" (Leah), which were also "*useful measures in terms of capturing their occupations and real-life stuff*" (Michelle). The therapists found that the occupational therapy assessments were vital because, as Michelle explained, it was necessary to "*have a client's perspective of what their goals are and what's important to them out of the programme*". Sarah described how bringing an occupational lens to the assessment process helped set broad goals beyond the here and now, "*the OT's perspective of looking forward into the clients, you know future, like what are their goals beyond Vocational Futures and growing that rehab independence, it fits really nice with CRT*". Utilising an occupational therapy assessment such as the COPM (Law et al., 2014) was a useful tool for helping tāngata whai ora to understand the link between their occupations and CRT. "*I think COPM is quite great because it outlines,*

what they perceive to be quite um, important for them and their concerns and then just really linking it to cognition" (Leah). However, as Leah revealed, weaving occupation together with CRT required conscious effort on the part of the therapists, "*I had to really focus on what were the client's goals in the first place and really try to link that with the cognitive remediation therapy*".

Commencing delivery of the programme by identifying tāngata whai ora occupational goals gave the therapists direction when delivering the programme because the occupational goals were "*always in the back of our minds*" (Michelle). Binding cognitive strategies to the real-world context appeared a natural step.

> *It's so occupationally based, and I think we really understand those transfer of those skills to everyday situations, we keep bringing it back to the real practical doing you know their aspiration to work even if they're not feeling ready at that stage but at some stage you know they want to work or study.* (Pam)

Linking learnt cognitive skills and strategies to meaningful occupations when running the individual and social skills group sessions was a concept that the therapists thought was easily understood by tāngata whai ora. Melanie stated that "*both the clients that I've worked with, were able to really grasp the concept of transferring those learnt skills into real life occupations*" and, therefore, "*apply those learnings for when they needed it in real life*". Consistent communication during the sessions helped tāngata whai ora to consolidate the link throughout each session, "*it was just something that we talked about regularly*" (Melanie). Leah expanded on how they communicated in a session,

> *It's also really focussing on what are the cognitive strategies that they're using or that they've chose before a task and reminding them or prompting them to use it during the task and then after that reflect on what went well and generalising the cognitive strategy into their everyday life.* (Leah)

Following sessions, the therapists continued communication with tāngata whai ora about the links between CRT and their occupations, "*So we did discuss how they might do that in the coming week, and then a check in again at the beginning of the next session to see whether there was any transference of skills in that week*" (Melanie).

Communication about the intertwining of occupation with CRT was not only facilitated by the therapists but was a two-way street. Melanie provided an example, "*One of the guys began catching the train out to see his family, and he talked quite in depth about how he was using the skills that he learnt in our session to this real-life situation*".

The therapists thought the occupation-focused CRT programme resonated with tāngata whai ora because the programme itself became a meaningful occupation. "*They actually found that they really enjoyed being a part of the programme because it gave them something meaningful to do, you know just the activity of actually doing the programme was really enjoyable for them*" (Sarah). Melanie shared her perspective that participation in the programme as a meaningful occupation held deep, personal significance for tāngata whai ora, going beyond cognition and function, "*he enjoyed it so much and that did appear to lift him and lift his concentration*, *he loved it, his self-esteem was definitely greater he definitely improved, just seemed to become brighter and more alert*".

Similarly, the interconnectedness between occupation and CRT struck a chord with the therapists on a personal level, "*it really resonated with me*" (Michelle) and "*I'm for anything that is going to be client centred and supporting clients to be independent and to live meaningful lives, and I feel that's what this programme can do*" (Melanie). Delivery of the programme was something the therapists also expressed enjoying, "*I feel enthusiastic about doing that, I really enjoyed my involvement*" (Michelle). Melanie lit up when she explained how much she enjoyed the connection with tāngata whai ora while delivering the programme, "*it would be cool, I would be working alongside them then we would discuss the strategy just to bring it into real life, like talk about how they would use those strategies in their work*" (Melanie). There was a sense that the therapists and the tāngata whai ora were engaging in a meaningful occupation together.

> *It's fun for me just the whole aspects of role modelling how to complete a task with a client, and you know there's different tasks, so it's never, it's not boring even though the client does mass practice. But they can always choose different kinds of strategies to try, and the difficulty increases. So that's fun, like interactive and also problem solving with the client.* (Leah)

Pam and Michelle, who had been practising as occupational therapists for many years, were inspired by their involvement in the programme. Michelle viewed her participation in the programme as a way to extend herself and her occupational therapy practice, "*for me it personally provided an opportunity to do something different, I thought yeah this is really great. This is something that I am really, really interested in, in developing skills*". Pam made a strong connection between her work in vocational rehabilitation and her work as an occupational therapist and CRT, "*there's a direct correlation with my job and it's so you know occupationally, and OT focussed and yeah now I see it absolutely having a yeah really important part of my role*". Having a focus on occupation, orientated the therapists to CRT and provided guidance in delivering the programme: "*I think it aligns really nicely with occupational therapy. I think having, you know, the functional outcomes for our clients it obviously fits nicely with occupational therapy. It fits into our OT framework, with assessment and intervention*" (Sarah).

Taking the Lead

The second theme, 'Taking the Lead', was constructed from the therapists' perceived lack of guidance and support from SCHB Level one to four leadership team to deliver the programme. A perceived gap in leadership prompted the actions of one of the therapists at Vocational Futures to put herself forward and work with the Vocational Futures' team manager to get the programme running.

The therapists wanted the existing SCHB leadership team to put in place leadership support for delivering the programme on realising its potential. However, they suspected that the SCHB leadership were not fully behind supporting the programme because delivering the programme was seen as "*taking a while to get going*" (Michelle). The therapists also wondered if the leaders had concerns over the amount of clinicians' time required to run the programme. As Melanie interpreted, "*I would hope that it would feature high up in service priorities, because there are so many benefits in it for our clients. My concerns are that it may not because of the time it demands*" (Melanie). Finances were a further reason for a perceived lack of leadership support, "*it's always a stretch for resources*" (Michelle). The void created by limited

leadership in delivering the programme meant therapists had to make decisions and solve problems as they encountered them, all the while feeling the need for guidance.

Sarah noticed this gap and decided to take charge and get the programme going, despite not being in a designated leadership position. Having Sarah guide the way was valued by the other therapists at Vocational Futures. "*I mean I try and nut it out myself as well as I could and then if I needed help, I'd go to Sarah*" (Pam). Sarah intuitively knew the programme required leadership for delivery and decided to take the reins, "*when I started there, they were in the initial stages of getting it up and running, so I took it on board*" (Sarah). I asked Sarah why she decided to take the lead and what qualities she thought she brought. She was reluctant to respond other than saying she was passionate about the occupation-focused CRT programme, and it was a good opportunity for her to grow her leadership skills. However, she also demonstrated a certain tenacity that seemed necessary.

> *I think I can be quite committed to things, so I'm not just going to, you know have the first hurdle and be like we have no computer access that's the end of CRT for us for now, like I'm quite committed to it and just problem solving the barriers we do have and try and meet with the manager and discuss ways about how we can support the therapist to deliver it or have time.* (Sarah)

Sarah did have support from her team manager to "*get things rolling*" (Sarah). An important decision made by the team manager, that Sarah found really valuable, was giving her designated time to work on getting the programme underway. "*Following training, we came back to Vocational Futures to deliver the therapy, so I worked with Amberlea* [team manager] *where I had designated time initially to get it up and running which was really helpful*" (Sarah). Having "*specific time when other things didn't get in the way*" (Sarah) appeared to provide the necessary space to start planning delivery and "*kicked things off*" (Sarah). The designated leadership time provided Sarah with the opportunity to come up with ways to address the practical implications of actually doing the programme. She said "*that time helped me organise. I put together some resources, and looked at issues we find challenging*".

There were also practical leadership actions involved in getting the programme embedded into organisational processes and documents such as "*keeping it on the agenda in key meetings I think, and having regular catch up with the OTs so it doesn't fall off their radar… I know it's in our 2017 to 2020 specialist mental health and addictions plan*" (Sarah). Leadership meant constant communication about the programme. Michelle stated that "*we discuss it in our policy meeting*" and Sarah detailed how she kept communication rolling:

> *Every month I write a report for clinical governance about what is happening for the OT department so keeping it on that agenda as well, so clinical governance is aware that we are still running CRT, who our therapists are and things like that. So, continue to do that for sure, I don't want it to fall off the agenda.* (Sarah)

By continuously discussing the programme in various forums, Sarah was able to advocate for resources. For instance, Sarah outlined that, "[The programme] *has been brought up at clinical governance around resources and that is how we have got access to additional computers*". Sarah also took the opportunity to highlight the programme's successes, "*I fed back to our clinical governance, the benefits of what the CRT programme does for our clients*". The therapists at Vocational Futures described actions taken that were deemed necessary to embed CRT by the leaders who were interviewed in the previous chapter. It appears that these actions remained at service level and did not reach the upper level leaders' radar.

In being at the forefront of delivery, Sarah also developed new service structures that supported programme delivery, including an occupation-focused CRT supervision group. The supervision group served multiple purposes including offering reassurance, "*I can build confidence*" (Leah) and collaboration with staff who were not trained "*which helped foster their interest in CRT*" (Sarah), and problem solving and celebrating achievements, which provided "*a good opportunity to discuss challenges and successes*" (Melanie). Additionally, Sarah explained that supervision offered an opportunity for skill development, "*attending supervision kept their skills up to date, it was really good to just remind people about what was covered in the training, to keep it rolling*". Sarah utilised the group supervision forum to create an action plan: "*things can be put off if you don't have your start date and you're ready to go. We set dates*

and tasks and who was responsible for completing those tasks" (Sarah). Sarah also used the group supervision structure to initiate team accountability.

> *We had a time frame, by this day you will have discussed and identified within the team a couple of new clients and so break it down into a time frame when we would like to have things complete around pre-assessments and post-assessments, so that gave us a bit of a framework to work around and so having the monthly supervisions were making sure we were on track with that time frame.* (Sarah)

Similar to sustaining momentum, expressed by the leaders, Sarah realised that to "*keep the programme rolling*" others who had a passion for the programme needed to be nurtured and grown for continuity.

> *I know that there are one or two key therapists who are really passionate about it, so maybe get them involved more in meetings and providing supervision and support to other therapists so they could easily step in if I was to leave.* (Sarah)

Sarah was viewed by the other therapists as someone who demonstrated personal qualities required when someone is leading the way. These qualities included leading by example, being pro-active, and collaborating with the necessary tāngata whai ora. Consequently, the other therapists would often be "*checking in with Sarah*" (Pam) and viewed her as a support to "*discuss any issues that they are having*" (Leah) and to help bolster their confidence. Melanie spoke with high regard of Sarah when providing an example of her leadership:

> *Sarah was really supportive and approachable. She actually came [onsite] and helped me get set up for the first time and then I sat in on a session with her with one of the clients that we were doing together. So just been able to observe that being done, what that session might look like when I do it with that client was really helpful, um and then as well as always knowing that I could contact her with questions um, as they arose which I did, and she was really helpful in remedying them with me.* (Melanie)

Sarah's willingness to take the lead in delivering the programme meant that she was viewed as a valuable resource and an important component that was integrated into the delivery of the programme. As Leah aptly pronounced "*we rely on Sarah*".

Strong Relationships Essential to Delivery

The third theme, 'Strong Relationships: Essential to Delivery', was constructed from the therapists' experience of crucial relationships that were intentionally formed but were surprising in how mutually reinforcing they were in delivering the programme. For example, the team allegiance was proudly explained by Pam as "*we're all working together yeah, that commitment as a service to deliver CRT, it's quite exceptional really*". There were three key relationships that the therapists identified: 1) the relationship between tāngata whai ora and the programme which was nurtured by the therapists; 2) the relationship between the therapists and their team manager; and 3) the relationships amongst the therapists. These three pivotal relationships are constructed into three subthemes. The first subtheme, 'Fostering a relationship between person and programme', describes how the therapist promoted a mutual commitment between themselves and tāngata whai ora that stimulated a loyalty to engage in the programme and saw it through to the end. The second subtheme, 'Working in tandem with the team manager', captures a solid unity between the manager and the therapists to grow skills, resources, and knowledge; with everyone willing to contribute. The third subtheme, 'Pulling together as a team', describes how the therapists worked as trusted allies to manage the additional time the programme required.

Fostering a relationship between person and programme

Attendance to and delivery of the programme required a significant commitment from both tāngata whai ora and therapists. The therapists conveyed that a connection between tāngata whai ora and the occupation-focused CRT programme was created because the therapists demonstrated their own dedication and sincerity to delivering the programme.

> *So, they had some really intensive therapy, which you don't see often these days. It felt like a real privilege to be able to offer these clients um, two to three sessions a week. So, I think that improved their commitment to CRT as well, because of this time being invested not just by themselves but by us as well.* (Pam)

Another mechanism the therapists found useful to nurture the relationship between tāngata whai ora and the programme was by providing concrete feedback via the occupational performance assessment. "*The COPM provided tangible evidence of improvement, it was great to be able to show that because that gave some hard evidence for all that time and effort put in*" (Pam). Furthermore, providing relevant feedback to tāngata whai ora was important to the therapists, as Pam conveyed, "*well, it's outcomes on work and study, those are the real, the best evidence, isn't it, that you can give at the end of the day*".

The therapists concluded that tāngata whai ora developed a bond with the programme that facilitated a commitment to seeing it through. Leah described how she came to this conclusion, "*I think they were quite engaged because all the clients that started, none of them um, decided to quit. The clients participated from start to finish no one has decided to back out*" (Leah). Michelle came to her conclusion due to tāngata whai ora engagement with the social skills group: "*16 weeks with the group, that's quite a big commitment. Most service users attended all the groups, and nobody dropped out and they were really engaged*" (Michelle). The therapists did not expect such a commitment, "*I was surprised yeah because there was quite a long, therapy you know, and it involved them continuously going through the session and making time as well to be here*" (Leah). I asked the therapists whether gaining and maintaining tāngata whai ora motivation to engage with the programme was a hurdle, but they were all amazed by tāngata whai ora high level of engagement.

> *I thought initially the clients buy-in might be a barrier, but the clients that I worked with were really enthusiastic about doing their session, it was something they really enjoyed and wanted to be a part of so no, that didn't end up being a barrier it was really surprising.*
> (Melanie)

The relationships between tāngata whai ora, the programme, and the therapists were mutually reinforcing and facilitated change. Learning and growth were evident for the therapists and tāngata whai ora involved which was an important factor to ensuring a successful completion of the programme, "*so all of them finished the programme, which was surprising, but it does need that support and the encouragement from the trained therapists*" (Michelle).

Working in tandem with the manager

The second significant relationship essential to delivering the programme was between the Vocational Futures team manager, Amberlea, and the therapists. There was a mutual desire from both the therapists and the team manager to deliver the programme.

The therapists viewed an occupation-focused programme as "*high priority*" (Pam) at Vocational Futures and, therefore, made a commitment to offer CRT. "*We have a goal to be able to provide CRT*" (Sarah). Michelle expressed her commitment with determination, "*there actually wasn't any negotiation we just said sorry this programme has to happen*". The therapists also stated that their team manager was equally committed to offering the programme. Michelle commented, "*I feel that we had full support from our manager, so I can't see any way within our service that it could be more supported*". Leah thought that Amberlea's commitment to the programme was enhanced by her clinical background and knowledge, "*Amberlea is an occupational therapist and she's done the CRT training and knows the benefits of it*". Having a team manager understanding the value of the programme meant the therapists felt supported. "*We have the full support of our manager; she is passionate about CRT and very keen to be involved*" (Michelle). The therapists enumerated the practical support provided by Amberlea in various ways such as "*her giving us designated time*" (Leah), and "*I felt it was really well resourced, computers were available*" (Melanie), and "*having rooms that's another important thing*" (Leah). From the therapists' account, the manager did all she could to reduce the barriers by ensuring "*access to resources*" (Pam); "*We've got all of that, that wasn't a barrier*" (Michelle).

Given the manager was a significant contributing factor to making the programme happen, I wanted to check whether, in light of this supportive relationship, the therapists felt they had the option to deliver the programme. Sarah replied.

> *I had a choice, it was a discussion in one of our OT meetings about it, when the training came around we knew the involvement that another staff member had in the pilot, so we had been fed back about the success of it, and also the research around pairing it with work.*

> *We also had discussions within the team around that so we were given a choice if we wanted to*. (Sarah)

Commitment to delivering the programme included "*the commitment that Vocational Futures have made that we all trained in CRT*" (Pam). At the time this case study was undertaken, the training was free, so if CIRCuiTS was to continue to be used, consideration for funding would need to be considered from the operational managers. All staff at Vocational Futures went on to deliver CRT; however, after completing the training not all staff at SCHB that did the training were keen to continue offering CRT.

> *There may be one or two who didn't quite feel as passionate about it, but those who are really passionate about it, and I would say that a good 80% to 85% are really passionate about it and see it as a core intervention that we do and have been really proactive about it and wanting to deliver it and following the principles*. (Sarah)

An essential relationship between the therapists and the manager was created and sustained by having a manager who could see the benefit of CRT and who was very supportive. In this manner, the relationship helped drive the delivery of the programme at Vocational Futures.

Pulling together as a group of therapists

The subtheme 'Pulling together as a team' highlighted how the therapists at Vocational Futures, who were collectively delivering the programme, joined forces to overcome some of the difficulties they encountered when trying to stay steadfast to the core principles and techniques that they learnt in their training. Pulling together meant sharing the load and supporting each other.

Sarah thought that "*overall the principles were pretty closely followed*" by the therapists at Vocational Futures. However, the training technique of mass practice where "*clients were having to come more than 2 or 3 days a week*" (Sarah) was seen by Leah, in particular, as a real stumbling block, "*It was a barrier actually; I really want to try and achieve those three sessions a week*". Leah expressed finding three sessions a week difficult on top of her other work, "*I think it was more just me managing my time to do other workload as well as the CRT clients*". Additionally, the programme ran for a

"*really long period of time. From the start of the programme to the end was well over 6 months*" (Sarah), involving both the individual computer sessions and the social skills group. "*So probably about a third to a half had probably finished the CRT computer stuff when we started the social groups, but there were some, that were still doing the computer stuff after the group had finished*" (Michelle).

Despite the demand mass practice placed on therapists' time, it was still viewed as valuable: *"you know it is quite time consuming but there is a good outcome at the end so it's worth it*" (Michelle). Therefore, to ensure mass practice, the therapists made a concerted effort to come up with joint solutions as a team.

The team at Vocational Futures brainstormed and trialled ways that would ensure mass practice. Initially they asked tāngata whai ora "*to do two sessions with a trained therapist, and then one session on their own*" (Leah). However, home access to the "*internet was a barrier*" (Melanie). Therefore, the therapists attempted to provide a solution by "*encouraging them to go to the public library since some of them would say their internet wasn't working*" (Leah). Neither option appeared successful, and Leah, showing exasperation, stated, "*it's hard because you try to encourage them, you really try to make sure that they try to do it at home but then they come back and say 'oh I was too busy*' (Leah). The therapists came to terms with the fact that *"the only time that they were having sessions was with the therapist*" (Melanie). This highlighted the importance of therapists' presence and support in delivering the programme. It also highlighted the meaning and enjoyment tāngata whai ora derived directly from attending the sessions.

Melanie thought doing all the sessions herself was unattainable. "*It wouldn't be realistic around my usual caseload".* However, by linking in with her teammates and "*getting alongside another trained therapists*" she was able to reduce the amount of sessions she would need to undertake, making delivering the programme possible. As Melanie explained, *"just doing one session a week, I felt that was realistic and seemed to work well*". This meant that two therapists worked with one client sharing the sessions between them. Pam also saw sharing the load as a viable option, "*my workload's too big anyway without taking CRT on board, so a colleague who was CRT*

trained and I co-worked with two shared clients" (Pam). Pam spent most of her time away from the main Vocational Futures site and worked in rural areas in collaboration with the community mental health teams, so she worked closely with other occupational therapists who had received the training but were working within the adult community mental health teams. Working across sites, teams, and services, and supporting each other meant "*spreading the sessions across and just sharing that workload*" (Pam).

Working as a team and sharing the load brought added benefits beyond managing time. It meant that by working together with one tāngata whai ora, therapists could learn off each other.

> *I started to slowly see clients for CRT with support from Sarah. It's a good idea for me because it kind of like shares the workload and then you get a different perspective or maybe a similar perspective with the other therapist.* (Leah)

Pam talked about having a more experienced therapist taking a lead role by setting goals, doing the majority of the weekly sessions, or being the main point of contact; while a less experienced therapist eased their way into delivering the programme. "*I was the support therapist rather than the lead therapist with those first three clients at different sites. So that then lessened my workload and was a nice slow transitional way of getting into it too*" (Pam). The role of the lead therapist was "*really to role model what's expected and how you're to complete the task*" (Leah).

Having a therapist in a support role, extended to include occupational therapists at Vocational Futures and in the community mental health teams who had not yet been trained, was seen as a way of developing interest and getting buy in. As Sarah and Leah explained, "*I think that helped foster their interest in CRT and see what it offered*" (Sarah), and "*to see whether they are passionate about it*" (Leah). Working together this way as a team, was a useful gauge to see whether new clinicians really wanted to be a part of delivering the programme, "*because it is a lot of work. I'd definitely would want to, look at what CRT is first, acting as a support role and from there decide whether I want to train or not*" (Leah). Additionally, being in a support role prior to attending the training was seen as a good way to strengthen the ability of new

Vocational Futures' occupational therapists to deliver the programme once they were trained. "*When they do the training, they have some knowledge already and maybe this would create more confidence to get going afterward*" (Melanie). The support role was used in place of what would normally have been independent sessions.

Sharing the load and managing time reinforced teamwork and created strong bonds within the team. Melanie described how she viewed teamwork, "*It was just good just knowing that support was there. We had regular contact with a kind of handover to see how we were getting on*". The mutually reinforcing relationship also provided space to reflect on what was, and was not, working well,

> *We were supporting the same client so making sure that the support that we were offering was complementing each other and just reflecting on the challenges that we were having and the progress and success that we were having as well and just checking that we were on the same page.* (Melanie)

Pulling together as a team strengthened the therapists' ability to deliver the programme by managing time more effectively and reducing the workload, by learning off each other, and by working towards a common goal: "*you know we have clients who are stuck. We see them as being really able, work ready. So, this enables us to help move those clients, assist them to move forward*" (Sarah). I asked the therapists if they had any idea how tāngata whai ora felt about having different therapists working with them and got a general feeling that there was no issue with that arrangement. Leah conveyed, "*the client doesn't seem to have any concerns with that*". However, it is unclear if therapists actually asked tāngata whai ora about working with different therapists or whether it was an assumption made from their own perceptions.

Enhancing Future Delivery

The final theme, 'Enhancing future delivery', was constructed from the therapists' learnings regarding what needed to remain, be improved, be included or excluded, in future programmes. As Leah stated, "*I think we could do a few different things differently*". The theme 'Enhancing Future Delivery' is made up of three subthemes which capture each of the three main learnings that the therapist thought would enhance the programme. The first subtheme 'Responding to te Tiriti o Waitangi',

describes the therapists' concerns that the programme did not meet their obligations to be more responsive to the needs of Māori. The second subtheme, 'Cultivating inclusion of whānau', captures the ideas that the therapists had to strengthen communication with whānau. The third subtheme, 'Building connections beyond the programme', highlights concerns expressed by the therapists of a void that was created for tāngata whai ora once they finished the programme. The therapists had ideas about how to address the void.

Responding to te Tiriti o Waitangi

The therapists shared that they felt the programme was not being delivered in a way that was relevant enough for Māori tāngata whai ora attending Vocational Future. Michelle stated, "*the programme could have more cultural input*". Reflecting SCHB values, and one of the occupational therapy competencies for registration, throughout the interviews the therapists considered the current delivery of the programme and how they could adapt what they were doing to deliver a programme in a way that was more responsive to the needs of Māori clients.

They mentioned that the CRT computer programme that they were using "*CIRCuiTS, is very anglicised*" (Pam) and given "*we have a lot of Māori clients within Vocational Futures*" (Michelle), they felt some urgency in making sure that the programme was delivered in a way that was mutually beneficial for Māori and non-Māori. Pam explained, "*there's potential to make the goals the clients work on culturally specific for them*", and Leah elaborated,

> *Say like if they want to learn kapa haka, they still need to be able to plan and um have that attention and executive functioning. Or if they're learning Te Reo Māori, that involves those areas of cognition to be able to memorise, yeah, and have that attention to learn language.* (Leah)

One idea that all the therapists commented on was to see if Te Reo Māori words and geographical places of Aotearoa could be included into the actual CRT computer programmes, "*I feel that having a NZ specific programme, like having some words could be a way of meeting that better*" (Michelle). However, the computer programme only made up a part of the overall occupation-focused CRT programme, and the

therapists were more concerned about weaving a greater understanding Te Ao Māori into the entire programme.

Partnering with Māori in the delivery of the programme was something the therapists thought could be done better and was an important learning for them. Pam, Sarah, and Melanie had ideas on how to strengthen the connection between themselves and Māori in delivery of the programme by "*building more of a relationship with the kaumātua*" (Sarah) or "*having a Māori peer worker in some way involved as a support person*" (Pam), or "*delivering the programme in partnership with Māori health providers*" (Melanie).

> *Maybe, be more flexible about where they access the programme, and having whānau involvement and even working from somewhere where there's a Māori provider or having another co-worker who's Māori.* (Pam)

The therapists were keen to include "*more Māori protocols*" (Pam), such as starting each group session with "*a waiata*" or "*karakia*" (Pam) and "*to have more relevant cultural activities, like food items. I think that could even help with the transference to real life as well*" (Melanie). Sarah had discussed some of these ideas with Māori advisors from the cultural team and had confirmation that bringing these changes into the programme was heading in the right direction: "*he thought the programme been done in this way would be great, so I had a buy in from the cultural advisor*" (Sarah). However, there did not seem to be any partnership with the cultural teams in the development or delivery of the programme.

Working to include whānau

The second important learning that the therapists wanted to improve on was nurturing the connection with whānau of tāngata whai ora. The subtheme, 'Working to include whānau' captures some of the ideas that the therapists had for "*involving whānau in the programme*" (Sarah). The delivery of the programme was described by Pam as "*very individualised, there wasn't much whānau involvement*" despite attempts by Vocational Futures to include whānau. "*We sent home flyers and things like that. We say you can take this back to your family*" (Sarah).

The therapists felt that a whānau centred approached would be beneficial for all tāngata whai ora, both Māori and tau iwi (non-Māori tāngata whai ora of Aotearoa New Zealand). Although therapists agreed that whānau participation in the programme would be beneficial, they also emphasised that the level of whānau involvement needed to be tāngata whai ora led. As Sarah voiced "*it depends on whether the client wants the family involved*".

Therapists did ask tāngata whai ora if they wanted whānau involvement; however, according to Sarah, "*most of them had said no*". The therapists came up with their own assumptions as to why whānau input was declined, which centred around maintaining privacy and dignity. Sarah stated, "*this is their work environment, they are coming to work, they may have felt some sort of stigma if they had a family member or support worker coming, maybe*?" Pam had similar thoughts, "*I really respect um, clients' own choice preference around that, you know they may be still living with family but also wanting to retain as much independence as possible*".

There was some limited whānau involvement. Pam described a situation with one tāngata whai ora:

> *They were just there being really quietly supportive on the periphery, but I didn't have any direct contact with family members. I would ask and encourage, for them to be able to share or show, their family what they were doing but I didn't have any contact. I didn't see that any of the families were putting any obstacles in the way.* (Pam)

The limited involvement whānau had was valuable, "*we had feedback, positive feedback from the families*" (Sarah) and encouraging, "*His mum said he did well*" (Michelle).

The therapists had many suggestions regarding whānau involvement, although it was not clear if they had any cultural guidance around including whānau. One suggestion the therapists had was including whānau in the sessions, "*I think the clients have the option of family being involved in the process, whether that was regular sessions or a session every now and then*" (Melanie). Michelle suggested starting slowly with whānau involvement in the sessions.

> *Ask the client who they would like to have included and maybe do an introductory teaching session on CRT so that they could be aware. You know maybe a session to begin with to introduce that this is what we're doing, this is what the person is going to be involved in.* (Michelle)

Another suggestion by Sarah was bringing everyone together in whānau meetings to discuss progress.

> *Maybe we could have had a family meeting, or a meeting with family and support workers which we didn't do, so that may have been helpful. Probably at the beginning and then a progress one and at times throughout just to make sure we were on track and see from their perspective to see how things were going.* (Sarah)

Not only could a whānau meeting be used to explain the programme, it could also be used as an opportunity to educate whānau about cognition and its impact. "*We could be offering to have a meeting* to *have that opportunity to be really, upfront and honest and be even using the word cognition, and explaining what cognition is*" (Pam). An education session with whānau and tāngata whai ora at the start of the programme seemed particularly important to Pam as she expressed that whānau members often misunderstand what cognitive difficulties are, "*it's so frustrating people think it's all about motivation. It could be things that the family don't know about, or you know struggle with but not being able to have an opportunity to talk about it*" (Pam). Furthermore, "*I think family members might think 'gee this is really helpful'*" (Pam).

Pam thought that tāngata whai ora might benefit from an education meeting with whānau to ensure everyone had a similar understanding of cognition and its impact.

> *It must be some relief for them because they may have taken on board those beliefs oh, I'm lazy, I'm hopeless, I'm useless. Well actually you've got some really quite significant cognitive issues and it will be frustrating til you really understand, then you put in strategies to address it. That's really important.* (Pam)

Another suggestion by Pam was for the therapist to share information with whānau so support could be offered at home to "*help them reach their goals*" However, as Sarah pointed out, previously "*getting it supported at home was quite challenging*". Therefore, Melanie thought that "*inviting the family to be informed about the*

programme through a meeting" *was* a viable option. As Melanie described, "*by them being involved. they can have an understanding about the strategies that the client's learning and then support them to use those strategies in everyday life, just prompting, I think that could be really valuable*". Having whānau involvement in the programme as a means of providing ongoing support was seen as something that needed nourishing "*particularly because the client is making quite a big commitment*" (Pam).

Building connections beyond the programme

The subtheme, 'Building connections beyond the programme', conveys the concerns that therapists had once tāngata whai ora competed the programme. Completion meant a transition back to normal rehabilitation input after "*some really intensive rehab*" (Pam). They had some ideas and suggestions to address their concerns.

When tāngata whai ora reached the end of the programme they went from attending a very intensive programme up to three times a week to their usual level of input, which was much less than the intensive programme they had just completed. The therapists were concerned about the void that completion of the programme created. The final learning captured in this subtheme conveys the therapists' ideas to bridge the void by putting structures in place, such as a peer support group, and making stronger connections with other service providers whom tāngata whai ora interact with. Sarah suggested,

> *Support worker meetings and things like that would probably be a good way forward. I think having those relationships and building those relationships with the wider support network for the client would be how we develop that support further.*

A tāngata whai ora peer support group was seen by Pam as a viable solution and valuable inclusion "*because that was what was, seriously lacking*". Adding a peer support group was seen by therapists as having twofold benefits. Firstly, a peer support group was a way to keep the momentum of the programme going, "*So it's like any programme, you sort of do really well and get up to there, but it's maintaining it so I would be really interested, I mean I think this would be a really good way forward*" (Michelle). Secondly, a peer support group could provide support from those who had completed the programme to those doing the programme.

Leah, Michelle, and Sarah were particularly supportive of the idea of a peer support group. Leah stated,

> *They have that knowledge already, that experience and so for them to support someone who's never done CRT that can really draw from their own experience of what went well and what they could do differently next time would be soo cool".*

Leah had already raised the idea of peer support with tāngata whai ora who she worked with, "*When I talked to them about the possibility of having a peer group, they were all quite keen and really engaged, with that idea yeah*". Michelle already knew someone who had completed the programme and was already voluntarily helping others, "*I know one of my clients would love to be part of that and he also was really happy to spend an hour with one of the other clients just supervising the computer sessions for his independent sessions*". Sarah had started taking steps to get leadership support for their idea, "*it is already on my agenda for next time*", and they had plans for taking their idea to the CRT Steering group for discussion.

> *The CRT Steering group should look at some guidelines around what the role would be for the peer support and what parts of the programme we are um we are comfortable and happy with them supporting with and what that might look like and just having some standardised process.* (Sarah)

Having good communication and strong connections with tāngata whai ora support network was seen as an important aspect of delivery that could extend beyond the completion of the programme. The therapists considered that good communication was something that was done well, in some respects, but which could be improved in other areas.

At Vocational Futures there were dedicated support staff responsible for ensuring the organisation's contractual arrangements were met and assisting tāngata whai ora with their work-related tasks. Support staff at Vocational Futures were not clinical staff and, therefore, did not necessarily have the knowledge of the impact of the health condition experienced by tāngata whai ora. For tāngata whai ora to be involved in the programme meant time away from their work-related tasks. Therefore, "*having buy in from the non-CRT staff was important because there can be a bit of tension there at*

times" (Michelle). Leah explained "*because they weren't sure what it does and what it is and why the client needs to be up with me rather than working*". The therapists believed that it was essential to involve the support staff in the programme to ensure they comprehended the purpose behind tāngata whai ora participation in the programme. "*Making sure they improve their understanding rather than just thinking that someone is lazy, or wondering why somebody is just you know, slow or whatever*" (Michelle).

The therapists shared various avenues they used for "*getting the buy in from the staff*". These included,

> *explain to the support staff what it was that we were doing in the session and directly relating how the client will be able to use the strategies in their work, so that was going to have a positive impact on their work, and I feel that that was really helpful to have their understanding and their buy in and support with me.* (Melanie)

Leah's idea was "*showing them the programme because you know they hear these words like CRT, and explaining it is one way but also showing the staff, Yeah, what the clients actually does when they're with me*". Michelle suggested presentations at team meetings and running in-services.

> *I did a presentation on CRT, before it started on what the benefits would be and there was education as well for the staff and support staff about what it was and that this was an exciting new program that the Vocational Futures were really keen on implementing and that you know it's a reminder that we are actually here for clients.* (Michelle)

Ongoing education to support staff about the programme was important to the therapists for enhancing future delivery and keeping the momentum going,

> *I think when we do it again it might be good to have another in-service or even our full staff meeting, take 10 or 15 minutes out to go over it again, yeah. We are going to have change of staff so that would be worthwhile definitely.* (Michelle)

The therapists expressed that building connections with tāngata whai ora wider support networks, such as their community mental health key workers, was not done

as well. "*Improving collaboration with other clinical teams*" (Leah) was something that needed to improve in order to support tāngata whai ora to continue to apply their newly learnt skills beyond completion of the programme.

> *For them to know that this client has done CRT, and this is what the results show you know, this is the most effective strategy that they've chosen, and yeah so for the clinical team to know and for them to encourage that they should use the strategy. Just having the information clear to everyone, giving education about what CRT is, and the benefits of it and what's worked with the client.* (Leah)

The therapists also expressed wanting to work closer with NGOs, and this was an area for improvement in delivering CRT in the future.

> *I think we could work closer together* [with NGOs] *because ultimately the aim is to support someone to be able to improve their cognition through the use of cognitive strategies and ultimately again looking at improving their function, engagement, and performance in, occupation.* (Leah)

The therapists saw NGOs as a crucial link to supporting tāngata whai ora to continue utilising their learnt skills beyond completion of the programme, "*you know supporting the persons to be involved in those day-to-day activities that they can use as well yeah that a community support work might do with clients*" (Michelle).

Perspectives from the therapists I interviewed have been conveyed in the previous four themes 'Splicing CRT and Occupation', Taking the Lead', 'Strong Relationships: Essential to Delivery', and 'Enhancing Future Delivery'. The following section, 'Broken Feedback Loops', conveys further information from therapists who completed the CRT reports and integrates perspectives of the CRT reports from Sarah, Pam, Michelle, Melanie, and Leah.

Broken Feedback Loops

The theme 'Broken Feedback Loops' conveys the idea that feedback is made up of cycles of communication which have the potential for continuous improvement of the programme. However, feedback loops that were designed to support the progressive development and iterative refinement of the occupation-focused CRT programme at

SCHB appeared broken. Cycles of feedback, loop around groups of people or various stakeholders so everyone understands what is going on, can identify issues or what needs to be done, are able to provide support, and hear about programme delivery outcomes. Cycles of communication or feedback loops ensure everyone that is involved in the programme has input. As outlined above, consent was obtained to review four tāngata whai ora CRT reports. Interpretations of these reports and the therapists' interviews informed my understandings about how the reports, which sought, gathered, and recorded feedback and outcomes, shaped the delivery of the programme.

There are multiple stakeholders that need to be included in feedback loops, such as managers and leaders who make decisions about resources and service delivery, and significant people involved in tāngata whai ora lives such as whānau, key workers, and community support workers. Stakeholders who needed to understand how the programme was being delivered, what resources were utilised, and what the outcomes were, included team managers and those people who occupied the Level one to four leadership positions at SCHB such as clinical leaders, operations managers, and clinical directors.

The primary purpose of gathering and recording information for these stakeholders was to demonstrate that the right tāngata whai ora were included in the programme, and to capture good outcomes as a means to justify the ongoing delivery of the programme. As Pam highlighted "*we just need as much evidence as we can*". The importance of seeking and capturing information to provide feedback was recognised by the therapists who were interviewed and was apparent in tāngata whai ora CRT reports written by therapists. The CRT reports used at Vocational Futures were the same CRT report used in the intial CRT pilot where rigourous evaluation of the programme was undertaken to provide a comprehensive rationale and justification for ongoing delivery of the programme. As Michelle stated "*we followed and filled in a CRT report from the pilot program and completed those*". There was also instructions to the therapists in the SCHB CRT training to complete a CRT report (SCHB Training Slides, 2017, 2018; Table 4).

The CRT reports obtained, showed that there were various ways in which the therapists at Vocational Futures gathered and recorded information. The therapists gathered and recorded information from their own observations, standardised outcomes measures, surveys, and discussions with tāngata whai ora. There was also a place in the report for feedback from whānau and significant others such as key workers or community support workers; however, the four reports obtained did not have feedback recorded from these sources.

The CRT report recorded tāngata whai ora difficulties with work related occupations and cognition to demonstrate that they were including the right clients and outcomes that reflected good progress. Difficulty with work related occupations was a pre-requisite for entering the programme. For instance, in one report the therapist wrote "he often needed the quality of his work checked and he had difficult remembering names of the job and steps required to complete jobs" (CRT Report, Table 4). Towards this same rationale, each of the reports also listed occupational goals that tāngata whai ora wanted to improve, such as "learning to use the forklift" (CRT Report, Table 4) and "improving my morning routine" (CRT Report, Table 4). Most of the occupations listed included such things as getting a better job, improving work performance, self care, and relationships. The reports recorded verbal feedback from tāngata whai ora regarding self-perceived improvements in occupations. "He is more satisfied with relationships, more active and skating again, paying more attention to personal grooming and doing more things he liked such as reading" (CRT Report). The CRT report was also structured to capture the therapist's perspective of tāngata whai ora engagement in the programme and occupational performance. For instance, one of the therapists wrote, "He engaged well in the programme, has been more confident and focused at work and has been learning to complete new and more complex jobs" (CRT Report, Table 4). Therapists' perspective of the programme appeared important to capture and feed back to the leadership stakeholders.

The therapists used various standardised assessments and a survey to capture outcomes and feedback. The COPM (Law et al., 2014) was used to record measurable improvements in occupational performance which was documented in all four reports. In this way, the report captured tāngata whai ora perspectives of what they wanted to

change and their subjective experience of change which, as mentioned previously, provided tangible feedback to tāngata whai ora on their occupational performance. Three of the reports provided a pre- and post-measure of cognitive functioning via the ACL screen (Earhart et al., 2022). While this screen captured improvements in an overall cognitive score, there was minimal other information about cognition; instead, the ACL supported understanding of cognition that generally impacted tāngata whai ora day to day function and support needs. Although the report format allowed therapists to record measurable changes in cognition, therapists consistently emphasised clients' occupational function. In formulating the reports, therefore, therapists reflected a primary focus on improving and recording information about occupational performance rather than cognition in relation to the delivery of the programme.

The therapists also used a survey created at Vocational Futures to seek feedback from tāngata whai ora on their experience of the programme (Vocational Futures Thinking skills for mahi feedback form, Table 4). The survey included statements such as 'I feel respected', 'I feel involved in decision making', 'my whānau are given information and encouraged to be involved' with a rating of 1-5 where 1 was 'I strongly disagree' and 5 was 'I strongly agree'. The survey statements reflected values that were important to the staff at Vocational Futures. Of the two reports that recorded survey results, all scores were positive except those regarding whānau involvement which were neutral. The range of ways Vocational Futures sought feedback from tāngata whai ora, indicates the multiple approaches required to capture feedback from people who experience cognitive difficulties. Emphasis on gathering feedback may have also reflected the value the therapists placed on gathering tāngata whai ora feedback. They also wrote comments about their own perception of tāngata whai ora engagement with the programme which was positive in all four reports. All reports commented on how motivated tāngata whai ora were to attend their sessions, and how they benefited from the programme with increased confidence and self-esteem and improved interactions with others.

The CRT reports reflected that the therapists went to a lot of effort to gather information to justify that the programme had made a difference for tāngata whai ora.

Therapists saw the COPM, the survey, and ACL as useful tools for conveying information, along with tāngata whai ora direct feedback. However, other than feeding back the COPM scores to tāngata whai ora, the valuable information collected in the reports did not cycle back to the Level one to four leaders in the SCHB leadership structure. The CRT steering group minutes documented the need to gather information from the CRT reports to share with the mental health divisional leadership team (CRT Minutes, 2018, 2019; Table 4). However, review of the CRT mintues did not find any summary report or any indication that information had been passed on to the leadership team. It was also not clear whether outcomes were shared with anyone beyond tāngata whai ora, which highlighted a gap in sharing information with key stakeholders and a lack of communication. The feedback loop was broken or perhaps not even developed; therefore, the information that the therapists collected did not get to where it was needed in order for CRT to be visible to the leaders. The wider implications of this broken feedback loop also meant that the leaders at SCHB had no information that could be further shared with poeple who provided strategic direction for the health system such as those who occupied positions in the Ministry.

The other groups of stakeholders that needed to be included in communication feedback loops were whānau, clinicians and key workers in the clinical mental health teams, and community or peer supports workers in the NGO sector. As mentioned in previous themes, these stakeholders were seen as essential to support tāngata whai ora to apply learnt skills and strategies in everyday life beyond the programme. Therefore, they needed to know what these skills and strategies were. It would seem important for tāngata whai ora to be provided with a list of strategies that they found useful, especially given the CRT report had a section to record strategies and recommendations. However, there was minimal documentation capturing these aspects in any of the four reports. The lack of information in the report around strategies and recommendations indicates no intent for this information to be fed back to tāngata whai ora and the other stakeholders; therefore, this feedback loop was also broken.

Additionally, the section for recording whānau and significant other feedback in all four reports was blank. I asked the therapists what some of the barriers were to

completing the full report. Pam stated "*ah time*" and Leah commented "*It's reflective of the amount of time it takes to complete the report*". The therapists' account highlights the time it took to complete the report. Moreover, it reflects the emphasis that was placed on therapists gathering evidence that the programme was working, over gathering and providing feedback to stakeholders involved in the day to day lives of tāngata whai ora. The therapists conveyed a lack of knowledge and training on how to utilise the CRT reports for the benefit of this stakeholder group; as Leah stated, "*Just, knowing what to do with the results, and what to do with the report and how do we support them to be able to still utilise the cognitive strategies you know, following it up afterwards*". Leah did share the CRT reports she completed with the clinical team but received no feedback from the tāngata whai ora key worker about the report. "*I've shared the reports to their clinical team, to the keyworker, but nothing has happened after that, it was just more like here's the information*". Feedback loops involve two-way communication in order for all involved to have input; however, it appears that communication from the therapist to key stakeholders and vice versa was not working effectively.

The CRT report was an important part of delivering the programme but in its current structure appeared to be a barrier to sharing information with key stakeholders due to the amount of information required to collect, time it took to complete, and trying to capture and provide information to multiple stakholders. Furthermore, the CRT report could not provide feedback to key stakeholders without some mechanism to share the information. Feedback loops require a process whereby information gets to the key stakeholders and loops back to those delivering programme in order to continuously improve the delivery of the programme. At present, that process or mechanisam appears broken and unclear.

Summary

This chapter presented the therapists' experiences of delivering an occupation-focused CRT programme. The therapists described how their new knowledge of CRT and existing knowledge of occupational therapy were woven together in the training they received which provided a solid foundation and compass for delivering the

programme. Having Sarah step up and take the lead for delivering the programme at Vocational Futures was essential for getting the programme rolling. The manager at Vocational Futures provided Sarah with the necessary time to prioritise and strategically plan for the delivering of the programme. Above all Sarah was passionate about the programme and held attributes of determination and problem solving. Three relationships were experienced as key to programme delivery. These comprised of the relationship between tāngata whai ora and the programme, the relationship between the therapists and their manager, and the relationships amongst the therapists which enabled them to pull together as a team to deliver the programme. Mass practice was viewed as a potential barrier to delivery of the programme, given the frequency of sessions required, two to three times a week. However, the therapists navigated their way through this challenge by being flexible with when and how the sessions took place. Having two therapists sharing sessions with one tāngata whai ora worked well by reducing demand on time and supporting each other with new knowledge. The shared way of working reflected a 'can do' team culture which valued the rehabilitation approach to their work, aligning with the organisational values and supporting the programme delivery. The therapists acknowledged areas for ongoing improvement which included delivering the programme in a way that was culturally responsive to Māori, having a whānau centred approach and building connections with tāngata whai ora support networks to aid new learnings beyond Vocational Futures. The CRT report completed by the therapist highlighted the importance of gathering and recording information, but equally how broken cycles of feedback prevent that information from reaching key stakeholders. The next chapter presents tāngata whai ora experiences of the programme delivery.

Chapter Eight: Tāngata Whai Ora Experiences of the Delivery of the Programme

I interviewed four tāngata whai ora participants for this study. Tāngata whai ora, broadly translates as 'seeking wellness' or 'individuals consciously in the pursuit of physical, mental, and spiritual health'. Two of the four tāngata whai ora identifed as female, Susan and Fiona; and two as male, Greg and Peter. Susan was of Pasifika and Māori descent, and the other three tāngata whai ora were Māori. All were working part time at the Vocational Futures warehouse/factory doing various jobs such as labelling, packing goods, or administration tasks, and worked closely with the contract support staff. They all had a long-standing diagnosis of schizophrenia, and had been unemployed for many years prior to coming to Vocational Futures. Greg had been attending Vocational Futures for 2-years, while the others had only attended for several months. Susan lived with her partner, Fiona lived with her mother, and Greg and Peter lived in supported accomodation. Table 11 summarises the demographic information of the four tāngata whai ora.

Table 11

Tāngata Whai Ora: Demographic Information

Name	Diagnosis	Duration of illness in years	Ethnicity
Susan	Schizophrenia	19	Pasifika/Māori
Fiona	Schizophrenia	14	Māori
Greg	Schizophrenia	25	Māori
Peter	Schizophrenia	19	Māori

At the time of the interviews, all four tāngata whai ora had completed the full programme (the computer-based sessions and the social cognition group) delivered at the Vocational Futures building. Greg and Fiona were in the first cohort and Peter and Susan were in the second cohort.

Tāngata whai ora experiences of the delivery of the occupation-focused CRT programme drew from two different data sets which were analysed separately. First, the data from tāngata whai ora interviews is discussed. Next, the second data set, the

COPM (Law et al., 2014) results embedded in four tāngata whai ora CRT reports, are considered.

As mentioned, three tāngata whai ora identified as Māori and the fourth tāngata whai ora identified as Pasifika and Māori. Therefore, in line with constructivism, and adhering to the principles of te Titiri, I sought a Māori worldview on the transcripts and the initial themes from my cultural advisor who is a kaumātua. The kaumātua sensed that the tāngata whai ora were conveying a narrative that they were in charge of their own waka—a vessel, a Māori canoe that is considered sacred. The idea that someone is in charge of their own waka is a metaphor for a person being in charge of their own life. I understood the Māori metaphor from my own perspective and knowledge of sailing. Therefore, this chapter is presented using the metaphor of sailing with themes constructed from the experiences of tāngata whai ora. The metaphor conveys my interpretations influenced by the kaumātua Māori worldview and my understandings of sailing. Interpretations from the interviews were constructed into one main theme, 'Making Way', with five distinct subthemes (see Table 12).

Table 12

Tāngata Whai Ora: Theme and Subthemes

Theme	Subthemes
Making Way	Lifting the anchor
	Experiencing learning
	Enjoying the challenge
	Being at the helm
	Expanding horizons

Making Way

The theme, 'Making Way', was constructed from tāngata whai ora accounts that by participating in the programme they were able to move forward in their lives with a sense of awareness and purpose, and became more equipped with the necessary skills and knowledge to do so. Making way is a boating term meaning a vessel has momentum and is moving forward through the water with control and direction.

Throughout the interviews, tāngata whai ora conveyed a sense of 'making way'. They used words such as 'I feel more' or 'it made me more'. As Fiona described, "*Now I'm living more independently I know I have the skills to think for myself*", and Susan stated "*I've found it beneficial. I do feel more confident, I feel more confident in myself that I'm doing something for me. My thinking is clearer, and I feel more on the ball*". 'Making Way' is made up of five subthemes, 'Lifting the anchor', 'Experiencing learning', 'Enjoying the challenge', 'Being at the helm', and 'Expanding horizons'. The subthemes are explored in greater depth in the following five sections.

Lifting the anchor

This subtheme captures how tāngata whai ora first heard about the programme and saw it as an opportunity to become unstuck from their current situation. The difficulties the tāngata whai ora were experiencing with cognition were like a heavy weight that kept them anchored in their current situation. They all first heard about the programme by having a conversation with their occupational therapist or the Vocational Futures' team manager. They connected with the possibility that this programme might help them lift the anchor, get their brains going, help with their thinking, and start moving forward. They all knew they had difficulty with their cognition. For instance, Greg stated "*I had some idea about my cognition, like from the psychologist test and stuff*". They saw the programme as an opportunity to make changes and improve their thinking. The tāngata whai ora had undergone cognitive testing in the past, which raised some issues, but they could not recall being offered any kind of help to address the issues until now. Susan said *"I thought it* [the programme] *might help me with my memory and help me use my brain as well as my body. I wanted to exercise the brain as well*".

The offer to join the CRT programme was given in a way that gave control to the tāngata whai ora by allowing them to choose whether or not to participate. Susan shared how she came to know about the programme, "*my manager approached me, she said no pressure, would I like to participate? She just talked me through it*". They all received a pamphlet that provided information about the programme but this seemed irrelevant; "*I had a leaflet, but I didn't read through it*" (Greg). Being told about the programme and having it explained by a staff member with whom they had an

established relationship seemed an important aspect of how they became interested. Being given a choice to move on from their current situation by someone they trusted, appeared significant.

When I asked the tāngata whai ora what made them decide to participate in the programme their answers were sprinkled with intrigue and hope, "*I was inquisitive, I thought to myself, well it might better myself, I thought I'll give it a go, it sounded interesting*" (Susan). Likewise, for Peter, "*they told me about the programme, and I really wanted to join… I said 'yeah'. I wanted to learn about things, learn more and learn better*". Fiona decided to participate in the programme because she thought it would "*make me more competent and independent*". For Greg, his decision to participate was because he began to wonder if it could really help him with the tasks he needed to do at Vocational Futures. Having a glimpse of this possibility felt new to him, "*I thought it might help me with my work, I've never come across anything like this before*" (Greg).

Becoming aware of the programme gave tāngata whai ora hope that they could move on from their current situations by addressing the difficulties that were keeping them stuck, as Peter explained, "*I was curious to know how to learn and how to solve problems and to get better…. Maybe it could help me get a better job*". They saw the offer to participate in the programme as an intriguing opportunity that captured their attention and sparked their interest with the possibility that it might lead to a new adventure. They chose to lift the anchor and get underway.

Experiencing learning

To move from being underway to making way requires skills and knowledge to set a course and have the power to move along that course. The second subtheme, 'Experiencing learning', captures what it meant to tāngata whai ora to get underway and embrace the opportunity for growth, empowerment, and development by participating in the programme. Undertaking the occupation-focused CRT programme was empowering because it provided tāngata whai ora with an opportunity to learn, grow, and develop the necessary skills to propel them forward in life. Susan stated,

"You know it's been a real learning curve, it's been really beneficial"; and for Greg, "*It's helpful you know, it's going to help me and it's going to be beneficial, to be better*".

Throughout the duration of the programme tāngata whai ora were learning the ropes that made up all aspects of the programme. "*I'm learning to be better, and I was taking on board what was going on*" (Peter). They were gaining insight into what they were capable of, learning about their strengths and areas for development. Fiona stated, "*I feel better, I had learned a whole lot*". Learning was an aspect for Peter and Fiona that they had not experienced for some time. "*It was like being at school, getting re-educated all over again… and I got a certificate at the end*" (Fiona). Peter was grateful, "*just to be learning new things*". There were two aspects to learning that came across as important to the tāngata whai ora: 1) Learning skills and strategies and becoming better thinkers; and 2) learning about themselves and becoming more self-aware.

Becoming better thinkers meant stimulating the brain through learning. Tāngata whai ora talked about the programme as being a way to improve their brain power or thinking skills. "*The first time I did CRT, it felt like my brain was really pumped*, *I was exercising my brain*" (Susan). Greg conveyed that it seemed like his thinking ability had been stagnant for some time and now his brain was getting switched on. "*We start off doing a bit of cognitive test or something you know to get the brain sparking*". Throughout the tāngata whai ora' accounts, they often referred to the occupation-focused CRT programme as something that really helped them learn valuable, functional skills. Peter noticed that "*increasing my memory helped me with learning how to do tasks better*". The programme was delivered in such a way that tāngata whai ora were able to see that the skills and strategies they were learning in their sessions were relevant to their everyday life.

> *The programme has just helped me, you know helped with the concentration and cognitive part you know. A strategy I've learnt is taking notes, you know for doing tasks and stuff, writing stuff is always useful in day-to-day life.* (Greg)

Tāngata whai ora learnt how to improve their cognitive skills and strategies to manoeuvre their way through daily tasks. Susan illustrated how she applied her

learning, "*I have come up with some really good strategies to help me. Talking myself through the tasks helps, repeating things helps*". Even a leisure occupation, such as watching a movie, was not possible for Peter before doing CRT, but now it was: "*I couldn't even watch a movie without drifting off, that's why I think this was good for me. I can watch an entire movie now*". Buying food for themselves at the supermarket was a task of daily living that all tāngata whai ora appeared to be able to move through with more ease after doing the CRT programme. They were able to stay the course while navigating the chaos of a supermarket environment. "*I do it in more of a systematic way, aisle by aisle*" (Peter). Fiona found working out the cost of food on the computer task first, enabled her to do the shopping task in real life with ease:

> *You've got to work out how much it will cost, so when you actually go to the shop you have to do that too. It made me more confident when I went out shopping, it really helped.* (Fiona)

Susan's description of her experience of shopping conveys the metaphor of being at anchor or underway. "*I'm a terrible shopper, I get lost. I've been there a million times and I go to the wrong place, or I pick the wrong thing or whatever*" (Susan). Doing the programme and learning strategies, Susan described her experience of shopping more like plotting a course and making way.

> *The shopping task [in CIRCuiTS], you've got to put the food in order, to make the shortest route as possible as you go around the supermarket, it's made me think about my own shopping. I'm more focused about getting things organised.* (Susan)

Having difficulty with everyday tasks kept tāngata whai ora stuck and caused stress. Learning skills and strategies that enabled them to move beyond their difficulties made doing tasks easier, with fewer problems.

> *When I went shopping it could be quite stressful at times. Now it works for me in a cognitive way, I actually enjoy shopping now because I know I can go out and get what I need, I'm not as stressed anymore*. (Greg)

All four tāngata whai ora attended the social cognition group, 'Thinking Skills for Mahi'. Being social with other tāngata whai ora was something they struggled with prior to

doing the programme. Furthermore, they had no idea that there were skills that could be learnt that would help them get on with others.

> *It's interesting knowing how to talk to people and how to engage in the conversation and body language you know. It's good to know how to end a conversation, how to clarify things which is everyday life isn't it? It's everyday things we do. We are social beings and we talk to each other every day so having more information on how to do these things is a real eye opener. I can take something from those sessions, I never really knew about that before, and I put it into practice.* (Greg)

There was a real emphasis that they were all learning something that was relevant to their lives and were experiencing the benefit that came from new learnings such as holding better conversations with work colleagues.

> *I'm getting a lot of help from it, like open ended questions and closed questions. That really makes me think more about my job and how I expect people to be, even body language. you know, that helps a lot because I used to slouch a lot. I have to stop doing that.* (Susan)

Not all of the tāngata whai ora were aware that "Thinking Skills for Mahi" was part of the occupation-focused CRT programme. Some of the tāngata whai ora were attending the group session in the same week as their computer sessions while others attended at a separate time of the year. However, it did not seem to matter to tāngata whai ora, they were just pleased to be able to attend both. Susan expressed "*I am just so thankful that my therapists approached me about this, I feel I have benefited from all of it*".

Having the experience of learning new skills and strategies also provided tāngata whai ora with the opportunity to learn more about themselves, "*The programme is really great. It helps you understand more about your own way of thinking*" (Greg). They gained insights into the cognitive strengths they possessed and cognitive abilities that needed improving. Susan described this learning experience as a revelation, "*I could only remember half of the items in the computer tasks, that was really interesting, it was a real eye opener*". By participating in the programme, tāngata whai ora learnt about their abilities that needed further development. "*Some things I didn't think I had a problem with, but I noticed, doing that, that I couldn't do it*" (Peter). They also learnt

strengths about themselves that they did not know they had; "*but there were other things that I could do that I, didn't think I could do before*" (Peter). Greg explained that learning more about himself, enabled him to navigate his work demands more effectively at Vocational Futures. "*The programme is really great it helps you understand more about your own way of thinking*" (Greg).

> *Knowing what I need, having better alertness, having better understanding of what I need to do to fulfill the tasks each day at work. I was having to think, think about information and work it out, which I learnt to do.* (Greg)

It appears the programme provided tāngata whai ora with a porthole through which they could see into their own thinking abilities and realise areas where they needed to improve.

> *Since doing CRT I'm more aware of your surroundings, more coherent in my job. I think that is what I mean by self-awareness. I'm being aware of myself and being aware of what I need to do in a task. So, I have found that really helpful, you know, I'm concentrating more. In the back of my mind, it helps me think about things and put them into practice and think about the way I'm doing it and how they should be done.* (Greg)

Having experienced learning and acquiring new skills, Susan, Fiona, Peter, and Greg were able to move from Lifting the anchor and being underway to 'Making Way'. They became more aware of their own thinking and could see the benefit that acquiring new skills and strategies would have on their future. But the learning came with its fair share of challenges.

Enjoying the challenge

When 'Making Way' it is often a challenge to keep moving forward and constant evaluation and adjusting to keep going is required. The programme was delivered in a way that provided enough challenge and successes to make the experience enjoyable. The third subtheme, 'Enjoying the challenge, describes how challenging the programme was; yet, how much tāngata whai ora enjoyed the challenge. "*It was real cool*" (Peter), "*it's fun*" (Greg), and "*it was neat*" (Fiona) were just some of the words they used to describe how enjoyable the experience was. New learnings require facing

new challenges. The challenging tasks were described by tāngata whai ora as the most enjoyable aspect of doing the programme. Greg talked about the challenge of the programme as a fun way of expanding and broadening himself, "*I just build on my skill level, you know it just builds on, builds on, builds on, builds on. It's helpful and it's challenging, and it's really, really enjoyable*".

'Making Way' in sailing terms is not straight forward. It involves monitoring the elements and continuously adjusting the sails to keep the wind hitting the sails in the right place, preventing them from luffing and, consequently, stalling the yacht. When nicely 'Making Way', everything is set right. The computer programme was interactive and challenging, but not challenging to the point where tāngata whai ora became frustrated, stalled, and disinterested—it was set just right. As Greg described, "*I really enjoyed it because there were different tasks and variety, the difficulty is actually quite challenging so I find that pretty good, I would have got bored if there wasn't a challenge*". Sometimes, to be 'Making Way', the yacht needs to change tack or change direction relative to the wind. Greg described how he changed tack to keep moving forward, "*I think that is what kept me coming back, thinking maybe I'll try it again another way and see how it works this time. The challenge made me want to do it more*".

When sailing, getting feedback from the boat's sailing performance and adjusting the sails or tack direction to suit the conditions is essential to making way. Tāngata whai ora described getting feedback from the computer programme as an important aspect to taking on the challenge of mastering tasks. The computer programme rates the subject's performance on tasks between 0 and 100% and provides score feedback. Anything over 80% enables the subject to move up to the next level of difficulty and challenge. Although a score of 80 or above was acceptable to Greg, Peter, Fiona, and Susan, they all relished getting a perfect score of 100.

> *I find one task a real challenge I thought to myself I really want to solve this I ended up getting 80% and I was like, damn it thought I'd gotten that. I was happy with the result, that I'd passed but I wasn't happy that I didn't get it 100% correct.* (Susan)

Tāngata whai ora had fun monitoring their own progress; seeing how well they were doing and changing tack to succeed. "*I'd do the questions and the answers and then check them, and it comes out whether you're right or not. I got most of them right, I really liked it, it was neat*" (Fiona). Receiving feedback on how well they were doing was a positive and rewarding experience. "*You get good feedback, and I can reflect and see what was hard and what wasn't hard. A few of them I can do really well; I get good percentages on them. Visual tasks I get 100%. I really enjoy doing them*" (Greg). Achievement was also an enjoyable experience, "*it made me happy when I passed the task, it felt good*" (Peter). The challenge tapped into their desire to move on from where they were at a given point in time, as Greg illuminated "*some of the things I'm good at, some I'm not and I want to get better, to get better at things and that's the challenge that's why its enjoyable to do*".

Feedback came from both the computer programme and the therapists. Tāngata whai ora reported receiving a lot of good feedback and praise from all the therapists. "*I would get it right and they would tell me how well I've done*" (Fiona). Having a feedback mechanism was an important aspect of delivery of the programme to tāngata whai ora.

Greg had a slightly different experience to the other three tāngata whai ora. Rather than the therapist working solely with him, the therapist had two tāngata whai ora doing the programme at the same time. Greg saw this as an opportunity to not only compete against himself, but also against the other person.

> *We did it together. He was doing his and I was doing mine so that made me want to do it more, to do better than he was doing. The therapist would shoot back and forth between us, it was fun.* (Greg)

I asked Greg how he thought doing CRT with more than two people would be as way of delivering it in the future; he responded, "*doing it with more people would have been a crack-up*"!

Tāngata whai ora talked about how "*enjoyable* [the programme] *was to do*" (Greg) and how much they "*enjoyed the challenge*" (Susan). It was also surprising to the tāngata whai ora that a programme offered by mental health services could be so enjoyable.

As Fiona stated, "*I didn't expect it to be like this. It was like wow this is really neat you know*". Furthermore, three of the tāngata whai ora talked about their participation in the occupation-focused CRT programme as an embodied experience. For Peter, enjoying the challenge "*was a good feeling*". Fiona "*loved working with the computer*", and for Susan, "*well, CRT I'm actually really fond of it, I like it and I enjoy doing it. I've really embraced it*".

Being at the helm

Being at the helm means taking hold of the vessel and pointing it in the direction you want it to go. The fourth subtheme, 'Being at the helm', captures tāngata whai ora experiences of having control over their participation in the programme, along with varying degrees of assistance by the therapists to help navigate the difficult challenges they encountered. Greg pointed out, "*The less help was better because I was doing for myself a bit more…. it was a bit more freehold figuring it out yourself*". The therapists were seen more as experienced crew helping with navigating the upcoming tasks by reminding tāngata whai ora of things to think about and to be aware of rather than telling them what to do. "*They stepped back and let me do a lot of the thinking, got me thinking about the tasks and which is the best way to do them you know, the strategies and stuff*" (Greg).

Being at the helm started right at the beginning when tāngata whai ora chose to come on board. There was flexibility in where, when, how, and with whom the programme was delivered, and for how long. These aspects of delivering the programme gave tāngata whai ora the opportunity to navigate the sessions in a way that worked for them. How often they attended the programme was their choice. "*I don't want to overdo it. I like the two sessions*" (Susan). As the sessions were individually run with the therapist there was flexibility on the days and the times the sessions could take place. It seemed to matter to tāngata whai ora that the sessions happened at a time where they could get the most benefit. Susan explained.

> *I was able to come in my own time, on a Tuesday and Thursday. Sometimes I'm really tired at the end of the Thursday, like mentally tired. So now we do it earlier in the day around 10 and 11 while I'm still fresh.* (Susan)

The length of time also varied depending on how long tāngata whai ora could stay alert and engaged in the session. Nonetheless, by the end of the programme, most tāngata whai ora indicated they were able to, and wanted to, attend for up to an hour.

> *When the CRT session is nearing the end of it, I'll look at the next thing that we're going to do and she [the therapist] goes, 'have you got another one in you Susan?' and I sit there and think. There's usually yes for one more, we usually take around an hour.* (Susan)

Tāngata whai ora acknowledged that the programme required a lot of effort on their part to attend the sessions so frequently, but they felt that it was worth it. "*I did it twice a week, you know it was quite a commitment and I usually did it for about an hour, it was worth it, but you really have to focus*" (Greg). Peter conveyed that "*the time goes really fast*" which reflected how immersed tāngata whai ora were in the programme activities. Even though the session was commanding their attention, they were in control of how long they wanted to participate.

The tāngata whai ora described the therapists as being alongside them in a supportive way, like an experienced crew member. Therapists helped tāngata whai ora navigate the upcoming tasks and reminded them of things to think about and be aware of. They encouraged them to think and do for themselves but provided some guidance.

> *Sometimes she will say are you sure that's the right way? She tries hard to get me to use my memory, she writes things down like I write things down. Sometimes I will say something, and she might say, 'that's really good Susan, that was good observing', she's very encouraging. Or if I might have got something wrong, she might say, 'Susan step back a bit, have a look and think about it, do you really think blah blah blah'. I might say, 'oh you're right because sometimes I can get a bit racy'.* (Susan)

The tāngata whai ora mentioned that at times they needed help to slow down. Sometimes they could rush in and get things wrong. To use the analogy of 'Making Way', sometimes the winds can become too strong making the yacht unstable. A tactic used to pull back and maintain stability is to reef the sail. Reefing involves pulling the sail down to reduce the amount of wind on the sail and prevent the yacht from getting away on itself. Susan's description suggests a form of reefing when she finds herself rushing into a task.

> *I can get too confident, and I've got to take a step back, take time to read the questions, and what needs to be done because they have the demo which shows you how to do the task. I always watch the demo even though I may have done the task two or three times because sometimes it changes a bit, and sometimes it gets a bit harder and sometimes it can be a little tricky. You have to really focus.* (Susan)

There were many ways to find a solution to completing the tasks. Tāngata whai ora were able to utilise what they learnt to find the best approach to get the best result. Being at the helm, meant that the tasks were completed by tāngata whai ora with the therapists stepping in only when necessary to support them to get the desired results of 80% or above. "*She would say so much, and I would have to figure out the rest*" (Peter). There were times when tāngata whai ora did not get the required score "*It can be disheartening if I only get 60%*" (Greg). However, it still mattered that the control was not relinquished to the therapists, and the results were authentic and based on their own efforts. As Greg stated "*helping me work it out is a good way of doing it because you're not really cheating then. It's more of a challenge and then it's probably more beneficial*".

All the tāngata whai ora had two different therapists who alternated between sessions. This factor did not appear to be of any significance as long as tāngata whai ora remained at the helm and the therapist remained in a supportive role. Peter articulated being at the helm, "*I enjoyed both of them, at the end of the day I still had to do the task, it had to be done you know to be completed. I had to do it*".

I asked the tāngata whai ora if they would have liked their whānau to be involved either in the research or in the actual programme sessions. I got a polite "*No*" from Greg: "*I'm not sure whether that fits. Yeah, probably not aye. I think, nah, I think it's alright as it is*". I received a similar response from Susan, "*I don't think so, I'm pretty independent*". I got the sense that there was a certain level of pride in taking this journey independently, but it was still important to tāngata whai ora that they shared what they were doing with their significant others. All four tāngata whai ora expressed that they wanted, and were excited, to let their whānau know what they were doing "*I talked to them about it all the time*" (Fiona). Whānau were more like passengers on their journey, taking in the commentary. Greg said "*I tell her* [my mother] *I do the*

programme. When asked what it is, she's pretty interested. I just said it's you know doing tasks, improving concentration and stuff and she said oh 'kia ora'". It was important to tāngata whai ora that whānau understood the significance of the programme.

> *I just talked to my mum about it. I told her what I was doing with it, and that made me feel better too. They understood more about the programme. Mum noticed that I was coming up more confident, that was really good.* (Fiona)

Expanding horizons

The final subtheme, 'Expanding horizons', describes how tāngata whai ora viewed the relevance of the programme to them personally. They could see the impact the programme was having on their daily lives and were able to make the link between what they were doing in the programme, seeing new possibilities, and the prospect of a better future. In a metaphorical sense a horizon can represent the limits of one's knowledge, understanding, or vision. Expanding one's horizons implies gaining new knowledge or experiences that go beyond one's current understanding or perspective, and to looking ahead. When 'Making Way' one is continuously moving forward; the horizon that is seen is never the same from moment to moment. Expanding horizons captures how tāngata whai ora could see new possibilities for themselves as they moved through the programme. For instance, Greg stated, "*CRT helps me to achieve goals… It helped me to have something to strive for. This will help me get a full-time job and I'll get a car once I've nailed the job*".

As the writer Craig D. Lounsbrough (2024) eloquently put it, "A horizon on the road of hope is nothing more than a starting point for the next horizon". The expanding horizons tāngata whai ora conveyed were points of hope, confidence, self-worth, and pride as they underwent their journey through the occupation-focused CRT programme. For example, Fiona stated, "*it helped me to be more confident I reckon; it was really good for me*". They could see for themselves how they were contributing to their own sense of self-worth, joy, and pride by participating in the programme. "*I've found it really beneficial I do feel more confident, I feel more confident in myself that*

I'm doing something for me, to help my mind function. My thinking is clearer, and I feel more on the ball" (Susan).

The tāngata whai ora were able to make a connection between what they were learning on the programme and how relevant that learning was to their everyday lives. Their learning helped them move beyond where they were and opened doors for other possibilities such as living independently or gaining a better job. "*I became more independent, and it felt good, and it didn't waste my time, it helped me with doing things outside of work and with work too*" (Fiona). Greg echoed Fiona's experience: "*Now I'm living more independently I know I need the skills; I have to think for myself*". Being more independent enabled Greg to think beyond what was currently in front of him. "*Being able to do things on my own time is better, I'm approaching things with a bit more hands on and getting involved*" (Greg).

Taking part in something they enjoyed and could see benefit in, gave tāngata whai ora something they "*looked forward to*" (Peter). Thus, they made it a priority in their lives. As Greg explained "*I changed a lot of my routine around just so I could get to my sessions*".

Tāngata Whai Ora' Experiences of Changes in Occupational Performance

The CRT programme was delivered with an occupational focus, so I sought to find out whether tāngata whai ora experienced changes in their occupations as a result of the how the programme was delivered. As mentioned in Chapter Seven, I gained consent from four tāngata whai ora to review their CRT reports from their clinical files. Within those CRT reports were details of tāngata whai ora experiences of their occupational performance recorded using the COPM (Law et al., 2014) at the start and end of their engagement in the programme. Therapists undertook the COPM with tāngata whai ora to identify five occupations that tāngata whai ora saw as important and with which they were struggling and wanted to improve, and to identify their perceptions as to their performance and satisfaction with those occupations.

Two of the reports obtained were from Peter and Greg who took part in the interviews. The other two reports belonged to Jake and Simon who were also attending Vocational

Futures. Table 13 overviews the demongraphic information for the four tāngata whai ora who consented to use of their CRT reports, including diagnosis, duration of illness, and ethnicity.

Table 13

Tāngata Whai Ora CRT Report Demographic Information

Name	Diagnosis	Duration of illness in years	Ethnicity
Jake	Schizophrenia	30	Māori/Pasifika
Simon	Schizophrenia	18	Māori
Greg	Schizophrenia	25	Māori
Peter	Schizophrenia	19	Māori

Examples of occupations identifed in the COPM (Law et al., 2014) as important and problematic by Jake, Simon, Greg, and Peter included learning to use the forklift, improving a morning routine, and holding a conversation in break times. Jake, Simon, Greg, and Peter self-rated how well they were performing their identfied occupations and how satisfied they were with their performance prior to beginning the programme and again on completion. Table 14, presents the total change scores of occupational performance and satisfiaction with performance for each tāngata whai ora.

Table 14

COPM Total Change Scores

Tāngata whai ora	Performance time 1	Performance time 2	Satisfaction time 1	Satisfaction time 2
Peter	6	9	6	9
Greg	4.6	5.8	4	5.6
Simon	7	7.4	6.2	8
Jake	4.7	7.25	5	5.5

Note. Time 1 = Beginning of programme; Time 2 = End of programme

Due to the small number of participants it is not possible to say the changes occured because of participaton in the programme. However, because the COPM is a self rated tool, it provides information on how tāngata whai ora experienced changes in their

own occupational performance after participating in the programme, with all four tāngata whai recording an improvement in performance and satisfaction with performance.

Summary

The theme ‘Making Way’ captures important aspects of how an occupation-focused CRT programme was delivered from the experiences of tāngata whai ora. Having the programme introduced in a way that tapped into their potential to move on from their current situation was an intriguing invitation. The programme was delivered in a way that enabled tāngata whai ora to learn new skills and strategies that were relevant to their lives, including developing self-awareness. It was delivered in a way that created just enough challenge to keep them engaged and made the programme enjoyable. The level of therapist input and the flexibility within the programme seemed important for tāngata whai ora to maintain a sense of control and achievement which, ultimately, resulted in the tāngata whai ora describing a feeling of increased hope, pride, confidence, and ability to move forward with their lives. Coming back to the Māori metaphor, tāngata whai ora were taking care of their own waka and ‘Making Way’. Furthermore, tāngata whai ora experienced an improvement in their occupational performance based on the COPM results after participating in the programme.

This chapter concludes the case study report which provided the contextual information about the case, such as organisational values, leadership structure, training, and information about where the programme was delivered. Key stakeholders’ experiences of the case, which provided key insights to how an occupation-focused CRT programme was delivered in a community mental health setting within Aotearoa New Zealand, were also offered. The following chapter presents my assertions, which summarises the key findings from the contextual information and the three perspectives presented in this case study report.

Chapter Nine: Assertions from the Case Study Report

This chapter presents my assertions, drawn from the overall case study report. The assertions highlight key conclusions that relate to the research questions: How was an occupation-focused CRT programme delivered in a community mental health setting within Aotearoa New Zealand? What were peoples' experiences of the delivery of the programme? What factors influenced the delivery of the programme and how did those factors shape delivery? The assertions are constructed from my interpretations of the overall analysis of the interviews and documents. They are shaped by my own understandings and experiences, and by discussions with my supervisors and cultural advisor. As Stake (2010) described "For assertions, we draw from understanding deep within us, understandings whose derivation may be some hidden mix of personal experience, scholarship, assertions of other researchers" (p. 12). Fourteen assertions are presented here. I present these assertions in order, with those that are relevant to the tāngata whai ora first, given the programme delivery is for them. I then move onto assertions that relate to the therapists and, finally, assertions relating to the leaders and organisation.

Assertion 1: The programme should be delivered in a way that empowers Tāngata Whai Ora to exercise choice and control

Delivery of the programme started with a personal invitation by the therapists with whom tāngata whai ora had an established trusting relationship. It involved sitting down together, face to face, and explaining the programme, "*she just talked me through it*" (Susan; Tāngata whai ora). The programme was explained by the therapists in a way that conveyed its personal relevance and what it might offer to tāngata whai ora, which sparked their interest, created intrigue, and supported their choice about whether or not to participate: *"I was inquisitive and thought I might better myself"* (Susan; Tāngata whai ora). Tāngata whai ora were, therefore, empowered right from the beginning. Programme delivery and the nature of the close relationship between the therapists and tāngata whai ora further supported tāngata whai ora to experience and exercise independent thinking and actions. Tāngata whai ora experienced autonomy to make decisions and choices as they engaged with the

programme content. The occupation-focused CRT programme was not being delivered **to** tāngata whai ora by the therapists, but **with** them.

Assertion 2: Programme delivery that provides opportunity to achieve occupational goals, have fun and be challenged is key to Tāngata Whai Ora engagement

The programme was delivered in a way that provided tāngata whai ora an opportunity to reach untapped potential to learn, grow, and experience achievement. Being challenged and having fun facilitated engagement, *"The challenge made me want to do it more*" (Greg; Tāngata whai ora). Delivering the programme in a way that was challenging and fun motivated tāngata whai ora to be self-determining and work towards meaningful, occupational goals, improving their own well-being and social outcomes. "*Now I'm living more independently I know I have the skills to think for myself"* (Fiona; Tāngata whai ora).

Assertion 3: Programme delivery that includes acquisition of cognitive skills and strategies alongside an occupational performance intervention means these elements are mutually reinforcing, relevant, and valued by Tāngata Whai Ora and Therapists

Acquisition of cognitive skills and strategies, alongside transference of these skills and strategies to everyday life, were central to programme delivery. Making the programme functionally relevant to tāngata whai ora provided a purpose to participate and fostered commitment. The programme was delivered in such a way that tāngata whai ora were able to see that the skills and strategies they were learning in their sessions related to their everyday life "*It's helpful .. and it can help me get a better job*" (Peter; Tāngata whai ora). Delivering the programme, that included a clear focus on occupation, enhanced tāngata whai ora experiences of pride and hope, and increased self-esteem and achievement by working towards meaningful occupational goals and by participating in a meaningful occupation. This supported the programme's meaning: "*I've found it really beneficial I do feel more confident, I feel more confident in myself that I'm doing something for me*" (Susan; Tāngata whai ora). Similarly, improving tāngata whai ora occupational and cognitive needs was important to the therapists, reinforcing the meaning it brought to tāngata whai ora lives. Focusing on occupations meaningful to tāngata whai ora made the programme relevant and gave therapists a focal point from which to apply concepts and teach strategies. Focusing on occupation

also gave the therapists direction when facilitating the sessions because the occupational goals were "*always in the back of our minds*" (Michelle, Therapist). Delivering the programme in a way that addressed cognitive difficulties and was relevant to tāngata whai ora meaningful occupations elicited buy-in from both tāngata whai ora and therapists.

Assertion 4: Tāngata Whai Ora find the digital nature of the CRT aspect of the programme appealing and accessible which supports their participation in learning cognitive skills and strategies

Tāngata whai ora and the therapists found the computer programme enjoyable, flexible, engaging, and a useful tool to learn and teach cognitive skills and strategies that could be applied to tāngata whai ora' day-to-day lives. Both tāngata whai ora and therapists found the delivery of the CRT programme via a computer programme supported the learning/teaching process. Delivering the programme using digital technologies was consistent with the organisational goal to "Grow awareness of digital health opportunities among staff and patients" (SCHB Digital Health Strategy, 2017; Table 4).

Digital technologies supported equitable access to some elements of the programme, such as using the CIRCuiTS programme, across different geographic areas. Other elements of the programme did not allow that flexibility. For instance, the social skills groups were not offered using digital platforms, disadvantaging some tāngata whai ora who lived at a distance. Lacking transport options, they could "*not attend the group at all*" (Pam; Therapist).

Assertion 5: CRT Therapist training that is informed by evidence, and that is consistent with expert opinion and programme principles, is Integral to the delivery of an Occupation-Focused CRT Programme

The content within the CRT training that was delivered at SCHB, regardless of the modality, was evidence-based in accordance with the international CRT expert working group and training provided via Kings College, London. On completion of the training, a CRT programme with a focus on occupation was delivered that was consistent with the key principles of CRT, such as massed practice and positive reinforcement, and which ensured fidelity to key techniques (i.e., errorless learning, scaffolding). "Overall, the

principles were pretty closely followed" (Sarah; Therapist). The training also covered core components required in a CRT programme as outlined by the CRT expert working group such as setting goals with tāngata whai ora and teaching tāngata whai ora cognitive strategies during the sessions that supported metacognition and which could be transferred to day-to-day occupations. The training also comprised of hands-on experience with the computer programmes, role playing, and practice. "It kind of put it all in perspective of this is how and what it would look like if you were to deliver CRT with occupation, which following that I obviously did get it up and running" (Sarah; Therapist). The occupation-focused CRT training provided therapists with adequate knowledge to learn, understand, and apply the CRT principles and techniques to support clients to apply them in their day-to-day lives and meaningful occupations. The CRT Steering Group provided oversight and quality control to ensure the ongoing delivery of the programme contained the evidence-based components of a CRT programme (CRT Steering Group ToR, 2017; Table 4). To apply learnings from the training without losing confidence, delivery of the programme needed to occur "within one month" (Sarah; Therapist) of receiving the training to support the therapist with application of the skills. Any longer and confidence to apply the training decreased, making it harder to get started with delivering a programme.

Assertion 6: Therapists' use of the Canadian Occupational Performance Measure (COPM) helps them support Tāngata Whai Ora in setting meaningful, occupation-focused goals and to provide feedback to Tāngata Whai Ora on their progress towards achieving their goals

While delivering the programme, the therapists used an occupation focused assessment tool, the COPM (Law et al., 2014), to capture occupations that tāngata whai ora deemed to be important and needed improving. The COPM was useful "*to support the clients to identify meaningful goals*" (Leah; Therapist), and "*in terms of capturing their occupations and real-life stuff*" (Michelle; Therapist). Also important to the therapists was that they had a tool that showed tāngata whai ora how well they were progressing towards their goals, and that provided visual encouragement.

Assertion 7: Trailblazers are necessary to make an Occupation-Focused CRT Programme happen

Delivery of an occupation-focused CRT programme needed leadership. "*CRT is in its infancy*" and needs a "*dedicated project lead*" (Anna; Leader). SCHB had trailblazers who initiated the pilot programme, received formal training, and delivered training to clinicians at SCHB. Trailblazers were required to push programmes into services and forge new pathways, figuring things out as the new programme progressed. The trailblazers at SCHB set up organisational structures to support future delivery of the programme, including the CRT Steering group and supervision group.

Vocational Futures had a trailblazer that led the delivery of the programme with a structured plan that included timelines, action plans, and which embedded the occupation-focused CRT programme into clinical governance meetings, business plans, and team meetings. "*Things can be put off if you don't have your start date and you're ready to go. We set dates and tasks and who was responsible for completing those tasks*" (Sarah; Therapists).

The trailblazers demonstrated tenacity, flexibility, collaboration, and problem-solving skills, which supported delivery of the new initiatives. The trailblazer at Vocational Futures was essential to the delivery of the programme.

Assertion 8: Prioritisation and strategic planning by Therapists and Managers towards delivery of a CRT Programme is supported when the occupational focus is consistent with management and team values

Successful delivery of the programme at Vocational Futures was due to the therapists and team manager valuing the occupation-focused CRT programme as an approach to support tāngata whai ora to achieve occupational goals. "*I feel that we had full support from our manager, so I can't see any way within our service that it could be more supported*" (Leah; Therapist). Valuing the intervention meant that all necessary resources were put in place to ensure successful delivery, including establishing a structured plan on how to deliver the programme, dedicated time, a designated leader, and resources (e.g., computer, training, assessments, computer programme licenses, designated areas). Vocational Futures was also a designated specialist rehabilitation service that was not required to attend to acute needs of those

accessing services. Therefore, Vocational Futures was able to focus and specialise on the rehabilitation and occupational needs of tāngata whai ora.

Assertion 9: Delivery of an Occupation-Focused CRT Programme is not prioritised at a mental health service delivery leadership level when there are overwhelming and competing demands in other areas of the service

Mental health leadership and management were strongly driven to address the needs of tāngata whai ora who were acutely unwell and at high risk of immediate harm, "*I feel like I'm constantly putting out fires all the time*" (Matt; Leader). Mental health leadership were less driven to address the rehabilitation needs of tāngata whai ora, and had low expectations of tāngata whai ora, who had cognitive difficulties. "*I think that there is a kind of acceptance that it is just part of it rather than something that could be improved and sharpened*" (David; Leader). Likewise, tāngata whai ora had low expectations of mental health services, so they were surprised and thankful when offered something that was helpful, "*I am just so thankful that my therapists approached me about this, I feel I have benefited from all of it*" (Susan; Tāngata whai ora). Both sets of expectations were at odds with organisational values where services need to "prioritise patient experience and better outcomes" (SCHB Website, 2018; Table 4).

People with an EPI are at high risk of dependency on health and social services due to their difficulty with everyday functioning. Therefore, delivery of rehabilitation programmes, such as the occupation-focused CRT programme, aligns with sector goals to "improve, promote, and protect the health of communities, integrate health services, and promote effective care or support for those in need" (SCHB Website, 2018; Table 4). Yet, low expectations from leadership resulted in limited support and resource allocation to rehabilitation programmes such as the occupation-focused CRT programme.

Assertion 10: Information sbout the delivery of the Occupation-Focused CRT Programme and its outcomes needs to be clearly communicated to key stakeholders

Good outcomes and benefits achieved from the programme were not shared widely with managers and leaders which meant the programme had no visibility. Information was not reaching the decision makers and key stakeholders. "*Since the pilot we're not*

getting the stories, there's not the information coming through about tāngata whai ora having good outcomes" (Matt; Leader). Therefore, managers and leaders were insufficiently informed to provide input and support to the programme. Additionally, whānau, clinicians and keyworkers were not getting feedback from the COPM data that demonstrated changes achieved, or information about recommendations that they could use to support tāngata whai ora with ongoing strategy use on completion of the programme. Consequently, important information about the programme remained within the confines of Vocational Futures and the SCHB CRT Steering Group, creating a compartmentalised bubble of CRT within the larger organisation. In the SCHB CRT Steering Group minutes (2018; Table, 4) it was stated: "collating anonymised information from multiiple individual reports to provide an annual summary to upper management and leaders on overall outcomes". However, this action did not occur, leaving a broken cycle of communication between key stakeholders and preventing an important feedback loop to continuously improve the programme delivery and outcomes for tāngata whai ora.

Assertion 11: Lack of understanding about cognition and the impact cognition has on functioning for Tāngata Whai Ora with an EPI is a barrier to them accessing the programme

Tāngata whai ora had some understanding of the difficulties they experienced with cognition on their day to day lives. Therapists, however, perceived a lack of understanding of these difficulties on the part of whānau, and mental health staff. They saw a need to increase knowledge around cognition and the occupation-focused CRT programme in order to support access and attendance "[I] *feel that that was really helpful to have their understanding and their buy in because there can be a bit of tension there at times*" (Michelle; Therapist).

Assertion 12: Further development of the delivery of the programme is needed to ensure it meets the obligations under Te Tiriti o Waitangi

Although the therapists were sensitive to their obligations to te Tiriti o Waitangi, and SCHB had made a commitment "to work with Māori to improve Māori health outcomes" (SCHB Website, 2018), the development and delivery of the occupation-focused CRT programme was not undertaken in partnership or collaboration with

Māori. There was a lack of consultation in the initial stages with cultural advisors and the cultural teams on how best to deliver the programme to meet the needs of Māori tāngata whai ora. While delivery of the programme went some way towards supporting self-determination, gaps remained in providing a culturally responsive, occupation-focused CRT programme for Māori. For example, there was tension between tāngata whai ora preferences to not involve whānau, which may reflect Western values for service delivery with individuals, and delivering the programme in a way that was responsive to te Tiriti o Waitangi which guides a whānau-centred service delivery. Keeping whānau informed about the programme is important to tāngata whai ora, "*I talked to them about it all the time*" (Fiona; Tāngata whai ora) but whānau inclusion in the actual sessions were considered by tāngata whai ora as not necessary "*I don't think so, I'm pretty independent*" (Susan; Tāngata whai ora). This is at odds with the therapist considerations where the programme "*needs to be implemented in more of a collective whānau-orientated way*" (Sarah; Therapist). Delivering the programme in a whānau-centred way has many possibilities but without the whānau voice there is limited direction. Therefore, it is unclear how the programme should be delivered to Māori because that conversation has not happened. In retrospect there were suggestions by the therapists on how to improve the programme for Māori which have been discussed with a Māori advisor; however, without working in partnership with Māori to develop and deliver the programme to Māori, therapists lack appropriate guidance.

Assertion 13: Manatū Hauora Ministry of Health needs to provide clear direction on the consistent provision of nental health rehabilitation services

Significant and ongoing structural upheaval of Aotearoa New Zealand's health system has meant that the leadership at SCHB and the Mental Health Services divisional leadership team do not know where responsibilities lie, how services will be divided up, or how they will provide mental health rehabilitation and recovery services in the future. At the time of this study, the New Zealand government was undertaking an enquiry into mental health services during which there was a lack of direction as to the focus of publicly funded mental health services and fiscal management to prioritise service delivery, despite the fact that services are "required to budget and operate

within allocated funding" (SCHB Website, 2018; Table 4). The SCHB website had no national, regional or sub-regional mental health and wellbeing initiatives stated. Lack of direction created hesitancy to move forward with interventions that may or may not have been required to be delivered by public mental health services, and which could have sat more with NGOs and social services. "*It's unclear from a national directive how much sits in the mental health arena, how much sits with other agencies…. does CRT sit in several different places and sectors? I don't know what the possibilities for that are*" (David; Leader).

Assertion 14: Collaborative partnerships between mental health service providers, NGOs, and government ministries to deliver an Occupation-Focused CRT Programme benefits all stake holders

There was general agreement among the leaders that delivering an occupation-focused CRT programme in conjunction with other services, such as NGOs and Māori health providers, would benefit tāngata whai ora: "*Working more with the NGOs, that is where the interventions need to be focused*" (David; Leader). The therapists also expressed wanting to work closer with NGOs, and this was an area for improvement in delivering CRT "*I think we could work closer together*" (Leah; Therapist). Working in collaboration with other sector services is also central to SCHB values and purpose for "services to work closer with social sectors, such as the Ministry of Social Development and non-government organisations" (SCHB Website, 2018; Table 4). Working in collaboration with other services offers increased access, support, collaborative practice, and utilisation of the peer support workforce. Collaboration with other service providers will also streamline tāngata whai ora journeys through mental health services, and benefit tāngata whai ora with continued support with learnt strategies beyond completion of the programme and discharge from SCHB mental health services.

Summary

This final findings chapter has summarised the key interpretations and claims in the form of assertions, which were constructed from key linkages across the various key stakeholders' perspectives and documents relevant to the case. The assertions highlight the importance of programme delivery that facilitates tāngata whai ora

engagement, self-determination, identification of meaningful occupational goals, being challenged, learning cognitive strategies and skills, and making the programme relevant. Training is essential in delivering the programme, along with the integration of an occupational focus. A designated trailblazer with a specific set of skills and attributes is instrumental to delivery; along with a manager who values the intervention. The leaders experienced tensions managing demands and resource allocation, but were forthcoming in what they needed, to support CRT which included visibility and a plan. Access to a CRT programme is more likely if the mental health workforce has a better understanding of the impact of cognition on day-to-day functioning and the programme is developed in partnership with Māori to ensure culturally responsive service provision. The following chapter discusses the relevance of these findings.

Chapter Ten: Discussion Chapter

The aim of this study was to gain an understanding of the factors that influenced the delivery of an occupation-focused CRT programme, as a basis for providing clear recommendations to support an effective roll-out of the programme through Aotearoa New Zealand mental health services. The previous five chapters presented the findings of this study. This concluding chapter provides a summary of the findings; and positions the findings in relation to existing literature, including relevant literature that was published over the duration of this study. The contribution of this study to the existing body of knowledge is discussed, along with the study's strengths and limitations and my reflections on how the study unfolded. The key implications of the study and recommendations for future delivery of the programme are presented along with recommendations for future research. This chapter ends with my concluding remarks.

CRT is an established, evidence-based intervention that improves cognition for people with a lived experience of an EPI (Bryce et al., 2016; Vita et al., 2023). CRT is a recommended intervention in international and Aotearoa New Zealand guidelines for the treatment of psychosis (Galletly et al., 2015; Killaspy et al., 2021; National Institute for Health and Care Excellence, 2020; Norman et al., 2017). The World Health Organization (2023) has similarly recommended the use of CRT in mental health rehabilitation services. Having an evidence-based intervention with proven efficacy and established acceptability is important; but, if a CRT programme is not implemented as part of service delivery to move people through their rehabilitation and recovery journey in the context of their everyday life, then it remains of little benefit to those who need to access the programme. Prior to the current study, little was known about how CRT is delivered within the constraints and influences of everyday clinical services. Even less was known about how the programme can be delivered in a way that improves people's lives and occupations; and there were no studies that explored the delivery of CRT for people living with a EPI within the Aotearoa New Zealand context. Therefore, this study answered the research questions: *How was an occupation-focused CRT programme delivered in a community mental health setting within Aotearoa New Zealand? What were people's experiences*

of the delivery of the programme? What factors influenced the delivery of the programme and how did those factors shape delivery? This study provides evidence within the Aotearoa New Zealand context of the support, resources, and workforce training needed for on-going delivery of occupation-focused CRT programmes. This research is also one of the first studies to contribute unique insights about the contextual factors that support or impede delivery, including cultural considerations, when delivering a standard, westernised CRT programme within the context of Aotearoa New Zealand. Furthermore, this study contributes to the current literature to help leaders, clinicians, and policy makers understand what is required when delivering the programme to address the cognitive and occupational needs of tāngata whai ora. The following section summarises the findings in answering the research questions.

Summary of the Findings

In Chapter 7, the case study report set the scene by highlighting contextual factors that were relevant to the delivery of the programme. Contextual factors relating to the organisation (SCHB) included the leadership structure, organisational values, the CRT steering group purpose and reporting requirements, and the training that was provided. The case study took place at the Vocational Futures rehabilitation service where stakeholders' experiences highlighted positive experiences and supportive elements, but also conveyed the complexities and tensions inherent to the programme delivery.

The leaders' experiences of the programme were constructed into two themes 'managing tensions' and 'embedding CRT'. The main tensions that the leaders identified were: focusing on the acute end of the service while acknowledging the unmet needs of tāngata whai ora living with an EPI. Second, were the multiple competing demands they were juggling daily which included prioritising resources and balancing budgets. Thirdly, the leaders described feeling unclear about what they were mandated to deliver or what belonged with other areas of the mental health sector such as NGOs. Leaders were unsure 'what was in' and 'what was out', including the occupation-focused CRT programme. The leaders were supportive of the programme and had some ideas on how to embed CRT into services, beginning with the

programme needing to be visible. They had not heard much about the programme, such as tāngata whai ora experiences and outcomes since the initial pilot. The programme needed to be on their radar to become and remain a priority. Designated time for a person in a trail blazer role was also required; someone who held attributes, such as determination, vision, and a wide array of communication skills. The leaders also felt that the programme needed to sustain momentum through implementation plans, embedding CRT into business plans, having succession plans, and linking CRT into Ministry-level drivers such as employment and quality of life outcomes.

The therapists' experiences of delivering the programme consisted of four themes derived from the interview data: 'splicing occupation and CRT', 'taking the lead', 'strong relationships essential to delivery', and 'enhancing future delivery'; and one theme from the CRT reports—'broken feedback loops'. Therapists' new knowledge of CRT and existing knowledge of occupational therapy were spliced together to create a programme that aligned with their practice and was, therefore, meaningful to deliver. Vocational Futures had a trail blazer that took the lead and was instrumental in rolling out the programme. The therapists described a relationship with each other that was supportive, along with a supportive manager which reflected a 'can do' team culture. These relationships were essential in delivering the programme in a flexible way when navigating challenges such as massed practice. Massed practice required the therapists to deliver the programme two to three times a week with each tāngata whai ora. There was room for ongoing improvement of the programme, including responding to te Tiriti o Waitangi and working with Māori to make the programme more culturally responsive, involving whānau in programme development and delivery, and building connections with tāngata whai ora wider support networks. Gathering and recording information in clinical files was seen as important; however, that information was not shared with key stakeholders creating broken feedback loops.

Tāngata whai ora experiences of the programme delivery were based around one theme—'making way', with an additional section on changes in occupational performance. 'Making way' captures how tāngata whai ora participation in the programme created a sense of engagement, purpose and moving forward in their lives. The programme was delivered in a way that invited them to take part in an

intriguing voyage of learning new skills, being challenged, and having fun. It was also delivered in a way that left them feeling like they had choice and control, and were at the helm of their own lives, expanding their horizons and potential for a better future. Tāngata whai ora perceived improvements in their occupational performance after participating in the programme.

The assertions in Chapter 9 draw together the main points of the findings. Crucial elements highlighted in the assertions derived from the themes were; firstly, that programme delivery facilitated tāngata whai ora engagement, self-determination and provided an opportunity to work toward meaningful goals, acquire the necessary cognitive skills and strategies, and see new possibilities. Secondly, training was essential in delivering the programme along with a focus on meaningful occupations and having occupational outcomes. Next, a project leader with passion, time, and organisational skills was necessary, along with team leaders who valued the intervention and could see its benefits. Complexities that hindered programme delivery were the demands placed on leadership to deliver a service with minimal resources and lack of ministerial direction, a lack of knowledge amongst staff about the impact of cognition on day-to-day functioning, and ineffective communication about the programme outcomes within the organisation. Furthermore, future programme development is required in partnership with Māori to ensure the programme is culturally responsive, which was not evident in the findings but seen as essential.

This study is the first to provide a detailed exploration of how CRT was delivered outside a research setting and how it embodied a holistic focus on a range of tāngata whai ora occupational needs. The findings draw attention to influences that can facilitate and pose a challenge to the delivery of the programme within the context of clinical practice. Furthermore, this study captured the experiences of key stakeholders, which highlighted factors and complexities that shaped how the programme was delivered. The next section situates the findings within an ever-changing healthcare environment.

Situating the Findings Within an Ever-Changing Environment

Relevance to government and policy makers

This study is one of the first to provide information relevant to policy makers in Aotearoa New Zealand about the experiences of key stakeholders involved in the delivery of a CRT programme. Stakeholder experiences included organisational leaders considering CRT within the wider context of service delivery, therapists delivering the occupation-focused CRT programme, and tāngata whai ora whose cognitive and occupational needs were being addressed through the delivery of the programme.

Over the course of this study, the Aotearoa New Zealand health system underwent the biggest health reform in the country's history, under the guidance of the then residing government and the Ministry of Health/ Manatū Hauora. The reform resulted in multiple actions: First, 20 separate health boards were combined into one health system called Te Whatu Ora which means "the weaving of wellness". Second, the first Māori Health Authority, Te Aka Whai Ora, was established to work with both Manatū Hauora and Te Whatu Ora to manage Māori health policies, services, and outcomes. Third, the Aotearoa New Zealand government introduced a new piece of legislation to set the health service priorities and system improvements over the next 5 to 10 years—the Pae Ora Healthy Futures Act (2022). At the same time, the government was responding to 40 recommendations made from the mental health inquiry—He Ara Oranga, with 38 having been either accepted, accepted in principle, or under consideration (Manatu Hauora Ministry of Health, 2023). An interim health care plan—Te Pae Tata—was introduced in 2022 (Health New Zealand: Te Whatu Ora, 2022). Pae Ora and Te Pae Tata provide broad brush strokes for services to set directions for future mental health care. Health services are having to continuously monitor and adjust what they do, given the ever-changing sociopolitical climate in which they operate, guided by the various policies, legislation, and reforms implemented by current and succeeding governments. For instance, Aotearoa New Zealand had another change of government at the end of 2023, which is looking to remove Te Aka Whai Ora, bringing about yet another possible change and further uncertainty. The changes in the political climate highlight the complexities the leaders in this study were having to navigate. The changes are constant, and leaders need to stay abreast of the

changes and what they mean for delivery of services within their organisations, all the while endeavouring to align service delivery nationally as part of one health system.

Additionally, leaders are still having to manage legacies of historical government decisions which have resulted in inequitable outcomes for Māori, stigma and discrimination in mental health, and poor outcomes for people who experience cognitive difficulties. Previous health strategies have called for change to address the needs of those with enduring illness who have been underserved (Ministry of Health 2012; Minster of Health 2016). Although there was a call for action in these documents, it appears from the leaders' accounts in the current study, that there was little guidance on how to deliver services, how to stretch resources and prioritise needs, and who should be delivering what. Therefore, very little has been done to address the cognitive needs of people living with an EPI (Kake et al., 2016). Continued inaction from government in providing guidance on service delivery will persist in having a negative effect on the lives of people living with an EPI. Consequently, people with an EPI will continue to be highly represented in negative health statistics such as low employment rates and poor housing; thereby, continuing to contribute to the economic burden of schizophrenia on Aotearoa New Zealand (Neil, 2014).

The current health strategies provide little guidance to leaders to address specific services for those with high and complex needs, cognitive difficulties, and EPI (Health New Zealand: Te Whatu Ora, 2022). This study brings to light what needs to be attended to by government and organisational leaders. It goes beyond just recommendations in national guidelines for the treatment of psychosis (Galletly et al., 2015), and beyond the broad-brush strokes in Pae Ora and Te Pae Tata (Health New Zealand: Te Whatu Ora, 2022). It highlights actions that are required to provide equitable access to an occupation focused CRT programme for tāngata whai ora who need it.

One organisation that could assist the government in achieving such actions is Te Pou. Te Pou is a not-for profit, national, workforce-development centre funded through the Ministry of Health. Te Pou works closely with the Mental Health and Addiction and Health workforce directorates in the Ministry (Te Pou, 2024). Te Pou's (2024) aim is to

"improve the lives of people with mental health, addiction and disability needs by connecting the people working with them, tāngata whai ora, tāngata whaikaha, (people with disabilities), and their whānau, with knowledge, resources, training, and information". Te Pou state their work is "staunchly evidence based". Much of the work Te Pou supports is focused on talking therapies and improving metabolic and physical health. There is limited mention on the Te Pou website of addressing the cognitive needs of tāngata whai ora or upskilling the mental health workforce to understand the impact of cognition on day-to-day life. It is time to change this. The health system in Aotearoa New Zealand is unique and complex yet does provide opportunities for new developments as demonstrated in the occupation-focused CRT pilot and delivery of the programme at Vocational Futures.

Relevance to Organisational Leaders and Managers

Prior to this study, I was not aware of any research in the literature that considered leaders' and managers' perspectives of CRT delivery within organisations; thus, drawing on leaders' perspectives is unique to this study. Dark et al. (2016) highlighted that often the outer context, policies, and government, are beyond local control. However, the internal context; that is, what goes on inside the organisation such as quality of service provision, resource allocation, and staying up to date with evidence-based practice, is modifiable and may influence the outer context. Therefore, it was important to gain the perspectives of those who had oversight of the services, and to make their experiences visible to policy makers and those that set the health direction for Aotearoa New Zealand.

What was evident in this study was that the leaders had several clear ideas about how to embed CRT into the organisation such as having implementation plans and a trail blazer passionate about CRT, as well as gaining support at a clinical governance level. Further evident in my findings was the importance of creating a feedback loop for accountability and visibility. Many of these aspects mentioned by the leaders were also evident in the therapists' accounts at Vocational Futures; yet, were not shared with the upper-level management. Poor organisational communication between management and the clinicians working with tāngata whai ora, described in this study as 'lack of feedback loops', is similar to findings in the implementation studies by Dark et al.

(2015, 2018), where they recommended keeping CRT visible at all levels of clinical governance. Furthermore, knowledge of clinicians' behaviours and organisational influences is underdeveloped in research involving mental health services (Greenhalgh et al., 2004), a concern which has been highlighted in a recent implementation trial of CRT in Iceland (Vidarsdottir et al., 2021). Vidarsdottir et al. (2021) found that clinical staff and leadership attitudes towards new, evidence-based interventions can be a barrier; therefore, those in leadership positions need to be supported to develop a positive attitude and enthusiasm about the CRT programme. The findings in my study, such as the need to have structured feedback loops, good communication, and keeping CRT outcomes visible to leaders, highlight what is needed to help foster enthusiasm. Other inner context structures to support delivery of the programme, as identified in the findings, included a robust training programme, a steering group, supervision, and resources. Additionally, my study highlights that the programme can be delivered with an investment in devices and assessment tools. Therapists' time can be spread to share the load, reducing the therapist time which may be associated with additional costs.

This study highlights the need to deliver the programme whereby therapists are not distracted by people who are acutely unwell and can, therefore, provide a dedicated service that addresses the rehabilitation needs of tāngata whai ora. The therapists at Vocational Futures talked about feeling very supported by their immediate team manager who had a passion for CRT and understood the value of the intervention on rehabilitation. While such understanding was a positive influence on being able to deliver the programme, therapists did not feel supported by the Level One to Four leadership structure. This is an important finding when considering future implementation of CRT into services.

With the health system undertaking a major reform, the leaders were needing to understand how service delivery fitted within the new interim health strategies. However, regardless of the changes, understanding where CRT fits may still be an issue for the leaders. The leaders did state that CRT was supported in principle but that it was not fully backed by resources and funding, and they needed more information. The leaders expressed that their focus of service delivery was on areas of the service where they perceived the most risk and the most immediate demands. Their focus was

influenced by organisational values and current ministerial direction to address the acute needs of consumers. The staff in community recovery teams were busy attending to acute or crisis work, leaving little time for attending to rehabilitation work for those that were not acutely unwell or at risk. Vocational Futures was one of the only teams at SCHB that was able to deliver the programme, despite staff from multiple mental health teams at SCHB having received the training. Vocational Futures is a dedicated rehabilitation service that addresses the rehabilitation needs of tāngata whai ora. The literature highlights that CRT is more effective if delivered alongside some form of rehabilitation programme (Bowie et al., 2020). This study highlights that teams focused on rehabilitation, rather than acute or crisis work, have the flexibility, authority, and time needed to deliver the programme effectively.

There was variation in the knowledge that the leaders had around CRT. All the leaders could see the benefit in the intervention but saw cost and time as a potential barrier. Allocating resources was a continuous tension that the managers needed to navigate. The current study, undertaken at Vocational Futures, has demonstrated that an occupation-focused CRT programme can be delivered with minimal resources such as a limited number of computers, computer software licences, some dedicated space, and chosen assessment tools. Literature, although sparse, has shown that the provision of a CRT programme can reduce acute inpatient admission rates, and that improvements in cognition reduces disability costs to society and healthcare (Garrido et al., 2017; Patel et al., 2010; Reeder et al., 2014; Vita et al., 2016). Leaders need to consider, therefore, the short-term outlay of costs against the long-term cost savings to services and to society more broadly. Having support with a long-term vision to address the needs of people with an EPI from the Ministry of Health would be helpful to navigate these decisions.

The findings in this study highlight how leaders at SCHB expressed a lack of direction from the Ministry regarding the focus of their core business of service delivery. This study informs policy makers of the need to provide strategic guidance to organisational leaders to support decision making about allocation of resources to improve the cognitive needs of people living with an EPI.

It is important that policy makers, who are setting the conditions under which health systems operate, hear from the people who are using and working within the system about what is needed to help people voyage to wellness. Studies highlight the importance of hearing consumers' perspectives and aligning goals for service delivery (Castle & Harvey, 2016; Morgan et al., 2017). This study provides narratives from those with lived experiences of the occupation-focused CRT programme that need to be heard. The study also highlights the socio-political and economic concerns voiced in the literature about the burden of disease associated with psychosis, and counters such concerns with a report of clinicians' ability to offer interventions that make a difference.

Integrating Tāngata Whai Ora and Therapists' Experiences of the Programme with Existing Literature

The current study highlighted a gap in the body of literature that informs delivery of an occupation-focused CRT, where the programme embodies a holistic focus across a range of tāngata whai ora occupations. Furthermore, knowledge gaps were also evident in terms of therapists' actual epxeriences of delivering the occupation-focused CRT programme, and in relation to tāngata whai ora experiences of the programme.

Relevance to Occupational Therapists

The World Health Organization (2023) lists occupational therapy as a profession able to deliver the CRT programme. The experiences reported by therapists in this study suggest that the occupational therapy profession is well suited to deliver a CRT programme. More importantly, occupational therapists in this study delivered the programme with a focus on occupation which created relevance and meaning for tāngata whai ora.

The current study demonstrated that the essential elements of a CRT programme, as identified in the international literature (Bowie et al., 2020; CREW, 2012), were able to be adhered to while maintaining a holistic occupation-focus, which contributed to maintaining tāngata whai ora motivation and engagement. To date, little has been known about what motivates tāngata whai ora to engage in the programme. This study sheds light on how, in the first instance, tāngata whai ora are motivated to attend the

programme by engaging with their therapists and the computer programme, with motivation that built over time through development of skills, being challenged, having fun, and linking to relevant occupations. Tāngata whai ora motivation was maintained over the duration of the programme rather than diminished.

Research has considered establishment of training required to deliver CRT (Dark et al, 2016). However, the findings from the therapists' data in my study informs us more deeply as to why training in CRT is essential to deliver the programme. Firstly, via the training, the therapists grew a deep understanding of the cognitive difficulties that tāngata whai ora living with an EPI experienced and the impact this had on their day-to-day lives. Secondly, the training grew therapists' fervency for the programme. These two findings are similar to a recent study by Hyde et al. (2020) who found that the therapists in their study were enthusiastic about the programme and grew an appreciation of the lived experience of cognitive difficulties after receiving CRT training. Thirdly, and unique to the current study, is that the therapists were able to 'be' occupational therapists which was motivating for them as therapists when delivering the programme. They were able to use and apply their occupational therapy knowledge and skills to re-focus the CRT programme.

The training the therapists received in this study was both in-house and online. From the therapists' perspective, the in-person 2-day training that covered essential aspects was sufficient to deliver a programme. The literature review highlighted the multiple CRT software packages that can be, and that are, used when delivering CRT. However, if CIRCuiTs is to be used, as was the case in the present study, then the online training is essential to be able to use the programme appropriately (The CIRCuiTS Team, 2024c). The online training comes at a cost; but the CIRCuiTS programme delivered at Vocational Futures was enjoyed by both the therapists and tāngata whai ora. The choice of computer programme in this study appeared to be influenced by prior knowledge of the trainers and the initial training they received through Kings College. Similar acceptability of the CIRCuiTS programme has been found in other studies that specifically investigated the use of CIRCuiTS (Hyde et al., 2020; Thomas & Rusten, 2019; Wykes et al., 2023). One study originates from the designers of CIRCuiTS (Wykes et al., 2023); the other two from a recent implementation trial in New South Wales

Australia (Hyde et al., 2020; Thomas & Rusten, 2019). All studies found that the CIRCuiTS software was feasible, acceptable, and contributed to promising outcomes for consumers. Delivering the programme using CIRCuiTS will have funding implications for future staff who will require training, a cost that will need to be factored into future delivery of the programme.

Expanding on training, this study highlights that people involved in tāngata whai ora care need to be on board and understand what the programme is about. The findings highlighted the need to educate support staff at Vocational Futures to prevent any potential barriers to accessing the programme. Additionally, the therapists noted the need for tāngata whai ora to be supported in applying their acquired skills and strategies beyond completion of the programme. Although this application did not occur in the current study, it could do if mental health staff, family, and whānau had some education or training about the impact of cognitive difficulties. The RCT study by Tan and King (2013) found that having a coach for 1-year post-completion of the programme provided improved outcomes in activities of daily living compared to those who did not have a coach. Although the therapists in this study did not suggest a coach, they did emphasise the need to include the wider support network of tāngata whai ora encourage ongoing strategy use. These findings align with an implementation trial conducted in Brisbane, Australia, by Dark et al. (2016) where the mental health workforce was upskilled on the impact of cognition on day-to-day functioning for people with psychosis to support cognitive strategy use and access to the programme.

The therapists in this study delivered the computer aspect of the programme in one-to-one sessions which seemed acceptable to both therapists and tāngata whai ora; however, one of the tāngata whai ora interviewed described his therapist going between two tāngata whai ora simultaneously which he enjoyed and expressed that undertaking CRT as a group programme would be fun. A group format was also considered as a viable option from the therapists, noting that tāngata whai ora enjoyed the social skills group component of the programme, and found learning with their peers beneficial. These Aotearoa New Zealand findings lend further support to studies in a range of countries that have explored various modes of delivery, highlighting acceptability and efficacy of a group mode of delivery (Bowie et al., 2017;

Cella, Reeder, et al., 2016; Contreras et al., 2016; Medalia & Freilich, 2008; Tan & King, 2013; Tan et al., 2016). Additionally, recent studies by Wykes et al. (2023) and Evans et al. (2023) have found that either one-to-one or group mode of delivery is cost-effective, and that there was no difference in consumers' satisfaction with either mode.

Findings in the current study reveal that the programme can be delivered with flexibility which was valued by both the therapist and tāngata whai ora. Vocational Futures is located in a setting with easy access to public transport which may have facilitated attendance however this was not evident in the findings, so would need further exploration. One of the Vocational Futures therapists, however, worked in rural communities and was able to deliver the computer-based aspect of the programme at remote sites in conjunction with trained therapists from other services and teams. This was a creative way of overcoming some of the geographical barriers and improving reach to people in more rural areas. My findings are supported by recent research where flexibility and alternative ways of delivering the programme were required during COVID-19, involving adoption of a virtual, online delivery mode (Best et al., 2023; Dark et al., 2022; Mendelson et al., 2022; Shreya et al., 2022). Although this study did not use remote, online delivery of the programme, the use of digital platforms and the flexibility of programme delivery in my study were seen as useful and positive aspects from the experiences of both the therapists and tāngata whai ora. Tāngata whai ora enjoyed the digital platform, working with the computers, and getting computer-based feedback. This is an important finding given the use of digital platforms is a core competency for occupational therapists (Occupational Therapy Board of New Zealand, 2022) and an objective for future health care delivery. The study has shown that the flexibility of delivering the programme enabled occupational therapists to deliver the programme in a multitude of ways to suit services and suit tāngata whai ora. Options included one-to-one delivery with shared facilitation, group settings, remote delivery, and inclusion of peer support. Such options can be adapted to suit the services therapists might be working in while still adhering to the core principles and techniques as outlined by the CRT expert working group (Bowie et al., 2020).

This study also illustrates the importance of a good team culture to deliver the occupation-focused CRT programme. The therapists had to navigate their way through the challenges of delivering the programme and, in doing so, demonstrated a 'can do' attitude. They reflected together and came up with ways to manage their time, such as a shared therapist model to conduct the sessions, which was also a good way to bring new therapists on board. The 'can do' team culture facilitated camaraderie, a common purpose, and a clear focus on rehabilitation, guiding tāngata whai ora to work towards meaningful goals. These findings align with recent research that has suggested teams that collaborate closely tend to achieve the most success in delivering the CRT (Hyde et al., 2020; Lammas et al., 2022). Moreover, Lammas et al. (2022) stated that teams who share the decision making can produce the "best and most pragmatic method of CR delivery in their unique context" (p. 8).

The therapists at Vocational Futures also had essential structures in place that supported their delivery of the programme. They had regular supervision which offered guidance, succession planning, and learning from each other. They had a timeline with allocated tasks, and a designated leader. The therapists also worked in a dedicated rehabilitation service and, therefore, were not distracted by having to attend to the acute end of service delivery and crisis management. These findings are consistent with those of Dark et al. (2018) who highlighted that supervision, timelines, and plans were crucial to support implementation of the programme.

Relevance to Tāngata Whai Ora

Tāngata whai ora in the current study found the programme delivery to be fun and challenging, as well as beneficial; and they enjoyed the therapists' input. These findings are similar to participants' experiences in studies by Contreras et al. (2016) and Rose et al. (2008) where participants reported that time passed quickly and they were kept occupied. However, unlike the findings in Rose et al's. study, where some participants in their survey self-reported a decrease in self-esteem following participation in a CRT programme, no tāngata whai ora interviewed in this study reported a detrimental effect on their self-esteem. All tāngata whai ora relayed that they found the programme beneficial and a positive experience. There was limited information in Conteras et al. and Rose et al.'s studies about the delivery of the

programme; therefore, it is unknown whether programme delivery impacted on participants' fewer positive experiences. My study provides unique insights from tāngata whai ora about key aspects of programme delivery that supported positive experiences. Such aspects promoted tāngata whai ora self-determination and were relevant to their everyday life and occupations, enabling them to see the possibility of a better future.

A significant aspect of this study was the tāngata whai ora and therapists' perspectives on the inclusion of peer support in the delivery of the programme. Tāngata whai ora enjoyed the peer support within the social skills group. Some of the tāngata whai ora participants expressed wanting to reciprocate by providing support to new people who were just starting on the programme. The therapists also strongly advocated for peers to be involved in the sessions, or to set up a peer support group so people could continue to support each other on programme completion. This study contributes to the limited literature highlighting the role for peer support within the delivery and design of the programme (Dark et al., 2018; Medalia et al., 2018; Sandoval et al., 2017), and highlights the untapped potential amongst tāngata whai ora to make a difference in one-another's lives, a shift which needs to be explored and advocated for.

Most importantly, and in line with international literature (Bowie et al., 2017; Cella & Wykes, 2017; Hyde et al., 2020; Reeder et al., 2016; Vita et al., 2021), this study emphasises the importance of the therapeutic alliance founded on trust and open communication between the therapist and tāngata whai ora, as well as the need for therapists to have a flexible approach and explain things clearly. Although the therapeutic relationship is important, tāngata whai ora in my study highlighted the importance of the therapists delivering the programme in such a way that it facilitates self-determination and generates personal agency by ensuring choice and control for tāngata whai ora as they navigate their way through the programme. This was an important strategy that created engagement in the programme, and further illuminated that the therapist did not have to be the same person in each session. The programme represented a journey that was navigated with tāngata whai ora at the helm, and the therapists as support crew. The programme was not delivered *to* them but *with* them.

Findings from tāngata whai ora in this study have highlighted the importance of having a holistic focus on occupation woven into the fabric of the CRT programme to support them in making occupational choices, working towards meaningful occupational goals, and having the programme relevant to their lives so they can start making way. Prior to my research there have been no studies that have explored a CRT programme with an holistic occupational focus, addressing the range of occupations tāngata whai ora identified as meaningful; although studies have highlighted the occupational deprivation experienced by people living with an EPI (Bejerholm & Eklund, 2004; Cella, et al., 2016). Additionally, other studies have shared the voices of people with a lived experience of psychosis who have expressed that they valued autonomy when making decisions about their occupational choices (Bjørkedal et al., 2016; Brown, 2011). The tāngata whai ora in this study expressed how useful it was to learn new cognitive skills and strategies, and anchor those newly acquired skills into their real-life occupations. These findings are similar to studies by Bjørkedal et al. (2016) and Brown (2011) who emphasised that after an acute episode of psychosis, consumers needed to reconstruct their lives through occupations. Most of the CRT research in the literature explores functioning in discrete areas such as work, social functioning, or activities of daily living, as secondary outcomes (Bell et al., 2014; Bowie et al., 2017; Contreras et al., 2016; Lindenmayer et al., 2017; McGurk et al., 2017; McGurk et al., 2010; Murphy et al., 2023). The current study provides a unique contribution which highlights the importance of including an occupation focus into an existing CRT programme. The way people spend their time over minutes, hours, days, and weeks constructs one's identity, social connectedness, and belonging (Bjørkedal et al., 2016; Brown, 2011). Doing meaningful occupations that provide enjoyment and challenge, facilitates participation and engagement as reflected in the tāngata whai ora experience of the delivery of the programme in this study.

Due to Māori and Pasifika tāngata whai ora agreeing to take part in the research, my study was able to explore their experiences of the programme which provided new insights relating to the delivery of the programme from different cultural perspectives. The demographic of this participant group, with three out of four of the interviewed participants being Māori, reflects the prevalence rate of schizophrenia in Aotearoa

New Zealand which is three times higher for Māori than non-Māori (Gibb et al., 2021; Kake et al., 2016). Māori are less likely to access public health services as a result of the impact of colonisation and inequitable access to health care. In Kake et al.'s (2016) study, the authors recommended some form of cognitive rehabilitation services suitable for Māori living with an EPI. This study is unique in that it not only sought the perspective of a marginalised population, those living with an EPI, but also had willing Māori participants living with an EPI share their views and opinions.

The tāngata whai ora participants were reluctant to have whānau involvement. After discussions with my cultural advisor, I learnt that, particularly for Māori and Pasifika, not having whānau involvement has wider implications on overall health not only for tāngata whai ora but also their whānau, hapū, and iwi. Unlike the western biomedical model of health, Māori and Pasifika have a holistic view of health that draws together the importance of physical, mental/thinking, and spiritual well-being of the person, as well as their family and community, aspects which are all interconnected and equally important (Durie, 1985; Tu'itahi & Lima, 2015). Occupational therapists work in a holistic way (Hooper & Wood, 2024); therefore, involving whānau was seen as important to the therapists, and is an aspect of delivery that needs improving. The study highlights the importance for tāngata whai ora to feel supported to have whānau involvement in their care, which will be discussed further in the strengths and limitations section of this chapter.

Getting Up to Date with the Literature on Delivery of CRT

Over the duration of this study, there has been studies published that have contributed knowledge about the clinical effectiveness of a CRT programme (Vita et al., 2023); though no further studies that have explored the delivery of a CRT programme with an holistic view of occupation. The study protocol of the ECLIPSE studies by Wykes et al. (2018) explores the use of the Goal Attainment Scale and, once completed and published, may provide further insights into ways improvements in tāngata whai ora goals can be evaluated. There have been four recent studies that have focused on implementation of CRT into clinical practice in Iceland (Vidarsdottir et al., 2021), Australia (Gott et al., 2023), and America (Medalia, et al., 2019; Medalia, et al., 2019). These studies were varied in their reports. One study described where the

implementation took place (Gott et al., 2023), while others described an implementation process based on implementation science principles. Two discussion pieces by Bryce et al. (2021) and Zbukvic et al. (2023), highlighted that with these recent studies there is a shift in focus from CRT efficacy trials to implementation studies, but that these studies are still limited. Little information exists about delivering CRT in conjunction with interventions to address function with occupation-focused outcomes. This study contributes to an emerging body of literature that seeks to close the gap from research to treatment for the delivery of an occupation-focused CRT programme to people with psychosis.

I am aware of some recent research that has been undertaken in New Zealand examining the effectiveness of CRT for people with mood disorders (Douglas et al., 2022a). A published study protocol outlines a group-based delivery of CRT based on a manualised version of Action-based Cognitive Remediation Therapy (ABCR) developed by Professor Bowie (Douglas et al., 2022b), The delivery of ABCR has been adapted to include language changes that incorporate te reo Māori, and sessions are reduced to one per week. Although delivery of CRT in this study protocol highlights consideration for the New Zealand context, it does not align with findings in my study in terms of frequency, and it is unclear how Māori were included in the study design. Nonetheless, more studies relating to CRT in the Aotearoa New Zealand context are needed.

Strengths and Limitations

The applicability of the research findings in this study must be considered in view of the positive aspects of the study balanced against the study's limitations. In this section, I draw attention to the study's strengths and weaknesses.

Methodology

A strength of my study is the methodological choice to use constructivist case study (Stake, 1995), underpinned by Guba and Lincoln's (2013) constructivist philosophical perspective. Constructivist case study methodology helped answer my research questions by enabling me to gain in-depth understandings of how an occupation-focused CRT programme was being delivered in a practice setting. I was able to bring to the fore diverse perspectives and experiences from important key stakeholders

involved in the case, along with differing contextual aspects that influenced stakeholders' decision-making regarding programme delivery, providing valuable insights. The constructivist perspective enabled me to draw from my own knowledge and experiences in interpreting the findings, all the while keeping participants' views as central (Lincoln & Guba, 2013).

Had I chosen another methodology to explore the key stakeholders' experience, I may have missed important information that situated those experiences within the context of Vocational Futures and SCHB. Therefore, constructivist case study methodology allowed the gathering of rich and important information on the contextual influences of how the occupation-focused CRT programme was delivered, alongside the experiences and perspectives of those involved. The choice to use case study methodology made possible a holistic view of occupation-focused CRT by providing detailed description of the case bounded by time, space, and a conceptual framework (Stake, 2010). Additionally, the choice to use instrumental case study design supported a focus on the issues around the case which were necessary for understanding how an occupation-focused CRT programme is delivered (Stake, 2010).

Constructivist case study research is a suitable methodology for exploring occupational therapy practice which is another strength of this study methodology. A recent review by McQuaid et al. (2021) emphasised the importance of case study research to capture and "untangle aspects of occupational therapy practice" (p. 12). Both the methodology and occupational therapy practice value a holistic perspective of phenomena (McQuaid et al., 2021). The effectiveness of occupational therapy practice is influenced by interactions between people and the particular contexts in which those interactions take place, and is not purely focused on metric outcomes. However, it is difficult to determine for sure if the programme delivered at Vocational Futures was a holistic occupation-focused programme given the service has a particular focus on employment. This is a limitation of the study. Nonetheless, occupational therapists are interested in the embodied experiences and nuances in the lives of the people they work with; therefore, it was appropriate to use case study research to build the profession's knowledge base and practice evidence in answering my research questions.

Constructivist case study research shaped how I undertook the study, chose the case, conducted the literature review, recruited and interviewed participants, sought documents, and the process of analysis. As I started gathering the data, and the study started unfolding, a constructivist perspective supported the collaborative process needed to answer my research question. I was not doing the research to people; I was getting together with people who held various perspectives and had various experiences to construct the findings (Lincoln & Guba, 2013; Stake, 1995). My intention was to gather perspectives from leaders, therapists, tāngata whai ora and their whānau and or significant other, although I was unable to gain the perspectives of whānau.

Whānau perspectives are an important aspect of the case; therefore, being unable to acquire access to whānau members is a limitation of the study. A recent dicussion piece in the *Australian and New Zealand Journal of Psychiatry* by Zbukvic et al. (2023), regarding the research to treatment gap for people with cognitive impairment due to psychosis, emphasised the need for organisational culture that supports family involvement. These authors see family as an important part of care and advocate the need for "cultural adaptation of family-focused care" (p. 1312). Whānau perspectives may have uncovered insights about the contextual influences on tāngata whai ora engagement with the programme. Whānau may have shared their perspectives in how the programme could have been delivered in a way that was more whānau focused. Not having the perspectives and expertise from whānau or significant others on the delivery of an occupation-focused CRT programme, leaves a gap in the knowledge.

I surmise that tāngata whai ora reluctance to have whānau involved in the research may have been influenced by the westernised, invidualised models of care that dominate mental health service delivery. When a western model of mental health service delivery happens over and over again for tāngata whai ora it may start to shape how they think things should be. However, without whānau or significant others' perpsectives I am unable to gain a more accurate understanding and, therefore, my assumptions remain speculation. I sought cultural support from a kaumātua into the design of the study at the intial stages and throughout the analysis. Having kaumātua input was a strength of the study, especially since the study did not set out to

specifically recruit Māori. Nonetheless, four out of the six tāngata whai ora who agreed to participate, either by sharing their CRT reports or being interviewed, were Māori.

Another limitation was the lack of diverse cultural perspectives amongst participants. Although this study sought a range of perspectives from different roles, the leaders and therapists were mainly New Zealand European and the tāngata whai ora were either Pasifika or New Zealand Māori. Although these demographics are representative of Aotearoa New Zealand mental health system (those providing and those receiving care), it does not offer experiences or perspective of people from other cultures that may have brought differing views and lent further insights into the delivery of the programme. Furthermore, there was no mention in the literature regarding developing a CRT programme that is designed specifically for Indigenous peoples. This study highlights that although the occupation-focused CRT programme was valued by the Māori tāngata whai ora participants, there remains a gap in delivering an occupation-focused CRT programme that was designed by Māori for Māori.

A key limitation of this study is the focus on one case and one instance which, coupled with a limited number of participants, can make generalisability to other contexts difficult. However, the limitation needs to be considered in light of the overall number of participants. Other study limitations include the COPM (Law et al., 2014) results presented in the tāngata whai ora chapter which suggested that tāngata whai ora experienced improved changes in performance and satisfaction in performance of identified occupations. However, these outcomes should be viewed with caution. The number of COPM results collected were small and tāngata whai ora may have recorded changes in occupation to please the therapists, given they had an established relationship with them. In saying that, this study does not state that occupational changes occurred because of the programme delivery.

Finally, this study took place in Aotearoa New Zealand context, where mental health services are primarily reliant on public funding. This context will differ from other countries, where services may be delivered by private health providers or insurers or other funding options. As such, transferability of these Aotearoa New Zealand study

findings in other contexts is limited. However, the strength of this study's approach supports a naturalistic generalisation (Stake, 1995).

My Reflections on the Research

Prior to starting my research journey, the constructivist perspective, Guba and Lincoln, case study, and Stake were all unknown to me. As they became familiar, I could relate to the philosophical underpinnings; and, as I delved deeper into my research, my understanding became interconnected with my own worldview. A strength of employing a constructivist case study methodology was the ability to stay close to the case with which I was already significantly involved. I made clear at the beginning of the research my involvement and the perspective I brought to the study. I constantly reflected on my biases throughout the research process and brought my thoughts and ideas to my supervisors, whose own views would have influenced and shaped my perspective. Constructive case study methodology also enabled me to seek out and reflect on the Māori worldview through the support of a kaumātua and cultural advisor, which illuminated the case in an unexpected way for me.

I grappled with not being able to include whānau participants in this study. For Māori and Pasifika people the significance of the whānau perspective cannot be understated. Due to my chosen methodology, I was able to have a discussion wth my cultural advisor about my concerns of a lack of whānau input into the research. She highlighted to me that Māori participants declining whānau involvement is not conducive to Te Ao Māori (doing things the right way for Māori), and that the data produced by the tāngata whai ora is toanga, or a treasure, and belongs to all Māori. Although the Māori and Pasfika participants were offered a cultural support worker throughout the consent and interview process in the design of the study, more needed to be done to ensure whānau invovlment was included. As a Pākehā, I did not feel I had the authority to enforce Māori and Pasfika ways, and my ethics application did not allow for Māori elders or cultural advisors to talk with tāngata whai ora without their consent. Having learnt the importance of Te Ao Māori over the course of this study, I would have changed how I approached my design and ethics application, with better preparation for the possibility of Māori participants to set the expectation that cultural advisors were present throughout the recruitment and data collection phases.

My own personal and professional learnings relating to Te Tiriti o Waitangi have also evolved over the course of this study. Being more culturally responsive to Māori is a lens through which I view my practice; a lens which has become clearer as I engaged in the doctoral process. I still have my occupational lens and think of occupations as everything that people do, but I now appreciate that there are multiple layers in how occupational therapists support people to voyage from where they start (point A) to where they finish (point B) in the rehabilitation journey that is undertaken together. I am now constantly thinking, how do we involve whānau, how do we engage with Māori? For instance, I have pondered the concept of taha hinengaro, which is one of the four pillars in Te Whare Tapa Wha (Durie, 1985), a model describing a Māori view of health. Taha hinengaro is concerned with health of the mind and thinking. I bring my own understanding of thinking and cognition which is influenced by my trainings and the western medical model of health, but this may differ to a Māori world view of taha hinengaro. Therefore, I am left with more questions than answers that require me to have a better engagement with Māori to help me understand.

My research questions and constructivist case study methodology has taught me to question how things are done to support tāngata whai ora engagement in occupations. I have also learnt to look at the larger system in the delivery of the programme such as complex contexts, funding, legislation, and policy. There are multiple ways to get from point A to point B, and through this doctoral process I have learnt that relationships are essential. The shift in my perspective has been shaped by my interactions with my participants and their stories, my supervisors, and my relationship with my cultural advisor. I have also been influenced by the emphasis of the Occupational Therapy Board of New Zealand, Government legislation, and SCHB organisational values to address inequities for Māori and honour obligations to Te Tiriti Waitangi which has become of utmost importance over recent years.

When reflecting on my research, I kept coming back to my sailing analogy which I used in Chapter Eight to convey the tāngata whai ora perspectives. I see the occupation-focused CRT programme as a vessel to move tāngata whai ora from one place in their life (point A) to a better place (Point B). Tāngata whai ora are most important. They are the people who need to go on that journey, which is reflected in a blog post that was

written by a tāngata whai ora who has just recently started the occupation-focused CRT programme at SCHB

> I could feel everything good floating away. Two decades into a schizophrenia diagnosis, I felt like I was being undone, nerve by nerve, dream by dream. For a long time, I bobbed along, held above water… I was invited by my excellent mental health team to commence the CIRCuiTS course… ...we show up to the clinic for two hours twice a week and engage with and advocate for the strategies learned. Our group facilitators display this same "showing up' and enthusiasm… In a world that often feels like "meds and beds" to me this feels radically different, hopeful and transformative I'm so glad to be aboard. (Morton, 2023)

This vessel was constructed to enable tāngata whai ora to go on that journey. Aspects related to the delivery of the programme at Vocational Futures meant that tāngata whai ora wanted to board the vessel and embark on a new adventure with support and guidance.

Implications for Delivering the Programme

From a personal perspective as an occupational therapist, and my experience of CRT, I am well aware that it takes more than clinicians' passion to introduce an evidence-based intervention into existing services. Undertaking this research has drawn my attention to what is needed when delivering the programme from leaders', therapists' and tāngata whai ora experiences. The study findings have brought to light the range of considerations that services must factor in when delivering an occupation-focused CRT programme in mental health settings in Aotearoa New Zealand. In this section, Implications for Delivering the Programme, I make six key recommendations based on the study findings which were constructed from the leaders', therapists' and tāngata whai ora perspectives and experiences, as well as existing literature. These recommendations will support policy makers, leaders, managers, and therapists who work in or influence the mental health service sector to deliver the occupation-focused CRT programme and provide better access and outcomes for tāngata whai ora.

I recommend that:

1. The cognitive needs of people accessing specialist mental health services are addressed and prioritised via nationwide delivery of occupation-focused CRT programmes that are culturally informed and support equity of access. Subsequently, an upscaled implementation plan is required. An equity-focused implementation process framework has been recently developed by a Māori and consumer advisory group to support planning and delivery of equitable implementation pathways and could be used for upscaling of occupation-focused CRT (Gustafson et al., 2024). Addressing the cognitive needs of people accessing mental health services needs to be mandated from a ministerial level and embedded into national strategic plans, with clear guidance to operationalise the strategic plan and state where the responsibility for operationalisation lies. Te Pou, which is funded to support the national mental health workforce in evidence-based practice, could be the appropriate agency to support upskilling of staff on the impact of cognitive difficulties on day-to-day functioning, an area of mental health practice that is overlooked.
2. Mental health services are flexible in how they deliver the occupation-focused programme and are well resourced. Flexibility can include 1) delivery via a dedicated rehabilitation team, 2) delivery within community mental health services, providing case-load weighting to allow for dedicated time to deliver the programme; 3) joint delivery with public mental health services and NGO partners; 4) delivery in the NGO sector; 5) employing various modes of delivery—one-to-one, group, or remote; and 6) involving peer support. Regardless of the which approach is taken, delivery of occupation-focused CRT programmes requires a designated leader and implementation plans. Resources required to deliver the programme include computers/ laptops or IPads, computer licences for the use of digital platforms to support the intervention, and online training to use CIRCuiTS software if this is the chosen computer software. Other resources include appropriate assessment tools and kai (food), particularly for group sessions.
3. Occupation-focused CRT programmes are developed by Māori for Māori with Māori and Pasifika clinicians prioritised to receive CRT training, and funding for training is allocated. Furthermore, mainstream occupation-focused CRT

programmes must be culturally informed which involves working with all cultures, tāngata whai ora, and whānau in the development and delivery of the programme.

4. CRT programmes must be delivered with a focus on occupation. Occupational therapists are well suited to deliver the programme with adequate training in CRT to develop the necessary skills. Training programmes must cover the aspects of CRT as outlined by the CRT expert working group. Local services can provide 2-day training from facilitators trained and knowledgeable in CRT. Alternately, if CIRCuiTS online training is the preferred platform, a 1-day, in-person training is essential to apply training to clinical practice settings. The training must also include a focus on occupations, gathering and feeding back outcomes, and application of the programme within relevant clinical settings. Therapists can start to deliver CRT as a support person, providing a trained CRT therapist is the main facilitator. Therapists must attend training prior to delivering the programme and it is recommended that they start delivering a CRT programme within 1-month of the training.
5. The programme is delivered *with* tāngata whai ora not *to* them. Therapists should deliver the programme in way that ensures tāngata whai ora are partners and have choice and control, where the programme not only provides a challenge but supports self-determination and is relevant and meaningful to their everyday life by linking learnt cognitive strategies to occupational goals. Tāngata whai ora do not live in isolation; therefore, good communication about the programme between the therapists and tāngata whai ora whānau and support networks is required. Including tāngata whai ora support networks in programme and post programme delivery, can support ongoing application of learnt skills beyond completion of the programme.
6. A CRT report template is developed to capture outcomes and tāngata whai ora narrative experiences of the programme. Therapists use an assessment tool to capture meaningful outcomes, whether that be the COPM (Law et al., 2014) or some other goal attainment scale such as the one used in the Eclipse study (Wykes et al., 2018). The CRT report should also record strategies that were useful to tāngata whai ora and provide recommendations for ongoing strategy

use in everyday life. A CRT report should be constructed so it takes minimal time to complete. Non identifiable outcomes in the CRT reports should be collated in a central system and shared with leaders and policy makers with robust feedback loops established.

Future Research

As I approach the end of this study, I am aware that there is much more to be done to ensure CRT is embedded into mental health services and delivered in a way that is relevant and meaningful to tāngata whai ora. This section summarises my thoughts on potential areas for future research.

I recommend that:

1. **Upscale implementation of the occupation-focused CRT programme in Aotearoa New Zealand.** This study has provided a thorough exploration of how an occupation-focused CRT programme has been delivered within the context of public mental health service in Aotearoa New Zealand. The findings can be used as a stepping stone to inform a wider implementation study within Aotearoa New Zealand mental health services. Zbukvic et al. (2023) stated that "the future of psychosis research includes multidisciplinary teams of clinical researchers and implementation scientists, working together with providers and consumers to build the evidence that can improve the implementation of cognition-focused treatments" (p. 1308). An implementation study should be co-designed with Māori and tāngata whai ora, and include expertise from the various stakeholders, such as those at a national policy level, organisational leaders, therapists, and implementation researchers. The utilisation of an equity-focused implementation process framework is needed (Gustafson, et al., 2024).
2. **Establish the efficacy of a CRT programme to improve occupations.** It is well established that CRT improves cognition. However, less is known as to whether CRT improves occupational engagement, participation and performance. This study has explored the experiences of tāngata whai ora and therapists' delivery of CRT with a focus on occupations, with both participant groups expressing

how relevant and beneficial the programme was having occupation woven into the delivery. However, more research is needed to establish whether CRT delivered with an occupational focus actually improves occupational engagement and addresses occupational deprivation for this population. A full scoping review may provide some insights into what is already established, and a pilot efficacy research design or a feasibility study could be implemented into services that currently deliver the programme to establish occupational outcomes following a CRT programme with a focus on occupations.

3. **Establish whether delivery of an occupation-focused CRT programme is cost effective.** This study did not establish the cost involved in delivery of the programme, or whether the cost of delivery outweighs the long-term cost benefits of mental health service use. Therefore, research that involves a cost benefit analysis would be useful information to obtain and would help establish a basis for funding allocation.
4. **Explore the potential benefit of whānau or significant others' involvement in delivery of the programme.** Understanding the experiences of whānau may help in designing the delivery of future programmes that include whānau support and ongoing application of learnt skills and strategies beyond the programme. More needs to be known about whānau or signficiant others' understanding of the impact of cogntiion on everyday life. Additionally, knowledge would be gained as to how strategies and learnings from the programme can be applied to every day life outside of the clinical setting and the role that whānau or significant others have in supporting tāngata whai ora to apply their learnings.
5. **Explore the potential benefit of peer involvement in delivery of the programme.** This study sheds light on the possibility of peer involvement in the delivery of the programme. In this study, there was no peer support in the delivery of the programme which may have been due to the limited number of tāngata whai ora with a lived experience of the programme. More research is needed to establish the role for peer support in the delivery of the programme.
6. **Utilise a kaupapa Māori research methodology to design and evaluate a CRT programme specifically to address the needs of Māori.** A kaupapa Māori

methodology is an Indigenous research paradigm which holds central the Indigenous ways of knowing and knowledge. It is collective and relational which differs from the Euro-Western lens which does not have Indigenous ways of knowing as a central aspect (Wilson 2022). The study findings have shown that the delivery of an occupation-focused CRT programme was a positive experience for tāngata whai ora Māori who took part in the research. This study did not set out to specifically seek the perspectives of tāngata whai ora Māori; hence, from my perspective, having Māori participants share their stories was a privilege and an honour. In my discussion with the kaumātua, she stated that Māori need to talk to potential Māori participants and let them know that their contribution to this research is about whānau, and that they are participating in the research for whānau. Little is known about Māori who experience cognitive difficulties due to an EPI, or the impact cognitive difficulties have on tāngata whai ora whānau. A kaupapa Māori research design (research by Māori for Māori) would enable exploration of the design and evaluation of an occupation-focused CRT programme specific to Māori. Alternative places to deliver CRT, such as marae (Māori meeting ground), could also be explored.

Conclusion

My research journey started out of my frustration that after a successful pilot and a considerable number of clinicians trained in CRT at SCHB, only one community service actually delivered the programme within their usual day to day business and clinical practice. As an occupational therapist who has worked in community mental health teams in Aotearoa New Zealand, I understand the tension that occupational therapists experience between key-working and wanting to provide occupational therapy. International literature on how to deliver and or implement CRT into mainstream services is in its infancy. There is limited research regarding how CRT is delivered into routine care; particularly how it is delivered with a focus on occupation. Therefore, I wanted to explore how the one community service managed to deliver the programme and bring to the fore aspects of delivery in routine care, that, to date, have remained unknown.

Using constructivist case study methodology enabled me to tease out complexities, tensions, and challenges, as well as positive influences that went along with delivering the programme. The methodology supported me to piece together, from the experiences and perspectives of key stakeholders, aspects of delivery that required navigating and ways in which to deliver the programme that made participation meaningful and relevant to tāngata whai ora. Critically, this study has illuminated how to address the cognitive difficulties through the delivery of the occupation-focused CRT programme so tāngata whai ora move on from their current situation; are able to learn new skills; experience a challenge; have control, choice, and self-determination; and, after many years of struggling with cognitive difficulties, are able to see new possibilities for themselves.

In conclusion, there is a whole population of people in mental health services that are experiencing cognitive difficulties and not having their needs met. This population has been underserved for too long, with far-reaching implications. This thesis has demonstrated that in Aotearoa New Zealand there is an intervention that meets the needs of this population and that it can be delivered within the context of Aotearoa New Zealand mental health services. Moving forward, equitable access to an occupation-focused CRT programme requires a structured, national approach to implementation. The impact of addressing the cognitive needs of people accessing mental health services will be significant for tāngata whai ora and their whānau, communities, and all stakeholders. This study yielded valuable insights about what is needed to deliver an occupation-focused CRT programme. It contributes to the growing body of evidence that explores aspects of CRT delivery.

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Glossary

Māori Term	Translation	Translation Source
Aotearoa	North Island, now used as the Māori name for New Zealand	Te Aka Māori Dictionary
Hapū	Kinship, tribe, subtribe	Te Aka Māori Dictionary
He Ara Oranga	Pathways to Wellness: Name used for the Government inquiry into Mental Health and Addiction	Ministry of Health
Iwi	Extended tribe, large group of people descended from a common ancestor associated with a distinct district	Te Aka Māori Dictionary
Kai	Food, to eat	Te Aka Māori Dictionary
Karakia	Prayer, ritual chant, blessing	Te Aka Māori Dictionary
Kapa Haka	Māori cultural performing group	Te Aka Māori Dictionary
Kaumātua	To grow old: Term used for Respected Māori elders	Te Aka Māori Dictionary
Kaupapa	A set of values, principles, and plans which people agreed on as a foundation for their actions	Te Ara: Encyclopaedia of New Zealand
Kōrero	Conversation, meeting discussion	Te Aka Māori Dictionary
Mahi	To work, perform, accomplish	Te Aka Māori Dictionary
Manatū Hauora	Ministry of Health	Ministry of Health
Marae	Generous, hospitable, meeting ground	Te Aka Māori Dictionary
Māori	Indigenous people of Aotearoa New Zealand	Te Aka Māori Dictionary
Pākehā	English, foreign. Introduced from or originating in a foreign country	Te Aka Māori Dictionary

Māori Term	Translation	Translation Source
Taha hinengaro	Expression of the thoughts and mind	Durie (1984)
Taonga	Something that is treasured, includes objects, resoruces, ideas, techniques	Te Aka Māori Dictionary
Tāngata Tiriti	Non-Māori who live in New Zealand under the Te Tiriit o Waitangi	Dictionary.com
Tangata whaikaha	People with disabilities	Te Aka Māori Dictionary
Tāngata Whai Ora	People seeking wellness. A term used to describe people accessing mental health services in New Zealand. Otherwise referred to as Consumers or Service Users	Law Insider
Tāngata Whenua	Local people, born of the land, where the people's ancestors have lived	Te Aka Māori Dictionary
Te Poari Whakaora Ngangahau o Aotearoa	The Occupational Therapy Board of New Zealand	Occupational Therapy Board of New Zealand
Te Rau Hinengarao	The Many Minds: Name given to the Mental Health Survey	Ministry of Health
Te Reo	New Zealand Māori language	Dictionary.com
Tauiwi	Foreigner, European, non-Māori, colonist	Te Aka Māori Dictionary
Te Tiriti o Waitangi	The Treaty of Waitangi	Te Ara: Encyclopaedia of New Zealand
Te Whatu Ora	The weaving of wellness: Name given to the new mental health system of Aotearoa New Zealand	Te Aka Māori Dictionary
Tikanga	Correct procedure, way. The customary system of values and practices that have developed over time and are	Te Aka Māori Dictionary

Māori Term	Translation	Translation Source
	embedded in the social context	
Tino Rangatiratanga	Self determination, sovereignty, autonomy, self-government, domination, rule, control, power	Te Aka Māori Dictionary
Tohunga	Skilled person, chosen expert, priest or healer	Te Aka Māori Dictionary
Waiata	Song or chant	Te Aka Māori Dictionary
Wairua	Spirit, Soul	Te Aka Māori Dictionary
Whakaora Ngangahau	Occupational therapy	Occupational Therapy Board of New Zealand
Whakawhanaungatanga	Process of establishing relationships, relating well to others	Te Aka Mãori Dictionary
Whānau	Family which includes extended family or community of families. In modern times is extended to close friends	Te Aka Māori Dictionary
Hauora	Fit and well	Te Aka Māori Dictionary

Appendices

Appendix A: Reporting Checklist for Qualitative Study

Based on the SRQR guidelines.

Instructions to authors

Complete this checklist by entering the page numbers from your manuscript where readers will find each of the items listed below.

Your article may not currently address all the items on the checklist. Please modify your text to include the missing information. If you are certain that an item does not apply, please write "n/a" and provide a short explanation.

Upload your completed checklist as an extra file when you submit to a journal.

In your methods section, say that you used the SRQR reporting guidelines, and cite them as:

O'Brien BC, Harris IB, Beckman TJ, Reed DA, Cook DA. Standards for reporting qualitative research: a synthesis of recommendations. Acad Med. 2014;89(9):1245-1251.

		Reporting Item	Page Number
	#1	Concise description of the nature and topic of the study identifying the study as qualitative or indicating the approach (e.g. ethnography, grounded theory) or data collection methods (e.g. interview, focus group) is recommended	**i**
	#2	Summary of the key elements of the study using the abstract format of the intended publication; typically includes background, purpose, methods, results and conclusions	**i-ii**
Problem formulation	#3	Description and significance of the problem / phenomenon studied: review of relevant theory and empirical work; problem statement	**15-20**

		Reporting Item	Page Number
Purpose or research question	#4	Purpose of the study and specific objectives or questions	**16** **37**
Qualitative approach and research paradigm	#5	Qualitative approach (e.g. ethnography, grounded theory, case study, phenomenology, narrative research) and guiding theory if appropriate; identifying the research paradigm (e.g. postpositivist, constructivist / interpretivist) is also recommended; rationale. The rationale should briefly discuss the justification for choosing that theory, approach, method or technique rather than other options available; the assumptions and limitations implicit in those choices and how those choices influence study conclusions and transferability. As appropriate the rationale for several items might be discussed together.	**74-87**
Researcher characteristics and reflexivity	#6	Researchers' characteristics that may influence the research, including personal attributes, qualifications / experience, relationship with participants, assumptions and/or presuppositions; potential or actual interaction between researchers' characteristics and the research questions, approach, methods, results and / or transferability	**20-31** **91-92** **248-250**
Context	#7	Setting / site and salient contextual factors; rationale	**95-97** **124-149**

		Reporting Item	Page Number
Sampling strategy	#8	How and why research participants, documents, or events were selected; criteria for deciding when no further sampling was necessary (e.g. sampling saturation); rationale	**95-105**
Ethical issues pertaining to human subjects	#9	Documentation of approval by an appropriate ethics review board and participant consent, or explanation for lack thereof; other confidentiality and data security issues	**92-95**
Data collection methods	#10	Types of data collected; details of data collection procedures including (as appropriate) start and stop dates of data collection and analysis, iterative process, triangulation of sources / methods, and modification of procedures in response to evolving study findings; rationale	**99-112** **306-318**
Data collection instruments and technologies	#11	Description of instruments (e.g. interview guides, questionnaires) and devices (e.g. audio recorders) used for data collection; if / how the instruments(s) changed over the course of the study	**107-111** **347-349**
Units of study	#12	Number and relevant characteristics of participants, documents, or events included in the study; level of participation (could be reported in results)	**150** **166** **200** **215**
Data processing	#13	Methods for processing data prior to and during analysis, including transcription, data entry, data management and security, verification of data integrity, data coding, and anonymization / deidentification of excerpts	**104**

		Reporting Item	Page Number
Data analysis	#14	Process by which inferences, themes, etc. were identified and developed, including the researchers involved in data analysis; usually references a specific paradigm or approach; rationale	**87-89** **112-121**
Techniques to enhance trustworthiness	#15	Techniques to enhance trustworthiness and credibility of data analysis (e.g. member checking, audit trail, triangulation); rationale	**121-123**
Syntheses and interpretation	#16	Main findings (e.g. interpretations, inferences, and themes); might include development of a theory or model, or integration with prior research or theory	**134-226**
Links to empirical data	#17	Evidence (e.g. quotes, field notes, text excerpts, photographs) to substantiate analytic findings	**125-226**
Intergration with prior work, implications, transferability and contribution(s) to the field	#18	Short summary of main findings; explanation of how findings and conclusions connect to, support, elaborate on, or challenge conclusions of earlier scholarship; discussion of scope of application / generalizability; identification of unique contributions(s) to scholarship in a discipline or field	**228-244** **250-255**
Limitations	#19	Trustworthiness and limitations of findings	**244-249**
Conflicts of interest	#20	Potential sources of influence of perceived influence on study conduct and conclusions; how these were managed	
Funding	#21	Sources of funding and other support; role of funders in data collection, interpretation and reporting	**xiii**

EQUATOR Network in collaboration with Penelope.ai

Appendix B: Article Details

Author	Study design	Context	Aim/purpose	CRT delivery	Relevance to study
Au et al. (2015)	Quantitative blinded Randomised Control Trial (RCT)	Hong Kong outpatient services. Chinese adults with schizophrenia and schizo-affective disorder n=96	Investigate synergistic effects of CRT on Integrated Supported Employment (ISE)	2 hours 3 times a week up to 72 hours cognitive training on a computer programme No other information about delivery	Stated that CRT along with ISE made no difference
Bell et al. (2014)	Quantitative 2 single blinded RCT. Original study and a continuation study	Unemployed people with a diagnosis of schizophrenia or schizoaffective disorder from a large urban community mental health centre n=175	Determine whether augmenting supported employment Individual Placement Support (IPS) with cognitive remediation can improve employment outcomes	Received up to 10 hours per week of computer programme cognitive rehabilitation (original study), Brain fitness and Insight (continuation study). Both groups attended work focused groups sessions. No other information about delivery	People with low community functioning that had CRT had better outcomes. No consensus on best practice
Bowie et al. (2012)	Quantitative RCT	New York. People with schizophrenia n=107 . Outpatient clinic	Examine whether CRT effectively generalises to functional competence and real-world functioning as a standalone treatment and when combined with functional skills treatment	120 minutes per week for 12 weeks for each intervention. In small group 3:1 patient to therapists' ratio. Discussed strategy use in everyday life. Based on the "thinking skills for work"	Real world functioning more likely when skills training and CRT were combined. Real world functional behaviour rated by observer

Author	Study design	Context	Aim/purpose	CRT delivery	Relevance to study
Bowie et al. (2017)	Quantitative nonrandomised control design	Adults with schizophrenia enrolled in a vocational services outpatient affiliated with community mental health agencies n=50	Compare changes across cognitive, functional competence, and vocational domains after CRT	2 hours a week for 10 weeks. Group setting with 2 therapists. Three pillars of treatment, computer cognition training, strategic monitoring, transfer cognition to everyday life. Scientific brain training pro. In group facilitated problem solving and transfer to every day	Trained therapist received weekly supervision. Found that therapy driven CRT more effective than computer driven, but may be costly. Provides support for reduction in work disability with increased therapist intensity
Cairns et al. (2013)	Article	Queensland, Australia Adults with schizophrenia n=42. Public mental health setting	To describe the steps taken to implement and evaluate a pilot study of CRT	Average sessions attended 8.5. Below the 20 that was intended. No information on dropout. Followed the NEAR programme	Utilised implementation strategies – staff training, ongoing professional development and steering group. Leaders and clinical lead lobbied service managers to support CRT programme as an implementation research programme
Cella et al. (2015)	Opinion piece	England		Described some active therapy component and the importance of including metacognition	Metacognition

Author	Study design	Context	Aim/purpose	CRT delivery	Relevance to study
Cella et al. (2016b)	Quantitative control group non-randomised	England. Adults with schizophrenia n=26	Assessed the acceptability and feasibility of implementing CR in small groups where therapist support is shared amongst service users	Group delivery is feasible and acceptable	Small groups allow therapist to spend sufficient time to support the use of metacognitive strategies
Cella et al. (2017)	Meta-analysis	United States. Adult population 45 studies n=2,511	Investigated the effects of CRT on negative symptoms for adults with schizophrenia	CRT principles scaffolding, errorless learning mass practice	Personal contact with a therapist likely to consolidate learning and make new learnt strategies more accessible in everyday life
Cella & Wykes (2017)	RCT Secondary analysis of Reeder et al.'s (2017) study	Queensland, Australia. Adults with schizophrenia n=42 . Public mental health setting	Looked for the active ingredients of CRT therapy, explored the relationship between CR ingredients, including alliance with a therapist and therapy outcomes.	Active ingredients that are important in delivering a CRT programme. CRT principles	Therapeutic alliance is a crucial factor in delivering CRT particularly in functional changes. Function was assessed using time use survey
Cella and Wykes (2017)	RCT Secondary analysis of Reeder et al. (2017) study Study Design	Queensland, Australia Adults with schizophrenia n=42 . Public mental health setting	Looked for the active ingredients of CRT therapy, explored the relationship between CR ingredients, including alliance with a therapist and therapy outcomes	CRT celivery active ingredients that are important in delivering a CRT programme. CRT principles	Therapeutic alliance is a crucial factor in delivering CRT particularly in functional changes. Function was assessed using time use survey.

Author	Study design	Context	Aim/purpose	CRT delivery	Relevance to study
Cellard (2016)	Case study mixed methods	French Canadian young people with psychosis and visual episode memory difficulties	Secondary study aim to evaluate CRTs applicability and acceptability in psychiatric care	Three times a week for 3 months using CIRCuiTS	Feedback from service users, all reported improvements. Minimal dropout
Contreras et al. (2016)	Qualitative: Brief semi-structured interviews	Monash, Australia. 20 adults with schizophrenia, average age 35, attending community mental health sites of living in supported accommodation and had participated in a pilot CRT programme	Explore the personal experience of participating in CR programme; in particular, to identify specific aspects that may have positively and negatively contributed to individuals' experience. In addition, questioned whether the cognitive benefits of CR, as previously reported in quantitative studies, were also being observed by participants in everyday settings	20 hours Cogpak computer programme. Group setting, first ask how the previous week has been, work on computer, stop for breaks come together as a group	Used Braun and Clarke's thematic analysis; CRT was beneficial, fun, enjoyed the therapists' input and the computer programme. 40% found transfer to everyday, life, 15 were unsure, 45 did not
Dark et al. (2015)	Survey cross-sectional evaluation (same research as Dark et al., 2016)	Australia public mental health services survey or staff perception; staff n=51	Examined the organisational baseline factors existing in two services promoting the routine use of cognitive	Results of the study used to design an implementation strategy to make cognitive therapies a part of routine psychosis care	The Organisational Culture Profile (OCP) high scores amongst leadership, planning, and humanistic workplace domains, communication the

Author	Study design	Context	Aim/purpose	CRT delivery	Relevance to study
		51% case managers, 8% team leaders	interventions for psychosis		lowest rating indicative of organisational weakness
Dark et al. (2016)	Survey cross-sectional (same research as Dark et al., 2015)	Australia public mental health services 33% of staff trained in CRT were delivering CR	Evaluated attitudes and skill of staff toward cognitive approaches to psychosis during a period of implementation of CR. Assessed staff access to tiered cognitive training, assess fidelity of CR therapy delivered following tiered training	Describes the tiered training for general cognitive approaches and CR.	Need for accessible therapy-based supervision for staff wishing to develop competencies as CR therapists
Dark et al. (2018)	Used a implementation framework to conduct research over 3 years, 2013-2015. Quantitative, administrative data, staff surveys, and yearly audits	Queensland. Australia. Public mental health setting n=42; n=128 people attending the programme; n=22 programme facilitators	Evaluated planned implementation of group-based CRT and Social Cognitive Interaction Training (SCIT) into routine psychosis care	Active ingredients that are important in delivering a CRT programme. CRT principles	Therapeutic alliance is a crucial factor in delivering CRT particularly in functional changes. Function was assessed using time use survey
Garrido et al. (2013)	RCT	Adults with schizophrenia n=67	Investigated the neurocognitive outcomes of computer assisted CRT and measure quality of	48 sessions over 6 months Using various computer software. Therapists facilitated problem solving, scaffolding	Generic delivery criteria based on some of the CRT principles. Some improvement on QoL and self-esteem measurement attributed to

Author	Study design	Context	Aim/purpose	CRT delivery	Relevance to study
			life and self-esteem as secondary measures	and errorless learning, encouraged generalising	immediate feedback competency; therefore, developing intrinsic motivation
Garrido et al. (2017)	Single blinded RCT	England. Adults with schizophrenia n=67; n=33 followed up (n=20 CRT and n=13 non-CRT). Use and cost of acute admission collected pre, post, 12, 24 36 post therapy	Investigate the effectiveness of CR and to examine the use and cost of acute psychiatric admissions before and after CRT	48 sessions twice weekly over six months. Scaffolding, errorless learning, therapists encouraged transfer of skills	Treatment lasted 12 months on well-being outcomes. Decrease in repeat hospital admission up to 36 months lowering global cost of acute admission
Kake et al. (2015)	Case control study	New Zealand Māori n=56 Māori in control group n=54 Māori with schizophrenia from South Auckland and Wellington	Examined cognitive neuropsychological functioning in Māori. Examined associations between cognition, medication, and symptoms of psychosis in the schizophrenia group	Not about CRT	Māori with schizophrenia have a moderate to large effect size of cognitive impairment. Important implications for improving outcomes for Māori. Provision of culturally informed cognitive rehabilitation programmes
Kurtz et al. (2015)	RCT	Hatfield, England. Adults with schizophrenia or schizoaffective disorder with a desire to improve	Compared the effects of a computer-assisted cognitive remediation intervention,	CRT was delivered once a week for 4 to 6 months, drill and practice little information.	Social skills group focused on assertiveness, friendship skills, and conversation. One training a week 4-6 months.

Author	Study design	Context	Aim/purpose	CRT delivery	Relevance to study
		social functioning. Outpatient n=64	administered along with a standardised programme of social skills-training (SST), with those of an active control condition that included participation in the same SST programme and a computer skills training programme	Goals were set but not sure how	Authors thought this was too brief. No benefit
Lystad et al. (2017)	RCT	Norway, based in sheltered workshops. Adults with schizophrenia	Examined the effects of CR combined with vocational rehab VR compared with cognitive behavioural therapy and VR on neurocognition and occupational functioning over a 2 year period	Feedback from neurocognitive assessment, setting up personal goals Psychoeducation. Two hours weekly of computer-based training with focus on transfer between training and work. Used Compaq software, included drill and practice task and at time strategy use was implemented	Cognition improved for those in the CRT group. Learning potential underlying mechanism between neurocognition and real-world functioning and work
Lindenmayer et al. (2013)	RCT	Adults with schizophrenia or schizoaffective disorder. Inpatient setting n=59	Examined whether CRT improves social cognition and emotion perception	Used COGPACK and MRIGE a social cognition software package	CRT and social cognition intervention provides great improvements in emotional recognition, discrimination, and social functioning than just CRT alone

Author	Study design	Context	Aim/purpose	CRT delivery	Relevance to study
Lindenmayer et al. (2017)	RCT and part of a parent study	Adults with schizophrenia and schizoaffective disorder n=63	Examined the effects of change in neurocognition on functional outcomes and to examine predictors of change in social functions	Three times a week for 12 weeks using CogPACK software. All were involved in a psych rehab addressing social skills	Concluded that CRT enhanced the benefit of the social skills psych rehab learnings
Lucas et al. (2015)	Editorial	Highlights need for functional outcomes to be a co-primary outcome in future CRT studies			Wanting assessment on everyday living. Although advocated for current psychiatric and psychological contrived assessments of functioning
McGurk et al. (2005)	RCT with 1 year follow up study design	New York. Adults with Serious Mental Illness (SMI) attending community mental health agency	Determine the effectiveness of CR (thinking skills for work programme) for improving competitive employment outcomes for people with SMI with a history job failure	Delivered by cognitive specialist with ES. "Thinking skills for work program", CRT two to three times a week over 4 months Cogpac. Integrates CRT with job searching and transfer of skills to in vivo work setting	Making the computer programme relatable to job planning, job seeking, and vocational support
McGurk et al. (2007)	Meta-analysis	26 RCTs of CRT n=1,151 people with schizophrenia	Evaluated the effects of cognitive remediation for improving cognitive performance, symptoms,		Moderate improvements in cognitive performance and when combined with psychiatric rehabilitation also

Author	Study design	Context	Aim/purpose	CRT delivery	Relevance to study
			and psychosocial functioning		improves functional outcomes
McGurk et al. (2010)	Unclear. 2 year follow up of CRT control group from a RCT	Suffolk County, Long Island. People with SMI and history of not keeping jobs and attend a clubhouse n=23	Determine the feasibility and preliminary outcomes of providing a CRT programme (thinking skills for work programme)	Recapped on 2005 study	60% obtained competitive job at 2 years follow up; 74% involved in some work activity. Supports the feasibility and promise of implementing the programme
McGurk et al. (2017)	Feasibility trial. Survey programme satisfaction	People with SMI n=83	Evaluated the feasibility of implementing an empirically supported cognitive remediation programme in routine rehabilitation services at 2 sites over 2 years	Thinking skills for work which included CRT was adapted to fit in with two different vocational sites	Talked about it being successfully implemented in a research context. Changes to frequency. Incorporation of bridging group to transfer to work goals
Medalia & Frelich (2008)	Discussion paper and review of articles	Review studies that have examine the efficacy of NEAR in psychiatric populations	Review the treatment principles and theoretical basis behind NEAR and discuss how these principles are applied to clinical practice	NEAR is an evidenced based approach to CRT. A learning activity with instructional techniques which incorporate educational principles. No fixed software variety of exercises based on need	This is about learning and developing intrinsic motivation. It talks about how the sessions are delivered

Author	Study design	Context	Aim/purpose	CRT delivery	Relevance to study
Medalla et al. (2018)	Discussion paper		Discussion paper on implications and possibilities of applying personalised medicine principles to CR	Discusses NEAR and intrinsic motivation	Targeting cognition and development of intrinsic motivation
Olaifa et al. (2015)	Unclear	First person perspective of two Health Care Assistants (HCA) of delivering CRT in an inpatient psychosis unit	Describes an attempt to provide a CRT service on an inpatient unit with all the restrictions and limitations in staffing	Novel having HCA deliver the programme under guidance from a clinician	Little is known about implementing CRT within routine clinical practice. This is partly because CRT is not yet recommended in NICE (2014) guidelines for schizophrenia as a treatment to be offered as standard
Panickacheril et al. (2017)	Retrospective naturalist study, measures were quantitative	Perth, Australia. Inpatient setting 4-5 months Adults with schizophrenia n=89	Feasibility and benefits of implementing CRT into everyday clinical practice	No CRT principles, just put on a computer programme	Lack of interest, big drop out
Patel et al. (2010)	RCT from Wykes' (2007) study	South London adults with schizophrenia n=85	Gather evidence regarding the cost-effectiveness of CRT	Health/social care and society costs were estimated at 14 weeks and 40 weeks	No additional costs with inclusion of CRT. Reduction in health care costs Depression plays a link between cognitive and functional changes
Reeder et al. (2014)	Single -blinded RCT CRT or treatment as usual	Adults with schizophrenia n=85	Investigate associations between improvements in	General CRT principles were applied and explained	Executive function changes reduce disability and resultant health and social care costs

Author	Study design	Context	Aim/purpose	CRT delivery	Relevance to study
			cognition and cost changes		
Reeder et al. (2016)	Mixed methods. Four studies including qualitative interviews	England NHS public study 1 nonclinical participant n=1. Study 2 Adults with schizophrenia n=5. Study 3 CRT therapist n=3. Study 4 adults with schizophrenia and their experience n=20	To assess the feasibility and acceptability of CIRCuiTS. Based on attractiveness, comprehensibility, acceptability, and usability	Scored high on all aspects	CIIRCuiTS developed with high service user input. Acceptable use
Reeder et al. (2017)	Two arm single blinded RCT	Adults with schizophrenia n=93.	Test feasibility for CIRCuiTS to be delivered in therapist-lead and independent sessions, and is efficacy for improved cognition and social functioning. Time use survey	28 sessions delivered by therapists supplemented with independent sessions facilitate mass practice. Collaborative goals and personalised targets, CRT principles applied	Feasible, well attended time use survey showed functional improvements but increased activity not sustained at follow up reflecting research setting with no follow up support
Rose et al. (2008)	Participatory research that included consumers as researcher	NHS Hertfordshire, England. Adults with schizophrenia who have received CRT n=21	Consumer feedback on CRT	Pen and paper tasks, 3 days per week. Questionnaire co-constructed with consumer and then interviewed people who had done CRT by consumers Not easy but can be done.	Time passed quickly, kept their mind occupied, enjoyable. Made achievements but nothing to do afterwards only 50% said self-improvement lasted

Author	Study design	Context	Aim/purpose	CRT delivery	Relevance to study
				Therapists: were helpful, friendly, non-judgemental	
Sandoval et al. (2017)	Pilot study part of a larger trial called brain imaging	People with schizophrenia n=16	Examined the effects of computer-based neurocognitive training, along with social interaction either with or without a peer	This study is on cognitive enhancement but talks about doing the programme together (group) so having peer support enhances outcomes	Including peer support in delivery as an option
Saperstein & Kurtz (2013)	Literature review	Adults with schizophrenia	Summarises conceptual approaches to CR and efficacy in clinical research setting	Summarised CRT active ingredients/principles	Core elements in a CRT programme that need to be delivered
Tan et al. (2013)	Blinded RCT	Singapore. Adults with schizophrenia or schizoaffective disorder from Singapore outpatient occupational therapy services with a focus on employment	Determine if CRT has positive effect on neurocognition and functioning within an English-speaking Asian population	Three sessions a week conducted in groups, with six participants. Drill and practice computer programme with therapist input to ensure strategies were acquired. Scaffolding and positive reinforcement. Group session to transfer skills to work and a place to provide feedback on progress	After the programme, the therapists continued to provide support monthly for a further 2 months. Those that undertook CRT had better employment outcomes within the vocational training then those that underwent physical exercise control group

Author	Study design	Context	Aim/purpose	CRT delivery	Relevance to study
Tan et al. (2016)	RCT	People with schizophrenia n=104	Evaluate cognitive and social functioning and symptoms. Control group music/dance therapy compared to CRT	Pen and paper CRT tasks. Group format, 4 to 1 ratio. Four times per week over 40 hours. CRT principles undertaken errorless learning, scaffolding	CRT group improved in cognition and social functioning in a group setting
Vita et al. (2011)	RCT	Italy	Study effectiveness of various form of CRT on cognitive and functional outcomes	Naturalistic setting of care Cogpack	CRT compared against everyday tasks, walking, reading shopping. Cognition improved, moderate improvement in function. Naturalist environment might have influenced results
Vita et al. (2016)	Taken from the RCT in Vita (2011) trial. Retorspective administrative data base	Italy	Assess possible changes in psychiatric services and patterns of care	Principles adhered to	Decrease in acute admissions More community uptake in rehab services
Wykes et al. (2003)	RCT	Adults with schizophrenia n=33	Investigates the durability of the effects of CRT compared to a control group of intensive occupational therapy	No mention of what each group received	Improved self-esteem in both groups which was contributed to matched for therapist contact, but self-esteem disappeared following the withdrawal of therapy for the CRT group, which contributed to the withdrawal of intensive therapy

Author	Study design	Context	Aim/purpose	CRT delivery	Relevance to study
Wykes et al. (2011)	Meta-analysis	Adults with schizophrenia n=2,104	Determine the effects of treatment and whether study method or potential moderators influence the estimates		Benefits when combined with psychiatric rehabilitation, benefit generalizes to functioning, relative to rehabilitation alone. Although function was not defined
Wykes et al. (2012)	Quantitative single group design	Adults with schizophrenia n=49 who had a support worker and a paid or voluntary job	To develop and test models of how cognitive improvement transfer to work behaviour using the data from current service	Hourly sessions three times a week; therapists, support worker, and participant met three times to discuss achievements and strategies used in CRT to transfer to workplace	Findings indicate that choice of remediation programme should not be based on its ability to improve cognition alone, but on how it is translated to functional gains
Wykes et al. (2018)	RCT single blinded study protocol	NHS, England. Adults between 16 and 46 years with first episode psychosis n=720	To determine the best method of introducing CRT for psychosis using CIRCuiTS in UK NHS early intervention services to optimise individual functional outcomes and costs	Using Goal Attainment Scale CRT principles Intensive, group and independent delivery modes	Primary outcome degree to which participants achieved their stated goals using the Goal Attainment Scale. Secondary outcome cost-effectiveness and satisfaction of the service users and staff

Appendix C: AUTEC Approval Letter

Auckland University of Technology Ethics Committee (AUTEC)

Auckland University of Technology
D-88, Private Bag 92006, Auckland 1142, NZ
T: +64 9 921 9999 ext. 8316
E: ethics@aut.ac.nz
www.aut.ac.nz/researchethics

14 March 2019

Kirk Reed
Faculty of Health and Environmental Sciences

Dear Kirk

Re Ethics Application: **19/15 Implementing an occupation focused Cognitive Remediation Therapy (CRT) programme: A case study.**

Thank you for providing evidence as requested, which satisfies the points raised by the Auckland University of Technology Ethics Committee (AUTEC).

Your ethics application has been approved for three years until 13 March 2022.

Standard Conditions of Approval

1. A progress report is due annually on the anniversary of the approval date, using form EA2, which is available online through http://www.aut.ac.nz/research/researchethics.
2. A final report is due at the expiration of the approval period, or, upon completion of project, using form EA3, which is available online through http://www.aut.ac.nz/research/researchethics.
3. Any amendments to the project must be approved by AUTEC prior to being implemented. Amendments can be requested using the EA2 form: http://www.aut.ac.nz/research/researchethics.
4. Any serious or unexpected adverse events must be reported to AUTEC Secretariat as a matter of priority.
5. Any unforeseen events that might affect continued ethical acceptability of the project should also be reported to the AUTEC Secretariat as a matter of priority.

Please quote the application number and title on all future correspondence related to this project.

AUTEC grants ethical approval only. If you require management approval for access for your research from another institution or organisation, then you are responsible for obtaining it. You are reminded that it is your responsibility to ensure that the spelling and grammar of documents being provided to participants or external organisations is of a high standard.

For any enquiries, please contact ethics@aut.ac.nz

Yours sincerely,

Kate O'Connor
Executive Manager
Auckland University of Technology Ethics Committee

Cc: katrina.wallis@waitematadhb.govt.nz; Margaret Anne Jones

Appendix D: Locality Agreement

[redacted] Thu, Mar 28, 2019, 8:03 PM

[redacted] <Katrina.Wallis@[redacted]>

to me

-----Original Message-----
From: Research & Knowledge Centre [mailto:research@[redacted].govt.nz]
Sent: Thursday, 28 March 2019 1:30 p.m.
To: Katrina Wallis ([redacted])
Subject: RM14267 [redacted] Locality Authorisation

Dear Katrina

The Research & Knowledge Centre has now received the relevant approvals for the following study:

Title: Implementing an occupation-focused Cognitive Remediation Therapy: A case study

Registration #: RM14267

This study now has [redacted] Locality Authorisation. All amendments to your study must be submitted to the Research & Knowledge Centre for review.

Note that all research, audit and related activity must meet ethical standards in relation to the safe storage, retention and destruction of research data.

At the conclusion of this study a copy of any outputs, reports or publications should be forwarded to research@[redacted].govt.nz

Good luck with your study.

Regards
Research & Knowledge Centre
[redacted]

research@[redacted]
[redacted]

Legal Disclaimer : www.[redacted].nz/Disclaimer.aspx

Appendix E: Overview of the Research Process

Research Question Proposed 2019

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Consultation with South Central Health Board (SCHB) including SCHB Kaumātua. Engagement with literature and supervisors as part of AUT DHSC PGR 9 development process

↓

Proposed research design PGR 9 submitted to AUT approved March 2019

↓

AUT ethics approval March 14, 2019. Locality agreement with SCHB approved March 28, 2019

↓

Recruitment of participants. Leaders April 13 to September 4, 2019. Therapists April 14 to June 21, 2019. Tāngata whai ora October 15-19, 2019. Whānau (no recruitment possible)

↓

Four leaders expressed interest and consented
Five therapists expressed interest and consented
Four tāngata whai ora expressed interest in being interviewed; two consented to accessing their programme report in their clinical file
Two tāngata whai ora consented to accessing their clincial report but not to an interveiw
No tāngata whai ora consented to whānau or signficant other to be contacted for the study

↓

No preliminary meetings were required for any of the participants. Consent forms were signed thorugh a intermediary and passed onto myself prior to contact to arrange interviews

↓ ↓ ↓

Interview Leaders		**Interview Therapists**		**Interviews Tāngata whai ora**	
Marie	10th May 2019	Melanie	29th May 2019	Fiona	24th October 2019
Matt	5th June 2019	Sarah	28th May 2019	Susan	24th October 2019
Anna	5th June 2019	Michelle	7th June 2019	Greg	29th October 2019
David	4th September 2019	Leah	21st June 2019	Peter	29th October 2019
		Pam	2nd July 2019		

↓

Documents relevant to the case were retrieved between June 2019 and August 2022, and include tāngata whai ora CRT reports, training material, CRT steering group minutes, service business plans, and websites. All participants were provided a copy of the transcript within 3-weeks of the interviews for feedback and preliminary findings of the Māori participants were reveiwed by kaumātua.

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Data analysis commenced from the first intervew on the May 10, 2019 and continued until December 2023

Appendix F: Overarching Data Gathering Plan

Research Questions: *How is an occupation-focused CRT programme delivered in a New Zealand mental health service?*

Issues Statements

1. Because of an occupational based CRT programme people's occupational performance will change positively
2. It is important that delivery of an occupation-based CRT programme involves a process which allows flexibility while maintaining fidelity and managing constraints.
3. Team members' and management's view of practices, personal attributes, attitudes, vision, and drive influence delivery of the programme and outcomes for service users
4. Therapists' delivery and training will influence outcomes
5. Te Tiriti o Waitangi commitment will influence implementation of an occupation-focused CRT programme

Topics/ Information sought relating to the issues.

1 Client demographics/the illness/impact/length/health determinant
2 Family attributes
3 Current structures/central processes to the application of the implementation process
4 Desired need for change in occupational performance and actual change
5 Perceived understanding and adherence to the implementation process
6 Perceived facilitator to implementation and outcomes
7 Perceived barriers to implementation and outcomes
8 Perceived application of te Tiriti o Waitangi
9 Key points of tension encountered by therapists delivering the programme and how they managed it
10 Key Influences on staff training of CRT

April/May/June

Recruit	Actions	Topics related to Issue Statements	Indicative Questions	GAPs/Comments
Managers Staff	Identify potential participants. • General Manager SMH & Addictions • Clinical Director SMH & Addictions • Psychology Professional Lead • Occupational Therapy Professional Lead • Clinical Director Mason Send following information to administrator to start recruitment. Intro email, Flyer, Information sheet, Consent email, Consent form. Instructions for Kirk Step 1 Send the introduction email and attach the flyer. Step 2 if they are interested, they will get back to you wanting more information. Step 3 send information sheet. Step 4 they will get back in touch with you if they agree to take part Step 5 send email regarding the consent process and attach the consent form Step 6 they will sign scan and send back to you or leave it with admin for me to collect.	3 Current structures/central processes to application of the implementation process 5 Perceived understanding and adherence to the implementation process 6 Perceived facilitators to implementation and outcomes 7 Perceived barriers to implementation and outcomes 8 Perceived applications of te Tiriti o Waitangi 10 Key influences on staff training of CRT	T 3, 5 What is your knowledge relating to CRT? T 7 What do you see as barriers in delivering the programme? T 6 What do you see as facilitators in delivering the programme? T 3 What was happening in the service at the time that influenced your decision in supporting the implementation of CRT? T 3, 8 How do you think CRT aligns with the vision for specialist mental health and addiction services? T 3, 5 Where do you see the implementation of CRT in terms of service delivery prioritise T 3, 5, 6, 7, 8, 10 How do you think the implementation of CRT could be best supported and resourced? T 6, 7, 10 What are your views on outcomes measures that focus on the occupations of what the person, wants needs and as to do? T 9 How do you see the CRT programme aligning with workforce development	Application to Māori Direction MH Inquiry

	Talk with Rachel Boles and receiving consent forms for me to collect.		
CRT Therapists	Five potential participants Step 1 Send email to manager advising that recruitment will begin Step 2 Send email to Kirk advising and attached information sheet and consent form Step 3 Flyer sent to Vocational Futures and request to have it distributed to staff meetings and put on notice board Step 4 Potential participants to contact Kirk and for further information Step 5 Kirk send information sheet Step 6 Potential participants contact Kirk for consent form Step 7 Kirk email consent form and request they scan and email back of leave with administrator and Vocational Futures for Katrina to collect	3 Current structures/central processes to application of the implementation process 4 Desired need for change in occupational performance and actual change 5 Perceived understanding and adherence to the implementation process 6 Perceived facilitators to implementation and outcomes 7 Perceived barriers to implementation and outcomes 8 Perceived applications of te Tiriti o Waitangi 9 Key points of tension encountered by therapists delivering the programme and how they managed it 10 Key influences on staff training of CRT	T 3, 4, 5 Tell me about your experiences overall of delivering the occupation-focused CRT programme? T 3, 7 What barriers did you experience in delivering the programme? T 3, 6 What facilitators did you experience in delivering the programme, what helped? T 4 How do you think the programme has helped with the everyday things your clients want, needs, and must do? T 3, 4, 5, 6, 7, 8, 9 What is your experience of the various aspects of the programme (e.g., CIRCuiTS, bridging, social skills)? T 1, 6, 7 What barriers and facilitators did you find regarding access to the programme (e.g., days, travel, internet)? T 10 How did the CRT training influence your ability to deliver the programme? T 4, 9 Do you think the programme met the needs of the service users; if so, how? If not, how do you think it can be improved? T 4, 9 What are your views on the outcome measures?
June/July			
Documents	Send email to secretary of steering group requesting the following documents	3 Current structures/central processes to the application of the implementation process	T 3, 7 Pilot Evaluation T 3, 4, 5, 6, 7, 8, 9 CRT reports T 10 Training manual T 3, 5, 10 Training slides

		4 Desired need for change in occupational performance and actual change 5 Perceived understanding and adherence to the implementation process 6 Perceived facilitator to implementation and outcomes 7 Perceived barriers to implementation and outcomes 8 Perceived application of te Tiriti o Waitangi 9 Key points of tension encountered by therapists delivering the programme and how they managed it 10 Key influences on staff training of CRT	T 3, 4, 5, 6, 7, 8, 9, 10 CRT steering group minutes
July/August/Sept/Oct			
Service users	Step 1: Send flyer to Vocational Futures administrator and request flyer to be put on notice board, put in newsletter, and passed around to staff and clients Step 2: Follow up with interested potential participants, and obtain contact details if they wish to proceed Step 3 Post out information sheet, or email and follow up with a phone call Step 4 Ask if they require cultural support Step 5 Arrange a time and place to meet to go over information and consent forms and arrange with kaumātua if cultural support is needed	1 Client demographics/ the illness/impact/length/health determinant 2 Family attributes 4 Desired need for change in occupational performance and actual change 5 Perceived understanding and adherence to the implementation process 6 Perceived facilitators to implementation and outcomes 7 Perceived barriers to implementation and outcomes 8 Perceived applications of te Tiriti o Waitangi	T 1 Can you tell me a little about yourself, how much do you understand about your mental well-being and the impact on your day-to-day life T 2 How well does your family understand your difficulties? T4 T5 Tell me about your experiences overall of the occupation-focused CRT programme? T 7 What aspects of the programme did you find difficult? T 6 What aspects of the programme did you find helpful? T 4 How has the programme helped with the everyday things you want, need, and must do? T 5, 6, 7, 8 Was the computer programme helpful, if so, how? T 5, 6, 7, 8 Was the social skills group helpful, if so, how?

			T 5, 6, 7, 8 How did you find accessing the programme (e.g., days, travel, internet)? T 8 Do you think the programme of aspects of the programme met your cultural needs, if so how, if not how could this be improved
Service user's clinical file	Step 1 gain written consent to obtain clinical file Step 2 send email to administrator requesting copy of service user/participant's clinical file	1 Client demographics/ the illness/impact/length/health determinant 2 Family attributes 3 Current structures/central processes to the application of the implementation process 4 Desired need for change in occupational performance and actual change 5 Perceived understanding and adherence to the implementation process 6 Perceived facilitator to implementation and outcomes 7 Perceived barriers to implementation and outcomes 8 Perceived application of te Tiriti o Waitangi 9 Key points of tension encountered by therapists delivering the programme and how they managed it	T 1, 2 ,3, 4, 5, 6, 7, 8, 9, Service user's CRT report T4 COPM outcome measures
Family members	Step 1: Send flyer to Vocational Futures administrator and request flyer to be put on notice board, put in newsletter, and passed around to staff and clients	2 Family attributes 4 Desired need for change in occupational performance and actual change 5 Perceived understanding and adherence to the implementation process 6 Perceived facilitators to implementation and outcomes	T 4 Tell me about any differences that you have noticed in your family member or significant other since they have undertaken the occupational-focused CRT T 4 Do you think the programme has made a difference in your family members/significant others life, if so, how?

	Step 2: Follow up with interested potential participants, and obtain contact details if they wish to proceed Step 3 Post out information sheet, or email and follow up with a phone call Step 4 Ask if they require cultural support Step 5 Arrange a time and place to meet to go over information and consent forms and arrange with kaumātua if cultural support is needed.	7 Perceived barriers to implementation and outcomes 8 Perceived applications of te Tiriti o Waitangi	T 2 Did you have any involvement in the programme, if so, how? T 2, 7, 6, 8 How do you think family could be more involved in the programme T 5, 6, 7 How difficult or easy what is for your family member or significant other to access the programme, days, times, internet etc? T 4 Have you noticed in any difference with your family member or significant others in social situations? T 8 Do you think the programme meet your significant others cultural needs, if so how, if not how could this be improved? How do you think the programme could be improved?
CRT Therapists	Recruitment of new cohort of CRT therapist may be possible if needed. Steps as above re previous recruitment of CRT therapists		

Equipment needed for all interviews:

Digital recorder, spare batteries, charged cell phone to record for backup (2 recordings). Ensure cell phone is set so no incoming calls can be made, note paper, pen, and paper. Water, tea, coffee if possible. Clock to keep track of time, list of indicative questions.
For Māori participants: arrange time with kaumātua, inform that I will be requiring their guidance around protocol, procedures.
Confidentially form for transcriber to be signed.
Transcriber has trialled digital recorder and is now familiar with it.
Digital recordings will be backed up on researcher's computer prior to taking to be transcribed.
Word document transcribed notes will be emailed to researcher.
Word documented will be printed and kept in folder in locked cupboard.

Rationale for order of recruitment

Staggered recruitment to prevent wait times if people agree within a close time limit. Managers and therapists are recruited simultaneously as their perspectives involve service delivery; managers have oversight of the strategic picture and where CRT sits in that, whereas therapists have the

knowledge around delivering CRT in an already stretched service. Each perspective will help shape the interviews which will guide me when interviewing tāngata whai ora and families in regards to their perspectives and where their perspectives sit within the strategic plan.

Appendix G: Participants' Data Gathering Plans

Data Gathering Plan for Leaders

1. 3-5 leaders, managers, or professional leads at SCHB in designated position and whom have decision making capacity regarding the occupation-focused CRT programme.
2. Email address will be given from the researcher to Dr Kirk Reed who will be making initial contact via email with the flyer about the research attached. Managers' names, positions, and emails are publicly available.
3. Contact details will be collected by Kirk Reed once Managers/Staff have made initial contact after seeing the advertisement.
4. Managers/staff will be invited to take part via email, phone call, or face to face discussion with AUT supervisor Kirk Reed. An in-depth information sheet will be emailed or given at the face the face meetings. They will also be provided Kirk Reed's contact details via email if they need further information/clarification. A written information sheet will be emailed out to interested parties via the researchers AUT supervisor Kirk Reed. They will be invited to a one-one meeting or phone call to verbally discuss the study if they require further information. Participants can contact the AUT supervisor o find out more information, the contacts details will be on the information sheet.
5. When potential participants are fully informed an AUT supervisor Kirk Reed will contact them to arrange a meeting to go through the written consent form (*if this is requested, otherwise they can be scanned and emailed back, or collected by the researcher*)
6. A copy of the transcripts will be shown to the participants to offer them the opportunity to have any information that they believe will identify them removed. Pseudonyms will be used.

Participants identified and emailed to Kirk — Date 13th April 2019
Invitation email sent to managers — Date 16th April 2019
Follow up email sent to remind — Date 3rd May 2019

Invited	Date consented	Consent form to Kirk	Date declined	No reply	Date arrange time	Date interview arranged	Place of interview	Study protocol completed	Interview conducted completed	Notes transcribed	Transcribed notes sent to participant	Transcribed notes returned for change
Marie	29/4	Email: Yes Original No	X	X	30/4	10/05	[redacted] Rd	Yes	10/05	Yes	Yes, return by 14th June	Returned, no change needed
Anna	3/5	Email: Yes Original No	X	X	06/05	04/06	[redacted] office	Yes	05/06	Yes	Yes 22/07	Requested return by 1st august no reply

Jo	x	X	3/5	X	X	X	X	X	XX	xx	xx	xx
Matt	06/05	Email Yes Original	X	X	06/05	04/06	Tena Koto Room [redacted]	Yes	05/06	Yes	Yes, return by 16th August	No reply
John	X	X	06/05	X	X	X	X	X	X	x		
David	20/08	20/08			22/08	04/09	[redacted] Rd	Yes	Yes 4/09	Yes	Yes 10th Sept	No changes returned 10th Sept

Data Gathering Plan for Therapists

1. 3-6 CRT therapists employed by SCHB who work or have worked at Work Foundations and who have delivered the occupation-focused CRT programme.
2. A flyer will be placed on the Work Foundations' staff notice board and presented at their business meeting informing of research. Potential participants are asked to contact Kirk Reed for further information.
3. Contact details will be collected by Kirk Reed once therapists have made initial contact after seeing the advertisement/flyer.
4. Therapists will be invited to take part via email, phone call or face to face discussion with AUT supervisor Kirk Reed. An in-depth information sheet will be emailed or given at the face the face meetings. They will also be provided Kirk Reed's contact details via email if they need further information/clarification. A written information sheet will be emailed out to interested parties via the researchers AUT supervisor Kirk Reed. They will be invited to a one-one meeting or phone call to verbally discuss the study if they require further information. Participants can contact the AUT supervisor to find out more information. The contact details will be on the information sheet.
5. A written information sheet will be emailed out to interested parties via the researchers AUT supervisor Kirk Reed. They will be invited to a one-one meeting or phone call to verbally discuss the study if they require further information. Participants can contact the AUT supervisor to find out more information. The contact details will be on the information sheet.
6. When potential participants are fully informed an AUT supervisor Kirk Reed will contact them to arrange a meeting to go through the written consent form (*if this is requested, otherwise they can be scanned and emailed back, or collected by the researcher*)
7. A copy of the transcripts will be shown to the participants to offer them the opportunity to have any information that they believe will identify them removed. Pseudonyms will be used.

Flyer emailed to administrator at Work Foundations for distribution. Date 14th April
Follow up email sent to administrator reminding to distribute the flyer to business meetings, notice boards etc. Date: 6th May
Follow up email to interested participants sent 22nd May

	Date consented	Consent form to Kirk	Date Declined	No reply	Date contact made to arrange time	Date interview arranged	Place of interview	Study protocol completed	Interview conducted/completed	Notes transcribed	Transcribed notes sent to participant	Transcribed notes returned
Michelle	13th May	13th May			14th May	29th May	Clarke St	Yes	Yes	Yes	4th June	Yes, no changes
Sarah	13th May	13th May			14th May	28th May	Clarke St	Yes	Yes	Yes	19th July	Yes, no changes
Melanie	20th May	20th May			21st May	7thJune	Clarke St	Yes	Yes	Yes	25th July	Yes, no changes
Pam	22nd May	22nd May			26th May	2nd July	Red Beach	Yes	Yes	Yes	25th October	Yes, no changes
Leah	28th May	28th May			10th June	21st June	Clarke Street	Yes	Yes	Yes	25th October	Yes, no changes

Data Gathering Plan for Service Users

1. 3-6 service users aged between 18 and 65, with a diagnosis of schizophrenia or schizoaffective disorder who have demonstrated a level of cognitive competency and English literacy to have been able to complete at least 60% of the occupation-focused CRT programme delivered by CRT therapists at Work Foundations.
2. Service Users: Recruitment will be initiated through a flyer which will be put up on Work Foundations' notice board and left on counters (The flyer will also be advertised at Work Foundations and in their newsletter). Potential participants are asked to contact the researcher for further information.
3. Contact details will be collected by Katrina Wallis once therapists have made initial contact after seeing the advertisement/flyer.
4. Service users will be invited by the researcher to take part via a phone call or face to face contact and will be offered a face-to-face meeting at Work Foundations to discuss the research further. They will also be offered the researchers details to gain further information at any time. A more in-depth information sheet will be provided at the beginning of this process once initial interest is shown.
5. A written information sheet will be emailed out to interested parties via the researchers AUT supervisor Kirk Reed. They will be invited to a one-one meeting or phone call to verbally discuss the study if they require further information. Participants can contact the AUT supervisor to find out more information. The contact details will be on the information sheet.
6. When potential participants are fully informed and agree to take part then they will meet with the researcher at an agreed site to go through the written consent form.
7. A copy of the transcripts will be shown to the participants to offer them the opportunity to have any information that they believe will identify them removed. Pseudonyms will be used.
8. CRT therapists at Work Foundations will provide the COPM results from the CRT reports. This is obtained from the clients clinical file to the researcher for participant who have consented to the researcher obtaining this information. The information will be de-identified.

Flyer emailed to administrator at Work Foundations for distribution	15th September
Flyer placed in September Work It Out edition	30th September
Service User expressed interest to their key workers and requested their key worker make initial contact	15th to 17th October
Site visit to meet with 4 potential participants individually, talk about the research, provide participant information sheet.	24th October – spoke with 4 potential participants. two consented straight way and wanted to do interview that day. Two are looking over the information sheet and have arranged to meet them again on the 29th to go over anything, obtain consent and interview.

	Date contact made by KW	Date discussed	Date consented	Consent form to Kirk	Date Declined	Date contact made to arrange time	Date interview arranged	Place of interview	Study protocol completed	Interview conducted/completed	Notes transcribed	Transcribed notes sent to Participant	Transcribed notes returned
Susan	10th Oct	24th oct	24th Oct	29th Oct		24th Oct	17th Oct postponed unwell	Clarke St	Yes	Yes 24th Oct	Yes	Yes	No changes
Fiona	18th Oct	24th oct	24 Oct	24 Oct		24th Oct	24 Oct	Clarke St	Yes	Yes 24th Oct	Yes	Yes	No changes
Simon	18th Oct	24 Oct	29th Oct	29th Oct		Report only							
Peter	22nd Oct	24 Oct	24th Oct	24th Oct		24th Oct	29th Oct	Clarke Street	Yes	Yes 29th Oct	Yes	Yes	Yes, no changes
Geoff	22nd Oct	24th Oct	24th Oct	24th Oct		24th Oct	30th Oct	Clarke St	Yes	Yes 30th Oct	Yes	Yes	Yes, no changes
Jake	24th Oct	24th Oct	24th Oct	24th Oct		Report only							

Data Gathering Plan Documents

1. Documents that are relevant to the case (5 documents identified).
2. Email the CRT steering to request documents.
3. Email to organisation executive assistant to request documents.
4. Email to case study site to request documents and CRT reports.

Document	Email Request	Follow up Email	Date received
Pilot evaluation	15th June 2019	Not needed	16th June
CRT reports	18th November 2020	2nd December 2020	12th January
		10th January 2020	1st February
Training manual	20th May 2020	20th May	20th May 2020
CRT steering group minutes	20th May 2020	22nd May	22nd May 2020
Training slides	28th May 2020	28th May	29th May 2020

Appendix H: Leaders' Recruitment Documents—Flyer, Information Sheet, Consent Form

Are you a [redacted] staff member in a designated leadership position who has had decision making ability regarding the endorsement of the delivery of a cognitive remediation therapy programme at [redacted]? If so, would you be interested in taking part in research about the programme?

Occupational therapist Katrina Wallis is conducting research to evaluate this programme and your opinion is important. She would like to meet with you for one hour to hear your views.

If you are interested in finding out more information, then please contact Kirk Reed at Auckland University of Technology

CONTACT

Kirk Reed
09 921 9156

kirk.reed@aut.ac.nz

Participant Information Sheet

For [redacted] Management Staff

Date Information Sheet Produced: 28th November 2018

Project Title: Implementing an occupation focused Cognitive Remediation Therapy programme: A Case study

Hello Tēnā koe talofa lava

My name is Katrina Wallis and employed at [redacted] an Occupational Therapist. Would you be willing to help me by taking part in research aiming to understand the delivery of the occupation-focused Cognitive Remediation Programme (CRT) that has been offered to service users at [redacted]

This study is being carried out by researchers based in the School of Clinical Sciences at AUT University as part of my Doctor of Health Science degree. Your participation in this study is entirely voluntary. If you do agree to take part you are free to withdraw at any time, without having to give a reason.

This information sheet will explain the research study. We appreciate your time reading this material. Please feel free to ask about anything that you do not understand or if you have questions at any time.

What is the purpose of this research?

[redacted] one of the first organisations to offer an occupation-focused Cognitive (Ctrl) n Therapy programme to service users in New Zealand. There is little known about how to deliver a CRT programme in New Zealand and how to deliver it with a focus on occupations that are important to the person. We want to explore the various perspectives of people who are involved in the programme including staff members in a designated leadership position who have decision making authority on whether CRT is delivered or not, in order to develop the best programme possible and create guidelines for other mental health services. Findings of this research ma be used for academic publications or presentations.

How was I identified and why am I being invited to participate in this research?

We want to capture a wide range of opinions and perspectives on this topic, from a range of different backgrounds. You have been invited as we believe you can contribute a valuable point of view to this project. You have been identified as a potential participant because you meet the entry criteria listed below

- You are an employee of [redacted] in a designated leadership position
- You have decision making ability about whether to support the delivery of CRT or not.

What will happen in this research?

You will undertake an interview conducted by the researcher. The interview will consist of some questions about your perspective on the delivery of the programme. The interview will take approximately 60 minutes and can be conducted at any [redacted] site.

What are the discomforts and risks?

There should not be any risk to you from this study. All possible effort will be made to ensure that your views are respected throughout the discussion. You can choose not to answer any questions you do not feel comfortable answering and can choose to cease your involvement in the interview at any time.

How will my privacy be protected?

Your interview will be audio recorded. This recording and all other information that you provide will remain strictly confidenal within the research team. All data is stored in secure password protected files. No material that could personally idenfy you will be used in any reports from this study. However, it maynot be possible to provide full confidentialy as there is limited people invovled in the cogntiive remediation therpay programme and limited people in leadership positions.

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What are the costs of participating in this research?

There will not be any cost to you except your time.

What opportunity do I have to consider this invitation?

You will have up to 4 weeks to consider this invitation

How do I agree to participate in this research?

You will be required to sign a written consent form, and a time will be arranged to go through the consent form.

You are able to withdraw from the study at any time. If you choose to withdraw from the study, then you will be offered the choice between having any data that is identifiable as belonging to you removed or allowing it to continue to be used. However, once the findings have been produced, removal of your data may not be possible.

Will I receive feedback on the results of this research?

You will be offered an opportunity to review the transcribed notes and remove any identifiable information. You will also be offered an opportunity to provide some comment on the initial themes that came from your interview. It will be posted to you with a return envelope. If you would like to receive a summary of the entire research findings you can indicate this on the consent form and provide your contact details. These will be sent to you at the end of the study.

MY QUESTION ISN'T ANSWERED HERE, WHO CAN I CONTACT FOR MORE INFORMATION?

If you would like more information about this research, please feel free to contact one of the research team.

Cultural support and advice can be sought through Waitemata District Health Board by contacting Whai [redacted] and Matua P[redacted]

Any concerns regarding the nature of this project should be notified in the first instance to the Project Supervisor, Kirk Reed.

Concerns regarding the conduct of the research should be notified to the Executive Secretary of AUTEC, Kate O'Connor, *ethics@aut.ac.nz* , 921 9999 ext 6038.

Cultural Support Details:

[redacted]

[redacted]

Researcher Contact Details:

Katrina Wallis. Mobile 0212465102

Project Supervisor Contact Details:

Kirk Reed: kreed@aut.ac.nz

Approved by the Auckland University of Technology Ethics Committee on *type the date final ethics approval was granted*, AUTEC Reference number *type the reference number*.

Appendix Q: Consent Form

WDHB Management/staff

Project title: *Implementing an occupation-focused Cognitive Remediation Therapy programme: A case study*

Project Supervisor: ***Dr Kirk Reed***

Researcher: ***Katrina Wallis***

By signing below, I acknowledge that

- O I have read and understood the information provided about this research project in the Information Sheet dated 28th November 2018
- O I have had an opportunity to ask questions and to have them answered.
- O I understand that notes will be taken during the interviews and that they will also be audio-taped and transcribed.
- O I understand that taking part in this study is voluntary (my choice) and that I may withdraw from the study at any time without being disadvantaged in any way.
- O I understand that if I withdraw from the study then I will be offered the choice between having any data that is identifiable as belonging to me removed or allowing it to continue to be used. However, once the findings have been produced, removal of my data may not be possible.
- O I understand that full confidentiality may not be achievable.
- O I agree to take part in this research.
- O I wish to receive a summary of the research findings (please tick one): YesO NoO

Participants Name

Participants Signature

Date:

Approved by the Auckland University of Technology Ethics Committee on 14th March 2019 AUTEC Reference 19/15

Note: The Participant should retain a copy of this form.

Appendix I: Therapists' Recruitment Documents—Flyer, Information Sheet, Consent Form

Are you an occupational therapists who is delivering the cognitive remediation therapy programme at [redacted]?, If so, would you be interested in taking part in research about the programme?

Occupational Therapist Katrina Wallis is conducting research to evaluate this programme and your opinion is important. She would like to meet with you for one hour to hear your views.

If you are interested in finding out more information then please contact Kirk Reed at Auckland University of Technology

Approved by the Auckland University of Technology Ethics Committee on 14th March 2019 AUTEC Reference number 19/15

CONTACT

Kirk Reed
09 921 9156

kirk.reed@aut.ac.nz

AUT

Appendix L: Participant Information Sheet

For Cognitive Remediation Therapists

Date Information Sheet Produced: 28th November 2018

Project Title: Implementing a occupation focused Cognitive Remediation Therapy programme: 'A Case study

Hello Tēnā koe talofa lava

My name is Katrina Wallis and I am a Occupational Therapist. Would you be willing to help me by taking part in research aiming to understand the delivery of the occupation-focused Cognitive Remediation Programme (CRT) that you have delivered to service users at [redacted]

This study is being carried out by myself and my supervisors based in the School of Clinical Sciences at AUT University as part of my Doctor of Health Science degree. Your participation in this study is entirely voluntary (your choice). You do not have to take part in this study and if you choose not to take part this will in no way affect your current or future employment. If you do agree to take part you are free to withdraw at any time, without having to give a reason.

This information sheet will explain the research study. We appreciate your time reading this material. Please feel free to ask about anything that you do not understand or if you have questions at any time.

What is the purpose of this research?

Cognitive remediation therapy (CRT) is offered in mental health services overseas for people who have difficulty with their memory, concentration, planning and organising. [redacted] is one of the first services to offer CRT to service users in New Zealand. There is little known about how to deliver a CRT programme in New Zealand and how to deliver it with a focus on occupations that are important to the person. We want to explore the various perspectives of people who are involved in the programme including therapists who have delivered the programme with service users

in order to develop the best programme possible and create guidelines for other mental health services. Findings of this research may be used for academic presentations and publications.

How was I identified and why am I being invited to participate in this research?

We want to capture a wide range of opinions and perspectives on this topic, from a range of different backgrounds. You have been invited as we believe you can contribute a valuable point of view to this project. You have been identified as a potential participant by an administrator at [redacted] because you meet the entry criteria listed below

- You are an employee of [redacted] and have delivered the CRT programme at [redacted]
- You have received training in CRT from credentialed CRT therapists.

What will happen in this research?

You will undertake an interview by the researcher Katrina Wallis. The interview will consist of some questions about your perspective on delivering the CRT programme. The interview will take approximately 60 minutes and can be conducted at any [redacted] site (such as [redacted] or at the Auckland University of Technology campus or somewhere in your community (such as the local library or café).

What are the discomforts and risks?

There should not be any risk to you from this study. As the researcher (myself) is known to you, we wish to ensure you are not influenced in any way. Therefore, I am not involved in the recruitment process as I do not want to influence your decision to participate or not. If you do decide to participate, you can choose not to answer any questions you do not feel comfortable answering and can choose to cease your involvement in the interview at any time.

How will these discomforts and risks be alleviated?

Should any risk of discomfort arise you will be encouraged to seek EAP counselling.

How will my privacy be protected?

Your name will be removed and a psyudenum name used in the final report. The audio recording of your interview and transcribed notes will remain strictly confidential within the research team. All data is stored in secure password protected files. No material that could personally identify you will be used in any reports from this study. However it may not be possible to maintain full confidentiality given there is a limited number of people involved in the programme who work at work foundations.

What are the costs of participating in this research?

There will not be any cost to you except your time. Interviews can be conducted during your work time.

What opportunity do I have to consider this invitation?

You will have up to 4 weeks to consider this invitation

How do I agree to participate in this research?

You will be required to sign a written consent form, and this will be offered to you by the AUT supervisor.

If you choose to withdraw from the study, then you will be offered the choice between having any data that is identifiable as belonging to you removed or allowing it to continue to be used. However, once the findings have been produced, removal of your data may not be possible.

Will I receive feedback on the results of this research?

You will be offered an opportunity to review the transcribed notes and remove any identifiable information. It will be posted to you with a return envelope. If you would like to receive a summary of entire research

findings you can indicate this on the consent form and provide your contact details. These will be sent to you at the end of the study.

MY QUESTION ISN'T ANSWERED HERE, WHO CAN I CONTACT FOR MORE INFORMATION?

If you would like more information about this research, please feel free to contact one of the research team.

Cultural support and advice can be sought through [redacted] by contacting Whai T[redacted] and/or Matua P[redacted]

Any concerns regarding the nature of this project should be notified in the first instance to the Project Supervisor, Kirk Reed.

Concerns regarding the conduct of the research should be notified to the Executive Secretary of AUTEC, Kate O'Connor, *ethics@aut.ac.nz* , 921 9999 ext 6038.

Cultural Support Details:

[redacted]

Researcher Contact Details:

Katrina Wallis. Mobile 0212465102

Project Supervisor Contact Details:

Kirk Reed: kreed@aut.ac.nz

Approved by the Auckland University of Technology Ethics Committee on *type the date final ethics approval was granted*, AUTEC Reference number *type the reference number*.

Cognitive Remediation Therapy Therapist

Project title: *Implementing an occupation-focused Cognitive Remediation Therapy programme: A case study*

Project Supervisor: ***Dr Kirk Reed***

Researcher: ***Katrina Wallis***

By signing below, I acknowledge that

O√ I have read and understood the information provided about this research project in the Information Sheet dated 14th March 2019

O√ I have had an opportunity to ask questions and to have them answered.

O√ I understand that notes will be taken during the interviews and that they will also be audio-taped and transcribed.

O√ I understand that taking part in this study is voluntary (my choice) and that I may withdraw from the study at any time without being disadvantaged in any way.

O√ I understand that if I withdraw from the study then I will be offered the choice between having any data that is identifiable as belonging to me removed or allowing it to continue to be used. However, once the findings have been produced, removal of my data may not be possible.

O √ I understand that full confidentiality may not be possible

O√ I agree to take part in this research.

O√ I understand that the interviews will be undertaken by Katrina Wallis as the primary researcher

O I wish to receive a summary of the research findings (please tick one): YesO√ NoO

Participants Name:

Participants Signature:

Date:

Approved by the Auckland University of Technology Ethics Committee on 14th March 2019 AUTEC Reference number 19/15

Note: The Participant should retain a copy of this form.

Appendix J: Tāngata Whai Ora Recruitment Cocuments—Flyer, Information Shet, Consent Form

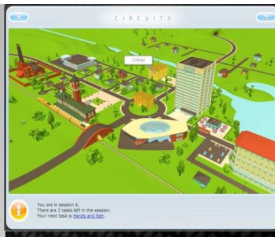
Have you recently been involved in the cognitive remediation therapy programme at [redacted]?

If so, would you be interested in taking part in research about the programme?

My name is Katrina Wallis and I am conducting research to evaluate this programme and your opinion is important to me. I would like to meet with you for one hour to hear your views.

If you are interested in finding out more information then please contact me

Approved by the Auckland University of Technology Ethics Committee on 14th March 2019 AUTEC Reference number 19/15



CONTACT ME

Katrina Wallis
0274 424112
katrinawallis7@gmail.com

AUT

For Service Users

Date Information Sheet Produced: 28th November 2018

Project Title: Implementing a occupation focused Cognitive Remediation Therapy programme: 'A Case study

Hello Tēnā koe talofa lava

My name is Katrina Wallis and I am the senior occupational therapist for Adult Mental Health Services [redacted]. Would you be willing to help me by taking part in research aiming to understand the delivery of the occupation-focused Cognitive Remediation Programme (CRT) you have completed or are currently undertaking at [redacted]

This study is being carried out as part of my Doctor of Health Science degree at Auckland University of Technology. Your participation in this study is entirely voluntary (your choice). You do not have to take part in this study and if you choose to take part (or not), it will in no way affect your current or future health care. If you do agree to take part you are free to withdraw at any time, without having to give a reason.

This information sheet will explain the research study. We appreciate your time reading this material. Please feel free to ask about anything that you do not understand or if you have questions at any time.

What is the purpose of this research?

[redacted] is one of the first services to offer a cognitive remediation programme to service users in New Zealand. There is little known about how to implement the programme in New Zealand and how to implement it with a focus on things that are important to the person. We want to explore the perspectives of people who have been through the programme in order to develop the best programme possible and create guidelines for other mental health services. The findings of the study will also be used for presentation and publications.

How was I identified and why am I being invited to participate in this research?

We want to capture a wide range of opinions and perspectives on this topic, from a range of different backgrounds. You have been invited as we believe you can make a valuable contribution to this project. You have been identified as a potential participant by an administrator at [redacted] because you meet the entry criteria listed below

- A service user of [redacted]
- You have a diagnosis of an enduring psychotic illness (Schizophrenia or Schizoaffective disorder)
- You completed at least 60 percent of the occupation-focused CRT programme at [redacted]
- You are aged between 18-65 years of age.
- You are not known to the researcher

What will happen in this research?

You will undertake an interview with the researcher which will consist of some questions about how you found participating in the programme. The interview will take approximately 60 minutes and can be conducted at a [redacted] strict Health Board work site (such as [redacted]) or at the Auckland University of Technology campus or somewhere in your community (such as the local library or café). It will be your choice. You may bring a support person with you. If you are Māori you will be offered a cultural support person to ensure your cultural safety and to ensure your Maori world view is captured in the interview.

We are also requesting access to your Cognitive Remediation Therapy report that is held in your clinical file to gather more information about the things you wanted to improve on while doing the programme. An administrator at [redacted] will be responsible for accessing your file and providing that information upon your consent.

We are also be asking you if you are happy for your family member or a person who is significant to you, to also take part in order to get their perspective on the programme. If you are, we will provide you with a flyer to give them to see if they are interested

You can choose to consent to both (the interview and access to your CRT report,) to parts, or to none.

What are the discomforts and risks?

There should not be any risk to you from this study. The researcher will make all possible effort to ensure that your views are respected throughout the discussion. You can choose not to answer any questions you do not feel comfortable answering and can choose to cease your involvement in the interview at any time.

How will my privacy be protected?

Your interview will be recorded. This recording and all other information that you provide will remain confidential within the research team. All data is stored in secure password protected files. No material that could personally idenfy you will be used in any reports from this study. All information from your CRT report will be de-identifed before given to the researcher. However given there are only a small amount of people that have undergone the cogntive remediation thearpy programme it may be possible that your information is recognised by others invovled in the programme, such as the therapists that you worked with.

What are the costs of participating in this research?

There will not be any cost to you except your time.

What opportunity do I have to consider this invitation?

You will have up to 4 weeks to consider this invitation

How do I agree to participate in this research?

You will be asked to sign a written consent form, and I can meet with you to go over any questions you have prior to signing the consent form. Your participation in this research is voluntary (it is your choice) and whether or not you choose to participate will neither advantage nor disadvantage you. You are able to withdraw from the study at any time. If you choose to withdraw from the study, then you will be offered the choice between having any data that is identifiable as belonging to you removed or allowing

it to continue to be used. However, once the findings have been produced, removal of your data may not be possible.

Will I receive feedback on the results of this research?

You will be offered an opportunity to provide some comment on the initial transcripts that came from your interview. It will be posted to you with a return envelope. If you would like to receive a summary of entire research findings you can indicate this on the consent form and provide your contact details. These will be sent to you at the end of the study.

What funding supports this research?

This research is part funded by the Auckland University of Technology Doctor of Health Science scholarship, the rest of the study is funded by the researcher.

MY QUESTION ISN'T ANSWERED HERE, WHO CAN I CONTACT FOR MORE INFORMATION?

Cultural support and advice can be sought through [redacted] by contacting Whai [redacted] and Matua [redacted]

If you would like more information about this research, please feel free to contact one of the research team.

Any concerns regarding the nature of this project should be notified in the first instance to the Project Supervisor, Kirk Reed.

Concerns regarding the conduct of the research should be notified to the Executive Secretary of AUTEC, Kate O'Connor, *ethics@aut.ac.nz* , 921 9999 ext 6038.

Cultural Support Details:

[redacted]

Researcher Contact Details:

Katrina Wallis. Mobile 0212465102

Project Supervisor Contact Details:

Kirk Reed: kreed@aut.ac.nz Phone 09 921 9156

Approved by the Auckland University of Technology Ethics Committee on 14th March 2019 AUTEC Reference number 19/15

Service Users

Project title: *Implementing an occupation-focused Cognitive Remediation Therapy programme: A case study*

Project Supervisor: ***Dr Kirk Reed***

Researcher: ***Katrina Wallis***

By signing below, I acknowledge that

- O I have read and understood the information provided about this research project in the Information Sheet dated 28th November 2018.
- O I have had an opportunity to ask questions and to have them answered.
- O I understand that taking part in this study is voluntary (my choice) and that I may withdraw from the study at any time without being disadvantaged in any way.
- O I understand that if I withdraw from the study then I will be offered the choice between having any data that is identifiable as belonging to me removed or allowing it to continue to be used. However, once the findings have been produced, removal of my data may not be possible.
- O I understand that full confidentiality may not be possible
- O I agree to take part in this research.

I agree to the interview and understand that notes will be taken during the interview and that they will also be audio-taped and transcribed. Yes O No O

I agree to the researcher having access to my CRT report in my clinical file Yes O No O

I wish to receive a summary of the research findings (please tick one): Yes O No O

Participants Name

Participants Signature

Date:

Approved by the Auckland University of Technology Ethics Committee on 14th March 2019 AUTEC Reference number 19/15

Appendix K: Family/Whānau and Significant Other Recruitment Documents—Flyer, Information Sheet, Consent Form

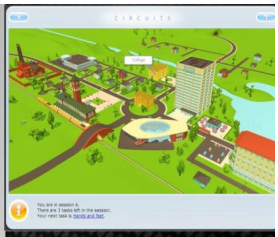
Has your whānau/family member or significant other been involved in the cognitive remediation therapy programme at [redacted]?

If so, would you be interested in taking part in research about the programme?

My name is Katrina Wallis and I am conducting research to evaluate this programme and your opinion is important to me. I would like to meet with you for one hour to hear your views.

If you are interested in finding out more information, then please contact me

Approved by the Auckland University of Technology Ethics Committee on 14th March 2019 AUTEC Reference number 19/15



CONTACT ME

Katrina Wallis
0274 424112
katrinawallis7@gmail.com

AUT

For Service Users Whānau/Family Member/Significant Other.

Date Information Sheet Produced: 28th November 2018

Project Title: Implementing a occupation focused Cognitive Remediation Therapy programme: 'A Case study

Hello Tēnā koe talofa lava

My name is Katrina Wallis and I am the senior occupational therapist for Adult Mental Health Services [redacted] Would you be willing to help me by taking part in research aiming to understand the delivery process of the occupation-focused Cognitive Remediation Programme (CRT) that your whanau/family member or someone important to you has completed or are currently undertaking at [redacted]

This study is being carried out by myself, a researcher based in the School of Health Sciences at AUT University as part of my Doctor of Health Science degree. Your participation in this study is entirely voluntary (your choice). You do not have to take part in this study and if you choose not to take part this will in no way affect you family member/significant persons current or future health care. If you do agree to take part you are free to withdraw at any time, without having to give a reason.

This information sheet will explain the research study. We appreciate your time reading this material. Please feel free to ask about anything that you do not understand or if you have questions at any time.

What is the purpose of this research?

[redacted] one of the first services to offer CRT to service users in New Zealand. [redacted] helps support people with mental illness to explore their potential to find employment. There is little known about how to implement a CRT programme in New Zealand and how to implement it with a focus on things that are important to the person. We want to explore the various perspectives of people who are involved in the

programme including whānau/family members of service users who have been through the programme in order to develop the best programme possible and create guidelines for other mental health services. Findings of this study may be used for academic presentation and publications.

How was I identified and why am I being invited to participate in this research?

We want to capture a wide range of opinions and perspectives on this topic, from a range of different backgrounds. You have been invited as we believe you can contribute a valuable point of view to this project. You have been identified as a potential participant by your whānau/family member/significant other because you meet the entry criteria listed below and they have given us their consent for us to contact you.

- You have a whānau/family member or significant person who has been through at least 60 percent of the CRT programme
- You are not known to the researcher

What will happen in this research?

You will be asked to take part in an interview with the researcher which will consist of some questions about your perspective of your whānau/family member/significant person participation in the cognitive remediation therapy programme. The interview will take approximately 60 minutes and can be conducted at a [redacted] work site (such as [redacted]) or at the Auckland University of Technology campus or somewhere in your community (such as the local library or café). It will be your choice. You may bring a support person with you. If you are Maori, you will be offered a cultural support person to ensure your cultural safety and to ensure your Maori world view is captured in the interview. The interview will be audio recorded and typed out.

What are the discomforts and risks?

There should not be any risk to you from this study. The researcher will make all possible effort to ensure that your views are respected throughout the discussion. You can choose not to answer any questions you do not feel comfortable answering and can choose to cease your involvement in the interview at any me.

How will my privacy be protected?

Your interview will be audio recorded. This recording and all other information that you provide will remain strictly confidential within the research team. All data is stored in secure password protected files. No material that could personally idenfy you will be used in any reports from this study. However there are limited people invovled in the project so it may possible that your information is recognsied by others involved in the programme.

What are the costs of participating in this research?

There will not be any cost to you except your time.

What opportunity do I have to consider this invitation?

You will have up to 4 weeks to consider this invitation.

How do I agree to participate in this research?

You will be asked to sign a written consent form, and I will contact you to arrange at time to go through this with you.

You are able to withdraw from the study at any time. If you choose to withdraw from the study, then you will be offered the choice between having any data that is identifiable as belonging to you removed or allowing it to continue to be used. However, once the findings have been produced, removal of your data may not be possible

Will I receive feedback on the results of this research?

You will be offered an opportunity to provide some comment on the initial transcripts that came from your interview. It will be posted to you with a return envelope. If you would like to receive a summary of entire research findings you can indicate this on the consent form and provide your contact details. These will be sent to you at the end of the study.

What funding supports this research?

This research is part funded by the Auckland University of Technology Doctor of Health Science scholarship, the rest of the study is funded by the researcher.

MY QUESTION ISN'T ANSWERED HERE, WHO CAN I CONTACT FOR MORE INFORMATION?

If you would like more information about this research, please feel free to contact one of the research team.

Cultural support and advice can be sought through [redacted] contacting Whai [redacted] and Matua [redacted]

Any concerns regarding the nature of this project should be notified in the first instance to the Project Supervisor, Kirk Reed.

Concerns regarding the conduct of the research should be notified to the Executive Secretary of AUTEC, Kate O'Connor, *ethics@aut.ac.nz* , 921 9999 ext 6038.

Cultural Support Details:

[redacted]

Researcher Contact Details:

Katrina Wallis. Mobile 0212465102

Project Supervisor Contact Details:

Kirk Reed: kreed@aut.ac.nz Phone 09 921 9156

Approved by the Auckland University of Technology Ethics Committee on 14th March 2019 AUTEC Reference number 19/15

Whānau/Family Member/Significant Other

Project title: *Implementing an occupation-focused Cognitive Remediation Therapy programme: A case study*

Project Supervisor: ***Dr Kirk Reed***

Researcher: ***Katrina Wallis***

By signing below, I acknowledge that

- O I have read and understood the information provided about this research project in the Information Sheet dated 28th March 2019
- O I have had an opportunity to ask questions and to have them answered.
- O I understand that notes will be taken during the interviews and that they will also be audio-taped and transcribed.
- O I understand that taking part in this study is voluntary (my choice) and that I may withdraw from the study at any time without being disadvantaged in any way.
- O I understand that if I withdraw from the study then I will be offered the choice between having any data that is identifiable as belonging to me removed or allowing it to continue to be used. However, once the findings have been produced, removal of my data may not be possible.
- O I understand that full confidentiality may not be possible
- O I agree to take part in this research.
- O I wish to receive a summary of the research findings (please tick one): YesO NoO

Participants Name

Participants Signature

Date:

Approved by the Auckland University of Technology Ethics Committee on 14th March 2019 AUTEC Reference number 19/15

Note: The Participant should retain a copy of this form.

Appendix L: Sensitive Data Safety Management Protocol

AUCKLAND UNIVERSITY OF TECHNOLOGY ETHICS COMMITTEE (AUTEC)

Guide for drafting a Sensitive Data Safety Management Protocol

DEFINITION & PURPOSE:

Sensitive data is data that can be used to identify an individual, object or location and which has a risk of discrimination, harm or unwanted attention associated with it. Sensitive data potentially poses a substantial threat to those who are or who have been involved in it, especially if it is shared inappropriately, or if it falls into the wrong hands.

Areas in which research data is likely to be threatening include:

- ***Where research intrudes into the private sphere or delves into some deeply personal or emotional experience (e.g. experience of serious medical condition or disability, sexual or religious practices, experience of abuse, death or violence);***
- ***Where the study is concerned with deviant, illegal or objectionable behaviours (e.g. the data reveals information that is stigmatizing or incriminating);***
- ***Where the study impinges on the vested interests of powerful persons or the exercise of coercion or domination (e.g. where the research is about social conflict or where participants may face political threat, discrimination or stigma).***

The central issue for a sensitive data safety management protocol is the prevention of accidental disclosure of the identity of a participant or their personal information.

The following questions are to be used as a guide for writing the protocol as relevant to the context of the project.

Project title and brief description:

Delivery of an occupation-focused Cognitive Remediation Therapy programme: A case study

People living with an enduring psychotic illness such as a diagnosis of Schizophrenia often have difficulty with cognition, primarily memory, attention, organising and planning impacting on their ability to participate in work, leisure and self-care occupations. Cognitive Remediation Therapy is a programme that helps address this issue. In New Zealand, there is limited uptake of Cognitive Remediation Therapy in mental health services, despite recommendations from government strategic plans to provide such therapy. This may reflect limited knowledge regarding how to implement such a programme. [redacted] has been the first to deliver an occupation focused CRT programme within their vocational service, [redacted]. This research aims to gain an understanding of the delivery process and the influences on that process in order to shed light on various aspects that services need to attend to. It will also provide practice guidelines for other mental health services, so it can be offered to their service users who need it.

This case study research will gather data from four different perspectives,

a) service users who have been through the programme

b) family members or support people of service users who have been through the programme,

c) cognitive remediation therapists who delivered the programme, and

d) managers at W[redacted]o have designated positions and are involved in decision making regarding the delivery of cognitive remediation therapy.

It will also gather data from the service users who have been through the programme regarding the outcome measures used in clinical practice.

Primary Researcher

Katrina Wallis

Supervisor/s

Dr Kirk Reed

Dr Margaret Jones

What data will be produced?

What physical data will you study? The physical data that I will study are de-identified scores on the Canadian Occupational Performance Scale retrieved from clients clinical file and de-identified CRT reports

What digital data will you generate? field-notes, audio or video recorded interviews, transcribed notes, reflective journal.

What file formats and software will you use? Password protected Microsoft Word and Excel

How will data be structured and stored? Data will be stored in a filing cabinet that I locked, as well as on a password protected computer.

How much data you will produce over time – do you have enough storage? I have enough storage.

Are you making full use of University provided, fully backed-up storage? I will if I need too.

How will data generated in the field be saved to safe University storage? When will this occur? On a password protected computer.

Do you have a logical file naming convention and directory structure? Not required

What quality assurance and back-up procedures are planned?

What raw data is being collected and how will it be managed?

How will the raw data be collected? Access to the client CRT report via an administrator at [redacted] Through audio tape recorded interviews

Will any raw data be stored on portable devices (e.g. audio files on a mobile phone)? No

How will the security of the temporary storage be assured? Through a password protected device and kept in a locked cupboard.

Will the raw data be securely stored or transferred to a secure data repository? Transferred in a locked bag.

Will the raw data be destroyed and if so, when and how? After six years via a confidential waste bin.

What are the ethical requirements for your data?

In what way is the data sensitive? The data collected will not contain deeply personal or emotional experiences it will not contain information about illegal or objectionable behaviours as this is not the focus of the research. It will obtain information about the delivery of the programme from various perspectives and the information may conflict with others. This study will not impinge on vested interest of powerful people or exercise coercion or domination. It is not expected that any personal information be disclosed

How and where is physical data (physical data/papers/records)? Is digitised data encrypted appropriately?

Will you anonymise / de-identify your data? How? When? What will happen to the identifiable information? The admin staff at V[redacted] enter the electronic file of the participant, retrieve the report with the COPM scores on them and block out the persons name and NHI number on the document before passing it on to me. The participants identifiable information remains in their electronic clinical file

Does your research funder have specific data management and sharing requirements? Not applicable

Should some data be destroyed? When and how? By whom?

How will the undertakings about consent, confidentiality, anonymisation and other ethical considerations given to participants be assured? By adhering to the processes outlined in the ethics application

What are the plans for data sharing and access?

Have you discussed data sharing with your research collaborators/ supervisor? Data will not be shared beyond myself and my supervisors.

If your research involves people, have you obtained appropriate consent for data sharing?

Can your data be released immediately, or should you embargo (delay access to) the data? What data will you keep?

Will data be openly available to everyone or will there be access restrictions?

How long will / should data be available for? Will you use a data repository? Which one?

What are your main data challenges? Who can help?

Do you need training or support? What is available?

What University policies are relevant to your project? Have you read and understood them?

Who is responsible for managing the data? What resources will you need?

Who is responsible for data at different stages in its lifecycle?

Are sufficient resources (skills, people, storage, technology) available to deliver your plan?

What will happen to the data if the Primary Research leaves mid-project?

Don’t forget to update your data management plan regularly:

Date for next review
A.1.1.

Appendix M: Transcription Confidentiality Agreement

AUT
TE WĀNANGA ARONUI O TĀMAKI MAKAU RAU

Transcription Services.

Project title: *Implementing an occupation-focused Cognitive Remediation Therapy programme: A case study*

Project Supervisor: ***Dr Kirk Reed***

Researcher: ***Katrina Wallis***

By signing below, I acknowledge that

☐ I understand that all the material I will be asked to transcribe is confidential

☐ I understand that the contents of the tapes or recordings can only be discussed with the researchers.

☐ I will not keep any copies of the transcripts nor allow third parties access to them

Transcriber's Name

Transcriber's Signature

Date:

Approved by the Auckland University of Technology Ethics Committee on 14th March 2019 AUTEC Reference number 19/15

Note: The Transcriber should retain a copy of this form.

Appendix N: Indicative Questions—Leaders, Therapists, Tāngata Whai Ora

Delivery of an occupation-focused Cognitive Remediation Therapy programme: Case Study Research

Semi Structured Interview

Indicative Questions for Leaders/Management

1) *What is your knowledge relating to cognitive remediation therapy?*

2) *What do you see as barriers in delivering the programme?*

3) *What do you see as facilitators in delivering the programme?*

4) *What was happening in the service at the time that influenced your decision in supporting the delivery of Cognitive Remediation Therapy?*

5) *How do you think Cognitive Remediation Therapy aligns with the vision for specialist mental health and addiction services?*

6) *Where do you see the delivery of CRT in terms of service delivery prioritise*

7) *How do you think the delivery of CRT could be best supported and resourced?*

8) *What are your views on outcomes measures that focus on the occupations of what the person, wants needs and as to do?*

9) *How do you see the CRT programme aligning with workforce development*

10) *Any additional comments you would like to make?*

Delivery of an occupation-focused Cognitive Remediation Therapy programme: Case Study Research

Semi Structured Interview

Indicative Questions for Cognitive Remediation Therapy Therapists

1) *Tell me about your experiences overall of delivering the occupation-focused Cognitive Remediation Therapy programme?*

2) *What barriers did you experience in delivering the programme?*

3) *What aspects did you experience in delivering the programme that you found helpful*

4) *How do you think the programme has helped with the everyday things your clients wants, needs and has to do?*

5) *What is; your experience of the various aspects of the service, eg CIRCuiTS, bridging, social skills ?*

6) *What barriers and facilitators did you find regarding access to the programme (eg days, travel, internet)?*

7) *How did the Cognitive Remediation Therapy training influence your ability to deliver the programme*

8) *Do you think the programme met the needs of the tāngata whai ora, if so how? If not how do you think it can be improved?*

9) *What are your views on the outcome measures?*

10) *Any additional comments you would like to make?*

Delivery of an occupation-focused Cognitive Remediation Therapy programme: Case Study Resarch

Semi Structured Interview

Indicative Questions for Tāngata whai ora

1) *Tell me about your experiences overall of the occupation-focused Cognitive Remediation Therapy programme?*

2) *What aspects of the programme did you find difficult?*

3) *What aspects of the programme did you find helpful?*

4) *How has the programme helped with the everyday things you want, need and have to do?*

5) *Was the computer programme helpful, if so how?*

6) *Was the social skills group helpful, if so how?*

7) *How did you find accessing the programme (eg days, travel, internet)?*

8) *How do you think the programme could be improved?*

9) *Any additional comments you would like to make?*

Appendix O: Researcher Safety Protocol

AUCKLAND UNIVERSITY OF TECHNOLOGY ETHICS COMMITTEE (AUTEC)

Researcher Safety Protocol

DEFINITION & PURPOSE:

This is a guide to drafting a Researcher Safety Protocol and needs to be adapted for each research project.

Researchers need to assure their own safety as well as that of their participants and research assistants. The main purpose of a researcher safety protocol is to assess the level and likelihood of risk and to provide appropriate arrangements to minimise and manage those risks.

Situations in which researcher safety is likely to be at risk may include times when:

- *researchers are visiting the homes of others;*
- *researchers are undertaking sensitive research in a manner that puts them at personal risk;*
- *researchers are undertaking research in hazardous conditions;*
- *researchers are undertaking their research in a social or cultural setting with which they have minimal familiarity;*
- *researchers are involving people who pose a higher risk than would normally be the case (e.g. people with a known propensity for violence);*
- *the study impinges on the vested interests of powerful persons;*
- *the study is subject to the exercise of coercion or domination (e.g. where the research is about social conflict or where participants may face political threat, discrimination or stigma);*
- *there is an increased exposure to everyday risks (e.g. accidents, illness).*

Researchers may find it useful to read this research about levels of violence towards researchers in the field (QUALITI (NCRM) COMMISSIONED INQUIRY INTO THE RISK TO WELL-BEING OF RESEARCHERS IN QUALITATIVE RESEARCH by Bloor, M., Fincham, B., and Sampson, H.)

Project title and brief description:

Implementation of an occupation focused Cognitive Remediation Therapy Programme: A case study

Applicant

Dr Kirk Reed

Primary Researcher

Katrina Wallis

Where is the research being undertaken?

The interviews will be undertaken at [redacted] work sites and AUT campus sites, but on occasions participants may choose to access community sites such as local libraries or cafes. Auckland transport travel warnings will be checked via an app on the researcher's phone to ensure access to sites is obtainable. A private location in community sites will be sought as chosen by the participant. The researcher will take their own car and park in public parking

Who will be collecting the data and interacting with participants?

On occasions a Maori support worker may attend the interviews with the researcher for family and service users to ensure cultural safety. The cultural support worker will inform the [redacted] of their attendance, time they leave the [redacted] work site, where they are going, contact phone number and time they are due back. All intermediaries and transcribers will remain on [redacted] work sites or AUT campus sites.

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How familiar is the researcher with the social or cultural context of the research ?

The researcher has 10 years of working in the mental health sector. Meeting service ussers and their families in community setting is regular clinical practice and is undertaken on weekly occasions. Keeping safe while working in the community is part of the culture in the mental health service working environment.

A cultural support worker will support the researcher in cultural situations that are not familiar and consultation has been sought with [redacted] cultural support workers.

Risk is minimal

How safe are the activities in which the researcher is taking part?

The activities in this research are semi-structured interviews and are a safe activity.

What level of access to support is available?

The mental health team clinicians will be available to provide assistance should it be required, and the researcher will inform the team at w[redacted] where these interviews are taking place in the community, time of commencement and completion. In addition, the researcher will inform the applicant by phone when they are heading to the interview and when the interview is completed

What emergency plans are in place? Who can help?

The researcher is known to the acute mental health team and will access the team if required. The clinical team, [redacted] team and AUT supervisors will be made aware of the researchers' movements when undertaking interviews in the community by phone. The researcher will have their phone on them at all times

If the researcher does not inform the [redacted] staff and supervisor that the interview is finished and are returning to work base, then the supervisor will contact the researcher to see if they are safe, if there is no reply then they will contact the crisis team who will follow up with police if required.

Don't forget to update your safety protocol regularly:

Date for next review

June 2019.

Katrina Wallis