SERVICE USER EXPERIENCES AND PROVIDER ATTITUDES TOWARDS A CARING CONTACTS SUICIDE PREVENTION INTERVENTION

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Abstract

Suicide prevention is a global public health priority. Caring contacts (CC) is a suicide prevention intervention that has shown promise and increasing research interest. However, there has been a lack of clarity as to ideal intervention protocols, with service users having limited opportunities to meaningfully contribute to the design and development of the intervention. This study aimed to identify factors that could lead to improved implementation of CC delivered via text messaging in a New Zealand crisis mental health context. The primary study recruited 20 people who presented to the Wellington Emergency Department (ED) due to suicidal ideation or behaviour and agreed to receive 12 supportive one-way text messages over a period of 6 months. Of those recruited, 11 people completed follow-up interviews. Thematic analysis abstracted four themes related to participants' experiences of receiving the messages: *Caring Connection, Safety and Security, Reflections on Recovery*, and *Limitations*. The secondary study explored service provider attitudes towards features of the intervention, suicide prevention and workplace culture towards research utilisation and implementation. Interviews with seven crisis mental health team members were conducted. Content analysis of interviews identified staff concerns about how service users may experience CC via text messaging, concerns about responsibility and possible flow on effects. These concerns were underpinned by significant time constraint and resourcing pressures that also formed barriers to research engagement and service improvement efforts. This study has implications for understanding the mechanisms driving CC interventions and specific implementation considerations at the level of the innovation, provider, and organisation.

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Table of Contents

List of Tables and Figures

Chapter 1: Introduction

Suicide is a significant global health and social issue. For individuals who experience suicidal ideation, stigma, isolation, and daily pressures to carry on, coping can be exhausting (Scarth et al., 2021). For families and communities who have lost a loved one to suicide, the impacts can be wide reaching and long lasting (Campos et al., 2018; Cerel et al., 2019). The World Health Organisation (WHO) has identified suicide prevention as a public health priority and has set targets for lowering rates of suicide (WHO, 2021). There is a need for improved supports to address the factors that contribute to suicidal behaviour.

Over the past five decades, there has been a significant increase in international research about interventions for suicidal and self-injurious behaviours (Fox et al., 2020). However, there has been a lack of improvement in intervention efficacy (Fox et al., 2020). In New Zealand, He Ara Oranga: Report of the Government Inquiry into Mental Health and Addiction (Patterson et al., 2018), was spurred, in part, by persistently high suicide rates. The Inquiry highlighted a lack of coordination and implementation of effective suicide prevention initiatives. All these findings suggest the growth in suicide prevention research has failed to lead to improved suicide prevention in health services and communities.

The gap between research findings and meaningful impacts on real world outcomes is referred to as the knowledge translation gap (Straus et al., 2009). Attempts to address this gap have led to an area of academic inquiry known as implementation science (Proctor et al., 2011). Models of knowledge translation and implementation emphasize the importance of considering context when designing and developing new interventions (Kemp, 2019). Specifically, knowledge translation recognises the importance of integrating the unique perspectives of service users, service providers, and researchers when developing and refining interventions.

Caring contacts (CC) is an intervention that has gained growing interest as a suicide prevention strategy. However, results have been mixed, possibly reflecting variation in specific elements of the intervention methods and protocols (Skopp et al., 2022). Against this background, the goals of this research were to address knowledge translation gaps relating to CC delivered via text messaging and to identify contextual factors to improve possible implementation in New Zealand. The primary study explored service users' experiences of receiving CC via text messaging. The secondary study investigated the attitudes of Crisis Mental Health staff towards features of CC via text messaging as well as the culture in the crisis team towards suicide prevention and innovations to address the problem.

1.1 THESIS STRUCTURE

Chapter 2 reviews the literature and begins with an introduction to the development of knowledge translation and specific models of knowledge translation that have informed this project. Next, the history and barriers to mental health service users' participation within academic research are reviewed. This section concludes with a rationale of why service users' voices are critical in shaping effective implementation of new interventions and the ethical considerations of research of service users' lived experiences. The subsequent section introduces definitions of suicidal behaviour and summarises approaches to suicide prevention. The Interpersonal Psychological Theory of Suicide (IPTS) (Joiner, 2005) is then introduced as a theory of suicidal behaviour. This section is followed by a brief summary of suicide risk factors and a discussion linking these risk factors to the Emergency Department (ED) as a site for implementing intervention. The literature review concludes with summaries of research related to CC and to Mobile Health (mHealth) interventions more generally, highlighting gaps in the literature which led to the aims of the current research.

The primary study methods are outlined in Chapter 3. Firstly, I discuss how the overarching frameworks of knowledge translation relate to critical realism as a philosophy of science. I then focus on reflexivity outlining how I as a researcher am positioned in the current study. The intervention design process, protocol, and approach to data analysis are then described. The chapter ends with a summary of participant characteristics and the ethical and cultural considerations relating to this study.

The analysis of the findings of the primary study are presented in Chapter 4. The findings are divided into four themes: *Caring Connection; Safety and Security; Reflections on Recovery; and Limitations*. Each theme contains multiple sub-themes. The themes are presented with supporting data extracts and interpretive analysis.

The secondary study is introduced in Chapter 5 with a brief review of literature related to research, innovation, and implementation conducted in crisis mental health settings. The methods section outlines the procedure for data collection and the approach to the content analysis. The results are then presented as summaries of topic areas discussed in the interviews and are followed by a discussion of the implications for CC via text message implementation.

Chapter 6 begins by reviewing how the four themes of the primary study relate to existing research and is followed by a discussion of how the findings relate to possible mechanisms of action for CC interventions. This discussion then informs the implementation considerations from both studies. Chapter 7 summarises the main findings and conclusions from both studies.

Chapter 2: Literature review

This chapter reviews the literature of the relevant domains for the current research on CC. The review begins by introducing the overarching frameworks of knowledge translation and consumer participation that have informed the current research. This introduction is followed by a discussion of how these frameworks may apply to suicidal behaviour as a global health problem and CC as an intervention. As there is growing interest in being able to deliver CC through digital modes of communication, this chapter includes discussion on what is known about mobile health interventions for other forms of behaviour change. Together this review will provide context and understanding for the aims of the current research.

2.1 KNOWLEDGE TRANSLATION AND IMPLEMENTATION SCIENCE

This section will introduce knowledge translation and implementation science. I will begin with a brief discussion of the factors that have led to and influenced the development of knowledge translation as a discipline. This is followed by a discussion of models of knowledge translation. The section will then conclude with a summation of how these models have been applied to the current research.

2.1.1 What is knowledge translation and why is it important?

Research can be a valuable tool for developing and testing novel interventions for a variety of health and social issues. However, as little as 20% of research into new interventions results in sustained changes in clinical practice (Kemp, 2019). When research does impact routine health care, there is a time lag up to 17 years between scientific discovery and associated changes in clinical health care practice (Morris et al., 2011). As a result, there is a gap between what is known to be beneficial, and the treatment options that people receive, referred to as the knowledge to practice gap. Additionally, issues such as "drift" can negatively impact the implementation of interventions (Bopp et al., 2013). Aarons, Green, et al. (2012) define drift as "a misapplication or mistaken application of the model, often involving either technical error, abandonment of core and requisite components, or introduction of counterproductive elements" (p. 2). In an evaluation of almost 400 "real world" delivery of corrections programmes, approximately 70% failed to meet fidelity requirements (Goggin & Gendreau, 2006). The need to strike a balance between fidelity and adapting and customising the intervention for the service setting can raise the question of "where are the bounds of flexibility before effectiveness is compromised?" (Proctor et al., 2009, p. 5).

There is a growing field of science known as knowledge translation aiming to address and develop strategies to reduce the knowledge to practice gap (Proctor et al., 2011; Straus et al., 2013). Knowledge translation has been defined as "a dynamic and interactive process that includes the synthesis, dissemination, exchange and ethically sound application of knowledge to improve health, provide more efficient health services and products and strengthen the healthcare system" (Straus et al., 2013, p.4). It is a non-linear process of initially "translating" scientific discoveries into clinical interventions, then embedding interventions into real world clinical settings in a way that maintains their efficacy through active implementation efforts (Kemp, 2019). This process is different from the passive diffusion and dissemination of information. Diffusion and dissemination are considered to be efforts to spread information related to new interventions, however, information about evidence-based practices is unlikely to lead to their successful adoption (Proctor et al., 2009). In contrast, implementation involves active processes to ensure an adequate fit between the intervention and service settings. Knowledge translation requires a shift away from unidirectional diffusion of knowledge from academic institutes and a move towards a "reciprocal, interactive fusing of science and practice" (Proctor et al., 2009, p.10). Specifically, this shift requires a triangulation of the knowledge and perspectives of service users, service providers and researchers (Proctor et al., 2009).

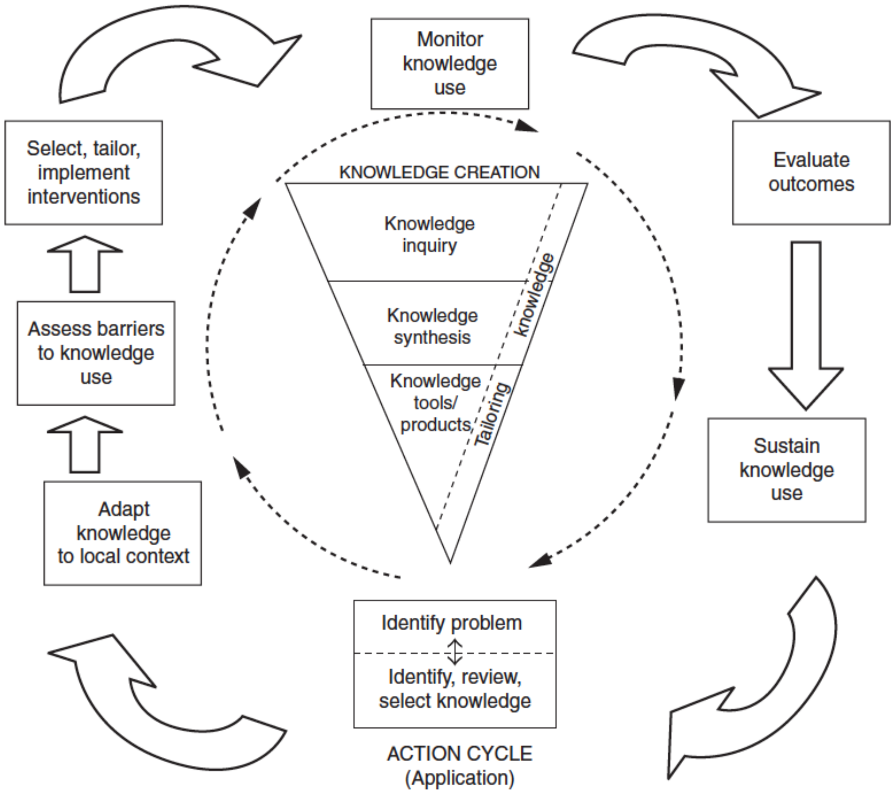
Increasingly, research funders are requiring researchers to include plans to ensure their findings are effectively utilised. Without knowledge translation, decision makers at every level fail to use research findings to guide action (Straus et al., 2013). Public research funding is arguably wasted if the public is not reaping the benefits of the research findings (Proctor et al., 2009). In the USA, the National Institute of Mental Health has identified increasing successful implementation of interventions in a broad range of communities as a priority, additionally the National Institute of Health has invested in Clinical and Translational Science Awards to incentivise implementation considerations (Liverman et al., 2013; Proctor et al., 2009). In Australia, assessments of university research are now including an evaluation of the non-academic impact and engagement of research (Gunn & Mintrom, 2018). In New Zealand, social science advisors have stated in their submission to the Mental Health Inquiry that any mental health reform and quality improvement efforts should be informed by implementation science processes (Potter et al., 2018).

2.1.2 Models of knowledge translation

There are a number of models to guide and inform translation research and processes (Kemp, 2019; Straus et al., 2009). Graham et al. (2006) have synthesised planned action theories to develop the knowledge-to-action cycle as a conceptual framework of knowledge translation (Figure 1). This model incorporates two iterative and dynamic processes of knowledge creation and knowledge application through the action cycle. Knowledge creation is defined as three stages of knowledge distillation: knowledge inquiry (primary research such as Randomised Controlled Trials (RCT)), synthesis (systematic literature reviews or meta-analysis) and knowledge products / tools (practice guidelines). The action cycle includes seven phases including problem identification and intervention selection, adapting to the setting, recognising possible barriers, implementation, monitoring, and evaluation.

Figure 1

The Knowledge to Action Framework



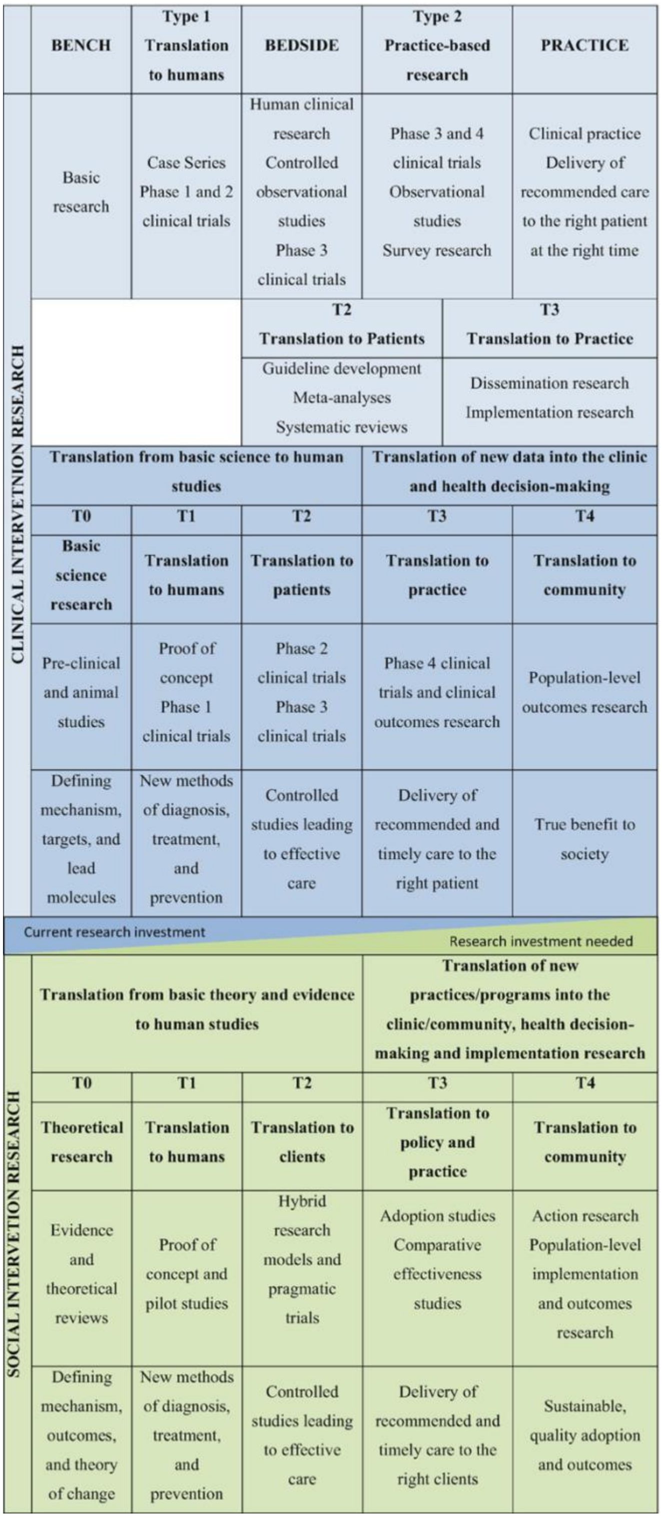
Note. Figure reproduced from "Lost in knowledge translation: time for a map?" by I. D. Graham, J. Logan, M. B. Harrison, S. E. Straus, J. Tetroe, W. Caswell, & N. Robinson, 2006, *Journal of Continuing Education in the Health Professions, 26*(1), p. 19. Copy right 2006 Wolters Kluwer Health, Inc. Figure reproduced with permission of the rights holder.

The knowledge-to-action cycle provides an overarching framework, whereas models, such as the continuum of translation research, specify the types of research and research questions to be answered at each phase (Graham et al., 2006; Liverman et al., 2013). The translation research continuum was developed out of the evidence-based medicine movement, but as is illustrated in Figure 2, it has been more recently applied to social science research as well. The continuum identifies five research phases with T0 – T2 being phases in research translation, and T3 – T4 being research implementation. T0 is theoretical research to identify possible intervention mechanisms and develop an explicit and testable theory of change. Connell and Kubisch (1998) state a theory of change approach requires consensus from all stakeholders on three components; the necessary steps of the intervention, the relevant contextual factors, and the desired outcomes. T1 phase research involves translating the theory of change into an intervention as well as analysing contextual factors that may impact on the real-world efficacy of the intervention, such as possible participant factors, logistics, and infrastructure. T2 research is the translation to clients and may involve comparison trials to ensure that the interventions provided are effective. In the first implementation phase, T3, involves action taken to support decision-makers, such as policy developers, practitioners and health consumers, to identify and adopt effective interventions. The final phase, T4, involves the translation to the community and utilises both business or quality improvement and fidelity research methods to ensure sustainable adoption (Kemp, 2019).

While the continuum model provides a helpful clear description of research goals to move from translation to implementation, a limitation is that it can promote the idea that these steps occur in a linear fashion. Kemp (2019) emphasizes that these steps must be carried out in a reflexive dynamic way, with findings from later phases being integrated to inform earlier phases of research. Proctor et al. (2009) highlight that unidirectional "pipeline" models of translation do not account for implementation until the final step and therefore often fail to account for organisational and practice contexts.

Figure 2

Continuum of Translation Research



	BENCH	Type 1 Translation to humans	BEDSIDE	Type 2 Practice-based research	PRACTICE
CLINICAL INTERVETNION RESEARCH	Basic research	Case Series Phase 1 and 2 clinical trials	Human clinical research Controlled observational studies Phase 3 clinical trials	Phase 3 and 4 clinical trials Observational studies Survey research	Clinical practice Delivery of recommended care to the right patient at the right time
			T2 Translation to Patients	T3 Translation to Practice	
			Guideline development Meta-analyses Systematic reviews	Dissemination research Implementation research	
	Translation from basic science to human studies			Translation of new data into the clinic and health decision-making	
	T0	T1	T2	T3	T4
	Basic science research	Translation to humans	Translation to patients	Translation to practice	Translation to community
	Pre-clinical and animal studies	Proof of concept Phase 1 clinical trials	Phase 2 clinical trials Phase 3 clinical trials	Phase 4 clinical trials and clinical outcomes research	Population-level outcomes research
	Defining mechanism, targets, and lead molecules	New methods of diagnosis, treatment, and prevention	Controlled studies leading to effective care	Delivery of recommended and timely care to the right patient	True benefit to society
Current research investment					Research investment needed
SOCIAL INTERVETION RESEARCH	Translation from basic theory and evidence to human studies			Translation of new practices/programs into the clinic/community, health decision-making and implementation research	
	T0	T1	T2	T3	T4
	Theoretical research	Translation to humans	Translation to clients	Translation to policy and practice	Translation to community
	Evidence and theoretical reviews	Proof of concept and pilot studies	Hybrid research models and pragmatic trials	Adoption studies Comparative effectiveness studies	Action research Population-level implementation and outcomes research
	Defining mechanism, outcomes, and theory of change	New methods of diagnosis, treatment, and prevention	Controlled studies leading to effective care	Delivery of recommended and timely care to the right clients	Sustainable, quality adoption and outcomes

Note. From *Translational Research: Bridging the Chasm Between New Knowledge and Useful Knowledge* (p. 371) by L. A. Kemp, 2019, Springer Singapore. Copy right 2019 by Springer Nature. Figure reproduced with permission of the rights holder.

A suggested alternative to “pipeline” models is multi-level models of implementation. In their model of implementation, Chaudoir et al. (2013) proposed that factors that predict successful implementation can be categorised hierarchically into structural or community level, organisational level, provider level, consumer level, and innovation level factors. Structural factors are defined as features of the wider physical, political, social, or economic climate such as topographical organisation of existing infrastructure or the political will to address the problem. Organisational factors relate to features of the organisation implementing the innovation, such as effectiveness of leadership, innovation climate, and staff morale. Provider factors can include individual attitudes towards evidence-based practices. Patient-level factors can include motivation and health literacy. Finally, the innovation level includes factors such as the relative advantages of the innovation compared with existing practices. Factors at each level can then impact implementation outcomes including acceptability, adoption, fidelity, implementation cost, penetration, and sustainability (Chaudoir et al., 2013; Proctor et al., 2011).

2.1.3 Applying models of knowledge translation to improve research outcomes

Across models, Kemp (2019) identifies critical elements for successful translation are attention to external validity, an understanding of whether the intervention is effective and why it is effective, through collaboration and community engagement. In regard to external validity, consideration needs to be given to the study context and whether participants are representative of the intended end-users of the intervention. Additionally, consideration must be given to how replicable the intervention protocol would be in the community. Kemp highlights that why or how an intervention works is rarely addressed, and that when expected mechanisms are published, these often fail to include end-users’ understandings of what worked about the intervention. As a result, community service providers cannot be informed of what processes are supposed to be occurring for successful outcomes. Kemp states that this neglected T0 research phase should be better documented to improve T3 and T4 translation by directly addressing the questions: "What the benefit of the intervention is, from both the provider and recipient perspectives; why and how the benefit was realised; and for whom" (p. 384). To be able to successfully address these questions requires engagement with all relevant stakeholders. Such engagement will help address knowledge translation and implementation gaps at the level of the innovation.

In regard to provider-level factors, qualitative research on the perceptions of those who adopt new evidence-based practices (EBP) reveals that there are two themes that can influence implementation: the adopter's attitudes and assessments of the new practice, and the adopter's experiences of learning and delivering the practice (Aarons & Palinkas, 2007). The authors of this research concluded that it is important to have suitable fit between the innovation, and the approach and values of the adopter, at both individual provider and organisational levels. Provider attitudes towards EBPs can be influenced by the intuitive appeal of the innovation, the presence of, and attitudes towards, organizational requirements, openness to change, and perceived difference between the current and new practices (Aarons, 2004). Implementation considerations at the level of the individual provider should take into consideration provider attitudes to the innovation as well as similarities and differences to their current practice.

Regarding organisational level factors, the culture and climate of an organisation can impact implementation (Aarons, Glisson, et al., 2012; Aarons & Sommerfeld, 2012; Aarons et al., 2009; Glisson, 2002; Kontos & Poland, 2009). Climate is defined as the ways individuals in the organisation perceive the work environment to be impacting on their subjective well-being, whereas culture refers to the shared common assumptions, values, and beliefs that inform the way work is done and prioritised in an organisation (Glisson, 2002; Kontos & Poland, 2009). Assessments of workplace culture focus on uniform behavioural expectations and beliefs within a team (Glisson, 2002). Organisations that have an innovation or learning culture tend to value and assimilate new knowledge, incorporate new knowledge into decision making, have decentralized decision making, and shared team goals for service improvement (Berta et al., 2005).

The current research aimed to address knowledge translation gaps at the level of the innovation, as well as possible provider and organisational levels for CC. What is currently known about the efficacy of CC interventions and the gaps in the translation process for this intervention will be discussed in the CC section of this chapter.

2.2 CONSUMER PERSPECTIVES

Service user involvement is critical to successful implementation of new interventions. This section will discuss the history of service user involvement in research, the service user/ recovery movements, and the arguments for the need for greater service user involvement at every stage of innovation.

2.2.1 History of service user participation

Historically, the perspectives of mental health service users (also described as consumers) have not been valued in research. The disregard of consumer perspectives was partially due to paternalistic “profession knows best” perspectives and attitudes (Phillips, 2006). In their exploration of New Zealand service users’ narratives of mental illness and recovery, Lapsley et al. (2002) discuss how, traditionally, the stigmatisation of mental illness and associated Western deficit-focused narratives of mental health service users being unreasonable, unreliable, and incapable, have resulted in service users being denied a voice in mental health literature. Lapsley et al. (2002) point out that these attitudes have sat alongside a growing power divide between medical or helping professionals and service users, resulting in service users also being denied a voice in treatments for physical and mental illness.

Phillips (2006) highlights that this denial of voice is equally true of research participation and partnership as it is of treatment participation.

These views began to shift as the consumer and recovery movements grew (O'Hagan et al., 2012). These movements arose after the deinstitutionalisation of mental healthcare and followed “nothing about us without us” principles of the disabled persons movement (O'Hagan et al., 2012; Phillips, 2006). The valuing of service users’ voices and perspectives was acknowledged in Blueprint for Mental Health Services in New Zealand (Mental Health Commission, 1998), which identified a need for a health system that values people with mental illness by increasing opportunities for service users to participate in all levels of policy development, funding, and service provision. This policy marked a shift in recognising the unique knowledge of those with lived experience of mental illness in New Zealand and how this knowledge could be used to lead to better service outcomes.

2.2.2 Rationale for service user participation

There are many reasons why service users should participate in service development (Gordon, 2005). In a New Zealand mental health setting, four reasons for consumer participation have been identified as: Participation in decisions that affect service users are part of their citizenship rights; participation allows service users to take an active role, which is considered critical for recovery; service users have rights to make choices and service providers should be responsive to their needs; and, finally, service user participation leads to improved services (Mental Health Commission, 2002). Therefore, the rationale for service user participation is based both on service user rights and improving outcomes.

In regard to service user rights as rationale for participation, this can be seen in government policy and strategy. Since the 1990s, national mental health strategy and policy documents have stated requirements for service users to be involved in service developments (Coney, 2004; Gordon, 2005; Phillips, 2006). However, Coney (2004) highlights that relative to the UK and Australia, New Zealand has had a less clearly defined strategic framework for service user participation leading to relatively poor application. He Ara Oranga, the national mental health enquiry, drew attention to examples of co-design with service users, and emphasized how the persistent lack of structure and support for service user involvement has led to variability in engagement across District Health Boards (DHB) (Patterson et al., 2018).

The evidence that service users' participation in service development leads to improved outcomes is mixed. In a systematic review of effective consumer participation in healthcare services, Coney (2004) highlighted that consumer participation programmes were at times evaluated in non-supportive environments. Examples cited included a Quebec community health organisation failing to meet its targets due to local doctors boycotting the service and attempts to have consumer voices heard on an Illinois health board being thwarted by well-organised and resourced professional interests. The undermining of these programmes led to several studies finding consumer input did not improve outcomes for health services. When service users were involved in genuine partnership from early stages in projects (for example by being part of setting the research agenda), Coney found that there was evidence from Australia and the UK for consumer participation leading to better outcomes particularly for mental health services. Coney concludes that service user participation can lead to improved outcomes, however it requires genuine sharing of power.

2.2.3 Ethical considerations of service user participation

Mental health service users' participation in research requires sound ethical considerations. Phillips (2006) highlighted that research should be conducted in a way where participants can benefit from their participation. He argued that by providing a platform for service users' voices to be heard, research can help empower service users in their recovery and help reduce stigma towards those living with mental illness. However, he contrasted the opportunity for empowerment with issues of subjugation of knowledge. When researchers place their own interpretive lens over the issues and concerns raised by service users, subtleties of meaning may be lost or recontextualised. Therefore, researchers must be mindful to not perpetuate the marginalisation of service users' voices.

Service user participation in research is critical for successful knowledge translation. Service users also have rights to participate in the design of services at every level and participation can lead to improved service outcomes (Coney, 2004). Therefore, in the design and implementation of new interventions, service users should have the opportunity to have their voices heard in the academic literature and to shape the implementation trajectory. In section 2.6, the literature related to service users' input into the development of CC interventions will be reviewed.

2.3 SUICIDAL BEHAVIOUR AS A GLOBAL HEALTH PROBLEM

A critical step in the knowledge translation process is identifying a problem (Graham et al., 2006). This section will outline suicidal behaviour as a significant global health concern.

2.3.1 Definitions and prevalence of suicidal behaviour

'Suicide-related behaviours' is an umbrella term that encompasses a wide range of possible thoughts, communications and behaviours that can result in a number of different outcomes (Silverman et al., 2007). All definitions of suicide-related behaviour in some way relate to a person's intent to die (Goodfellow et al., 2020). This definition allows for distinctions from self-injurious thoughts or actions that reflect no intent to die, such as self-harm with the intent to regulate or express affect. The Columbia Classification Algorithm of Suicide assessment defines classifications of suicidal and non-suicidal events (Posner et al., 2007). A completed suicide is defined as "A self-injurious behaviour that resulted in fatality and was associated with at least some intent to die as a result of the act" (Posner et al., 2007).

Suicide is distinguished from a suicide attempt by the outcome of the behaviour, in that a suicide attempt is not lethal and may or may not result in physical harm or injury. Suicidal ideation is classified as thoughts of wanting to die (passive ideation), that may or may not include planning (active ideation). While it is useful to be able to distinguish suicidal from non-suicidal behaviour, intent can be difficult to operationally define and determine (Goodfellow et al., 2020). Systems for classifying suicidal behaviour manage these challenges of determining intent by including categories of self-injury with unclear intent or amalgamate suicidal and non-suicidal self-injury (Goodfellow et al., 2020).

Globally, over 700,000 people die by suicide each year (WHO, 2021). In 2019, one in every 100 deaths was a result of suicide and suicide is the fifth leading cause of death of young people (WHO, 2021). As a result, the WHO has recognised suicide prevention as a public health priority (WHO, 2014). The WHO and the UN have set targets of reducing the global suicide mortality rate by one third by 2030 (WHO, 2021). Global age-standardised suicide rates are declining, but not at a fast enough rate to meet this target (WHO, 2021). These declines are also not impacting all populations evenly. A greater rate of decline was seen in women compared to men, and countries including USA, Mexico, Brazil, and Australia have seen increases in the age-standardised suicide rate (Alicandro et al., 2019; Naghavi, 2019; WHO, 2021).

In New Zealand, the age-standardised suicide rate has remained relatively stable for the 10- year period from 2009 to 2018 (Office of the Chief Coroner & Ministry of Health, 2021). However, the age-standardised suspected suicide rate for 2019 was 12.9 per 100,000 people, which is higher than the global rate of 9.0 for the same year (Office of the Chief Coroner & Ministry of Health, 2021; WHO, 2021).

Similar to global trends, these national trends do not impact all populations evenly. Health inequities related to the enduring impacts of racism and colonisation are evident in the suicide rates among Māori being twice as high as the rates for non-Māori (Ministry of Health, 2019b; Paradies, 2016). New Zealand's youth suicide rates have also remained persistently high. Suicide is the leading cause of death for people under the age of 25 in New Zealand (Child and Youth Mortality Review Committee, 2019). New Zealand youth suicide rates are among the highest in OECD countries (UNICEF Office of Research, 2017).

2.3.2 Suicide prevention

While global trends of declining suicide rates are hopeful, these figures highlight the need for greater efforts and commitments to further reduce the rates of death by suicide. There is international political will to address this need, as is reflected in the UN setting specific targets to reduce suicide rates by one third by 2030 (WHO, 2021). Nationally, a Suicide Prevention Office has been established in response to recommendations from the He Ara Oranga Mental Health Inquiry (Patterson et al., 2018), with the aims of providing leadership, coordination, and supporting the implementation of prevention and intervention programmes (Ministry of Health, 2020). There are currently no national targets or timeframes for reducing suicide (despite recommendations by the Mental Health Commission), however, the national Suicide Prevention Strategy describes having a long-term ambitious vision of a future without suicide (Ministry of Health, 2019a, 2020). Consistent with the literature on consumer perspectives, the prevention strategy states the need to amplify the voices of those with lived experience of suicidal distress in order to achieve this vision (Ministry of Health, 2019a).

Suicide prevention programmes or plans can be universal (reaching the entire population), selective (targeted at specific at-risk populations), or indicated (targeting at-risk individuals) (WHO, 2014). A review of New Zealand suicide research found that the majority of study publications were epidemiological studies, and there was a relative lack of intervention and evaluation studies (Coppersmith et al., 2018). Additionally, where there were intervention studies, these were universal and selective interventions rather than indicated. A meta-analysis of international RCTs for interventions that may have a preventative effect on suicidal or self-injury behaviour found that there has been an increase in the number of interventions published over the last five decades and that all interventions had similarly small effect sizes (Fox et al., 2020). The authors argue that the lack of improvement in intervention efficacy is due to interventions not targeting causes of suicidal or self-injury behaviour.

From service user's perspectives, suicide prevention interventions are often experienced as discriminatory, culturally inappropriate and not aligned with the person's needs or values (Fitzpatrick & River, 2018). In a review of suicide prevention interventions published between 2010 and 2019, Watling et al. (2022) found only 11 studies that incorporated perspectives of people with lived experience of suicide into the intervention design. Additionally, the authors highlight that where lived experience was included, there was limited detail of how to incorporate these findings into intervention implementation. Given this, in order to develop more effective suicide prevention interventions, service users' perspectives and experiences need to be better incorporated into intervention development and implementation.

There are several methodological and ethical challenges in quantitatively evaluating suicide prevention programmes. Challenges include suicide being a relatively low base rate event requiring large sample sizes to detect statistically significant reductions, and individuals at high risk of suicide often being excluded from research (O'Connor & Portzky, 2018). Hjelmeland and Knizek, (2010) argue that this pattern of low yield research outcomes is a result of an almost exclusive focus on explaining suicidal behaviour through quantitative methodologies. As a result, there is a growing demand for more qualitative and translation research in the field of suicidology that focuses on understanding suicidal behaviour

(O’Connor & Portzky, 2018; White, 2017). Specifically, there is a need for greater translation between theories of suicidal behaviour, the insights of people with lived experience, and suicide prevention interventions. In order to consider how suicide prevention efforts can be improved, we need to consider theories of suicidal behaviour, who to target with interventions, and those individuals’ perspectives on possible supports.

2.4 THE INTERPERSONAL PSYCHOLOGICAL THEORY OF SUICIDE

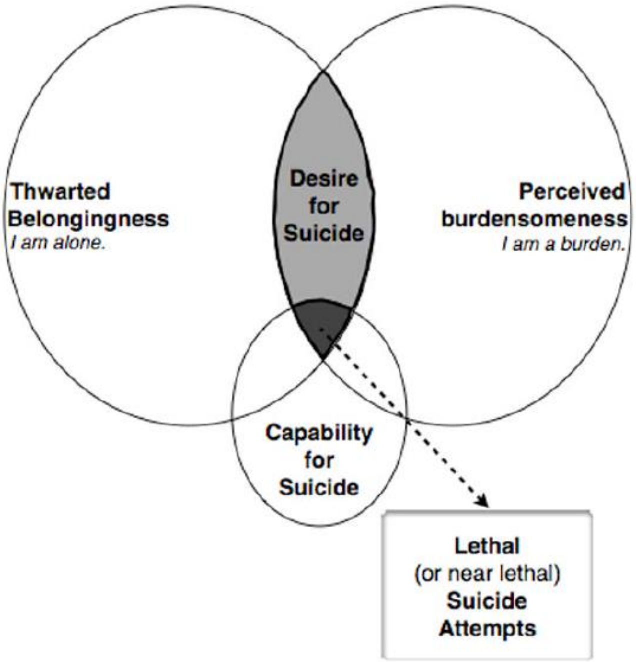
A dominant theory that aims to explain suicidal ideation and behaviour with high intent to die is the Interpersonal Psychological Theory of Suicide (IPTS) (Joiner, 2005; Van Orden et al., 2010). IPTS is one of many theories of suicidal behaviour. A meta-analysis by Schafer et al. (2021) has compared the predictive ability of different types of theories of suicidal behaviour. Ideation-to-action theories of suicidal behaviour such as IPTS outperform biological, biosocial and hopelessness theories of suicide in accurately predicting suicidal thoughts and behaviours. Given the relative strength of IPTS to predict suicidal thoughts and behaviours as well as the theories’ ability to be translated into intervention targets, this review will focus exclusively on IPTS. This section will outline the stipulations and developments of IPTS. A review of the empirical evidence testing the theory’s hypotheses will follow. The section will conclude with comments on the strengths and limitations of the theory to inform possible interventions.

2.4.1 The constructs of the IPTS

The IPTS posits that the desire to die, or the motivational component of suicidal behaviour, is related to psychological constructs of perceived burdensomeness and thwarted belonging. That is, beliefs that one’s existence causes a burden to others, and the belief that one is alienated from others. The predictions of IPTS are that when both beliefs are present, a person may experience suicidal ideation (Van Orden et al., 2010).

Figure 3.

Assumptions of the Interpersonal Theory of Suicide



Note. From "The Interpersonal Theory of Suicide," by K. A. Van Orden, T. K. Witte, K. C. Cukrowicz, S. R. Braithwaite, E. A. Selby, & T. E. Joiner Jr, 2010, *Psychological Review*, 117(2), p.42. Copy right 2010 by American Psychological Association. Figure reproduced with permission of the rights holder.

For ideation to translate to suicidal behaviour, IPTS states that a person needs an acquired capability to engage in serious self-injurious behaviour (Joiner, 2005). Joiner and Silva (2012) highlight that suicidal ideation is relatively common in both clinical populations and the general population, whereas suicide deaths and high lethality suicide attempts are relatively infrequent. IPTS suggests that in order to make a high lethality suicide attempt a person must overcome their self-preservation instinct. There are a wide number of biological, psychological, social and cultural factors associated with an increased risk of suicide. Joiner and Silva (2012) suggest that each of these factors increase risk because of the way they contribute to either thwarted belonging, perceived burdensomeness, or acquired capacity.

2.4.2 Defining thwarted belonging, perceived burdensomeness and acquired capacity

Further development of the theory has led to further definition and deconstruction of these three factors. In regard to thwarted belongingness, Van Orden et al. (2010) have specified that belongingness exists along a spectrum and relates to constructs of loneliness and absence of reciprocal caring relationships. Van Orden and colleagues define loneliness as "an affectively loaded cognition that one has too few social connections, for example, 'I did not have a satisfying social interaction today' or 'I feel disconnected from other people'" (p. 10). Reciprocal caring relationships are defined as feeling cared for by another as well as being able to demonstrate care for them in return. It is stated that relationships need to be experienced as positive and supportive in order to meet the interpersonal need for belonging and if they are not experienced as positive and supportive, the relationship is not considered to be a reciprocal caring relationship. When loneliness and an absence of reciprocal caring relationships are experienced, it is suggested the result will be experiences of thwarted belonging. As these constructs relate to both interpersonal and intrapersonal factors, the theory states that experience of belonging will fluctuate over time and is not a stable trait.

Perceived burdensomeness has been expanded to include the constructs of liability and self-hate (Van Orden et al., 2010). These are defined as beliefs that one is personally flawed to an extent that one is a liability to others, and the presence of affectively laden cognitions of self-hatred, respectively. Similar to thwarted belonging, perceived burdensomeness is proposed to exist along a spectrum and reflect a dynamic cognitive affective state.

The theory has also been expanded to include mechanisms that contribute to acquired capability (Van Orden et al., 2010). Van Orden and colleagues suggest that repeated exposure to painful and/or fearful stimuli leads to habituation. In turn, habituation can lead to 1) a lowered fear of death and 2) an increased tolerance for pain. IPTS suggests habituation is the process by which people may acquire a capacity for suicide.

2.4.3 The hypotheses outlined by the IPTS

IPTS generates four hypotheses related to the continuum of suicidal behaviour (Van Orden et al., 2010). The first is that complete perceived burdensomeness alone, or complete thwarted belonging alone, will result in passive suicidal ideation (i.e., a desire to die but without intent “I would be better off dead”). The second is that if both perceived burdensomeness and thwarted belonging are present and these states are attributed as being stable across time (i.e., a sense of hopelessness about changing one’s interpersonal connections), the result will be suicidal desire, or active suicidal ideation. The third hypothesis is that if all relevant constructs are present for a person to experience suicidal desire, and the person has a lowered fear of death (the first component of acquired capability), this combination will result in suicidal intent with the development of preparation and plans for suicide. The final hypothesis is that if a person is experiencing perceived burdensomeness and thwarted belonging, and if they have a lowered fear of death as well as an increased pain tolerance, this combination will result in a lethal or near lethal suicide attempt.

2.4.4 The evidence for the IPTS

These hypotheses have been tested with mixed outcomes. Ma et al. (2016) conducted a systematic review of 66 studies published between 2005 and 2015 that evaluated the constructs of IPTS. There was strong support for perceived burdensomeness as a predictor of suicidal ideation with a significant effect being reported in 86% of studies across a variety of settings including schools, hospitals, mental health clinics and primary care. Perceived burdensomeness was also reported to consistently account for a larger amount of variation in suicidal ideation compared to thwarted belonging. Thwarted belonging was less frequently assessed than perceived burdensomeness and was only found to significantly predict suicidal ideation in 40% of studies where it was assessed. The authors reported that the effects of acquired capability and the predictions of interactive effects between constructs were not frequently tested and when they were, studies were underpowered with small sample sizes.

In a meta-analysis, Chu et al. (2017) analysed published and unpublished data on the effect sizes of the IPTS constructs in relation to suicidal ideation, attempt history, and suicide risk. The authors found from 130 articles spanning 59,698 participants, higher levels of both thwarted belonging and perceived burdensomeness were associated with greater suicide risk, more severe suicidal ideation, and suicide attempt histories. Acquired capability was significantly associated with suicide attempts but the effect size was weak. Interactions between thwarted belonging and perceived burdensomeness were significantly associated with higher levels of suicidal ideation and the interaction between thwarted belonging, perceived burdensomeness and acquired capability were associated with a greater number of suicide attempts. However, both interactions had weak effect sizes. The authors concluded that the findings generally support the theory but that weak effect sizes might limit the clinical utility of IPTS as a way of understanding and assessing suicide risk.

A more recent study examined the ability of the IPTS constructs to predict further suicide attempts among a cohort of psychiatric service users who were admitted to hospital due to severe suicidal ideation or suicide attempt (Forkmann et al., 2020). Over a 12-month period, perceived burdensomeness significantly predicted future suicide attempts and had moderate performance in screening for future suicide attempts. However, there was no significant interaction effect between constructs.

Together these findings are consistent with criticisms that the IPTS may oversimplify the multiple and complex factors that contribute to suicidal behaviour (Gunn, 2014). Specifically, Gunn (2014) highlights that the IPTS is bold in its attempts to explain all suicidal behaviour across cultures and age groups, when it has been long acknowledged that suicide is a complex behaviour. While there may be limitations in the IPTS's ability to predict all suicidal behaviours, results discussed above show it is generally supported and does hold value in understanding suicidal behaviour. Gunn (2014) also discusses the simplicity of the IPTS as a strength in its ability to identify and inform possible interventions.

In conclusion, the IPTS is a theory of suicidal behaviour. While there may be mixed findings around the specific hypotheses outlined in the theory, it identifies and defines three clear constructs that the research reviewed above suggest are associated with suicidal thoughts and behaviours. Therefore, the IPTS is a valuable theory in understanding suicidal behaviour and for developing possible interventions.

2.5 WHO IS AT RISK AND WHERE DO THEY SEEK HELP

By considering both the constructs of the IPTS and data on risk factors associated with suicidal behaviour, attention can be given to individuals who may be at risk and should be targeted for intervention. A significant risk factor for death by suicide is a history of suicidal thoughts or behaviours (Franklin et al., 2017). Specifically, there is a high rate of suicide deaths in the year following a non-fatal suicide attempt (Demesmaeker et al., 2021). There are also high rates of repeated non-fatal suicide attempts requiring hospitalisation (Gibb et al., 2005). Van Orden et al., (2010) suggest that repeated suicide attempts and other known risk factors such as childhood maltreatment, combat exposure, and exposure to deaths by suicide lead to habituation to fear and pain responses, resulting in an increased capacity for suicide.

Given this trend, it is unsurprising that a UK study found that 39% of people who had died by suicide had presented to the emergency department (ED) in the year prior (Gairin et al., 2003). In New Zealand, people are advised to present to the ED if they are feeling unsafe due to thoughts of suicide (Ministry of Health, 2017). People who present to the ED for physical health concerns can also have risk of suicide that remains largely undetected (Claassen & Larkin, 2005) and have been observed to return to the ED due to self-harm within a short time frame of their index visit (Crandall et al., 2006; Kuehl et al., 2021). For these reasons, it has been suggested that EDs are a good site for implementing suicide prevention initiatives and interventions (Larkin & Beautrais, 2010).

2.6 CC AS AN INTERVENTION

CC is a type of Brief Contact Intervention (BCI) that has shown promise as a suicide prevention initiative (Milner et al., 2015). In this section, the history and initial development of CC will be discussed.

2.6.1 The history of CC

The idea of reaching out to people who may be at risk of suicide to provide them with caring communication has been around since 1969 (Motto, 1976). The preliminary work in the area was conducted by Motto and colleagues. Motto's approach was inspired by his personal life experiences during World War II, where he consistently received letters from a woman he had met briefly before being deployed (Cherkis, 2018). Unlike letters from his family, Motto experienced no expectation to reply, as her letters kept on coming whether he replied or not. Cherkis (2018) reports that this experience led Motto to speculate that the positive effect of the caring and consistent letters he received may also have a positive effect for people struggling with thoughts of suicide. Specifically, he hypothesised that contact, which is instigated by a concerned individual, which communicates care and concern for the person at risk (while asking nothing of them in return) would have a preventative effect on suicidal behaviour (Motto, 1976). Additionally, he stipulated that the contact needed to be consistent and extended over a long period of time.

Motto tested his hypotheses in one of only two RCTs that have shown to prevent death by suicide to date (Comtois et al., 2019; Motto, 1976; Motto & Bostrom, 2001). Three thousand and five people from nine inpatient psychiatric facilities in San Francisco who had been admitted due to suicidal or depressive episodes were recruited for the study (Motto, 1976). Each participant underwent a comprehensive psychosocial interview with a member of the research team. Thirty days after each participant had been discharged from the hospital, follow-up contact was made by the research team to determine whether the person was receiving therapeutic support from a psychiatrist, psychologist, social worker or pastoral counsellor. Participants who were not engaged in therapy were then randomly assigned to receive regular contact through letters, or to receive no contact. This procedure resulted in 1,939 participants who were in formal treatment, 389 participants who were in the contact condition, and 454 participants in the no contact condition. Two hundred and twenty-three participants either died or could not be contacted within the first 30 days.

The letters sent to participants were worded to let the recipient know the research team was aware of their situation and thought of them kindly (Motto, 1976). Self-addressed envelopes were included so the person could respond if they wished. Each letter was worded differently and would include responses to any comments the participants made in any reply letters. The letters were sent from the member of the research team who had conducted the interview with that participant. These letters were sent monthly for four months, then every second month for eight months, then every three months for four years totalling to 24 letters over 5 years. As participants changed address, the number of letters known to be received varied from two letters to the full 24 letters. Of those receiving the letters, only 11 participants asked for them to be discontinued. All participants who received any contact remained incorporated in the contact group for analysis.

The primary outcome for the study was suicide deaths (Motto, 1976). This data was collected through the state department of health, coroners' records, death certificates, and from family, friends or clinicians of the individual. The percentage of suicide deaths was lowest in the contact group, then followed by the no contact group, and was highest in the treatment group for the five years of the study. Formal survival analysis showed the difference was only significant during the first two years. A follow up study found that the suicide rates remained lower in the contact group compared to the no contact and treatment groups until 14 years after discharge when the rates converged (Motto & Bostrom, 2001). However, these differences were only significant during the first two years when the letters were sent most frequently. These findings provided strong initial evidence for the suicide preventative effect of CC.

2.6.2 Landmark studies of CC

Since the original Motto (1976) work, several studies have attempted to repeat and build on these findings. Notable RCTs of CC by postcard have been carried out in Australia (Carter et al., 2005) and Iran (Hassanian-Moghaddam et al., 2011). Both studies sent postcards to patients admitted to hospital due to deliberate self-poisoning monthly for four months post discharge, and then every second month over a 1-year period. Both studies found at 12-month follow up that there had been fewer repeated suicide attempts per participant in the contact group compared to the control group. In the Australian study, the number of repeat episodes in the contact group was nearly half that of the control group. One point of difference in the findings of these two studies was that in the Iranian study, Hassanian-Moghaddam et al. (2011) observed a significant difference between the contact and no contact groups in the number of participants who reported any repeated suicide attempt, while Carter and colleagues (2005) found no difference between groups. Additionally, Hassanian-Moghaddam et al. (2011) found lower reporting of any suicidal ideation during the study period for the contact group compared to the no contact group. The Australian study by Carter and colleagues did not look at suicidal ideation. A follow up of the Australian study found that even five years after discharge (four years after receiving the last intervention contact), participants in the contact group had significantly lower rates of psychiatric hospital admissions (Carter et al., 2013). Both the Australian and Iranian studies provide support for Motto's hypothesis that this kind of contact can have a preventative effect on suicidal behaviour.

While the studies were intended to be very similar, the small differences in findings may relate to small differences in design. For instance, the Australian study sample size was much smaller than the Iranian study (772 and 2113 participants respectively) (Carter et al., 2005; Hassanian-Moghaddam et al., 2011). As a result, Carter and colleagues' sample may have been underpowered to detect differences in the number of participants who had a repeat episode. Additionally, Carter et al. (2013) suspected the treatment effect in their study may have been weakened. A clerical error resulted in 20 participants in the control group being sent the postcards, exposing these control group participants to the intervention. Additionally, 76 participants from the intervention group did not consent to receive the postcards, and a further 32 participants did not receive the full series of postcards, reducing the number of participants in the intervention group who received the full intervention. One of the most notable differences of the Iranian study compared to both the Australian study and the original Motto study was the wording of the messages. The messages in the Iranian study included inspirational or spiritual quotes rather than simple well wishes. Additionally, the postcards included floral imagery to make the intervention more culturally relevant. In the future, if this intervention is to be adopted in new settings, it will be important to ensure that the message delivery is well matched to the cultural setting.

2.6.3 Findings from follow-up by phone call

Other studies have taken the same principles of the CC intervention and applied them to telephone (rather than postal) communication. At a similar time to the original Motto study, Termansen and Bywater (1975) compared the effect of follow-up contact made by a crisis centre, follow-up made by mental health workers, or no follow-up for patients who presented to the ED due to a suicide attempt. The follow-up contact in this study was more intensive than other studies with a schedule of daily contact for the first week, every two days for the following week, twice weekly for the third and fourth weeks, weekly for weeks five to eight, then every second week until week 12. The authors found that at three months after initial discharge, patients who received follow-up from mental health workers had made significantly fewer re-attempts. Additionally, patients in the contact groups (contact from a crisis centre or mental health worker) had greater improvement on a range of measures including anxiety and depression. While these findings highlight the promising potential protective effects of follow-up contact, the participants were not randomly assigned to groups. Therefore, the differences may be due to underlying differences within the groups rather than the follow-up care.

In a large RCT of a CC type intervention, Fleischmann et al. (2008) compared the outcomes of a control group of service-users who had attempted suicide and received treatment as usual to an intervention group who received psychoeducation related to suicide, follow-up contact, and treatment as usual. There were 1,867 participants across five low and middle-income countries. A one-hour information session was delivered as soon as possible after the person had been discharged from hospital and phone contact occurred at weeks one, two, four, and seven and at months four, six, 12 and 18. At the 18-month follow up, significantly fewer patients in the intervention group had died by suicide compared to the control group. This is the only intervention study to date, alongside Motto's original work that has shown a significant reduction in the number of participant deaths by suicide. While this study does provide some support for the beneficial effect of ongoing contact, it cannot be determined the extent that this effect was related to the initial information session, the contact, or the combination. Additionally, some of the contacts were made face-to-face rather than over the phone. Therefore, it is not clear whether more distant communication (exclusively over the phone or through mail) would have had a similar effect. Suicide attempts during the 18-month period were also analysed as a secondary outcome (Bertolote et al., 2010). The proportion of participants who made repeat attempts was similar between the intervention and control groups.

Similar findings of the benefits of CC by phone call have been reported by Cebrià et al. (2013). The authors compared outcomes of patients discharged from hospital following a suicide attempt from two hospitals covering similar catchment populations in Spain in a population-based case control study. One of the hospitals provided six follow-up calls over the space of a year in addition to usual care, while the other provided treatment as usual. The authors found that patients who received follow-up calls were less likely to reattempt and on average had a longer period before reattempts were made, compared to the control population. However, at a five-year follow-up, there was no significant difference between populations for rate of re-attempts suggesting the intervention did not have a lasting effect (Cebria et al., 2015). This evidence taken together with the other phone-based studies suggests that the principles of CC can be applied to telephone communication and produce similar outcomes.

2.6.4 Studies where no effect was found

The studies summarised have shown a positive effect for CC type interventions. However, a handful of studies have reported CC interventions to have no significant effect. In New Zealand, Beautrais et al. (2010) conducted a RCT sending postcards to patients who had presented to the ED due to self-harm or attempted suicide. Participants were assigned to either the intervention group receiving six postcards over 12 months as well as treatment as usual or to the control group who only received treatment as usual. Initial analysis seemed to indicate that the intervention reduced the number of self-harm re- presentations. However, when patients' self-harm histories were controlled for, there was no significant difference between the groups. Despite participants being randomly assigned to groups, there was a significant difference in the self-harm histories of the intervention and control groups, with the intervention group having fewer past-self-harm episodes. Therefore, the initial differences reported between the control and intervention groups could be explained by group differences rather than the effect of the intervention. Additionally, the trial was stopped early when there were initial positive results, which may have led to the study being under-powered.

Similarly, Cedereke et al. (2002) examined whether two follow-up phone calls could increase treatment adherence and thereby decrease psychological distress and suicide attempts in patients who had been discharged from hospital following a suicide attempt. The follow-up phone calls were focused on trying to increase client motivation toward treatment. The authors found no significant difference in any of the outcome measures between participants randomly assigned to receive the follow-up calls and participants who received treatment as usual. However, patients who were receiving no treatment, either prior to the suicide attempt or at follow-up in the intervention group, had lower psychological symptom severity compared to patients in the control group. Cedereke et al.'s (2002) findings may highlight the importance of the original stipulations by Motto (1976) that the contact must ask nothing of the person. The phone calls may have created a sense of expectation for participants to change their behaviour, due to the calls focusing on increasing motivation towards treatment. This focus could have made the phone calls feel demanding, or imply that the participant is failing to meet expectations. Failure to meet Motto's stipulations may explain why there was no significant effect in this instance. The impacts of making demands on participants may also explain the findings from Robinson et al. (2012). Robinson and colleagues sent 12 postcards over 12 months to youth at risk of suicide and included self-help messages in the postcards but failed to find a significant effect of the intervention. The inclusion of self-help content may have again created a sense of demand or expectation on the participants to change their behaviour. Together these findings may emphasize the importance of contact not placing expectations or demands on the participant.

2.6.5 Moving into the digital age

More recently, there has been a shift to delivering CC through digital communication (i.e., text messaging and/or emailing). Luxton et al. (2020) delivered CC via email to American veterans and active military members who had been discharged from psychiatric inpatient care. Participants were randomly assigned to receive 13 emails over two years in addition to treatment as usual or to only receive treatment as usual. There were no significant differences between the groups on any of the measures of suicidal behaviour. The authors reported they were unable to recruit the intended number of participants, possibly leading to the study being underpowered to detect group differences. The authors also discussed the possible impacts of message content. Each message included guidance that participants would not be able to access immediate support by email, information on the limited confidentiality of email (and associated advice to not reply with personal information), as well as multiple weblinks and crisis phone lines where participants could access support. The authors discussed how the wording may have negatively impacted the simple caring message the email was intended to communicate. At follow-up interviews, only 113 out of 210 (54%) participants in the treatment condition stated that they recalled receiving the emails. Nearly half of the participants may have not recalled seeing the emails due to the emails being redirected to junk email folders, participants not opening or interacting with the email, or simply forgetting having received the emails.

Caring text messages have also been evaluated in supporting active military personnel. Comtois et al. (2019) sent 13 text messages over 12 months to military personnel who had presented to health care services due to suicidal ideation or suicide attempts. Participants were randomly assigned to receive treatment as usual or text messages as an addition to usual treatment. Messages included brief well wishes and a link to the project website. The messages were sent via a pre-programed online delivery system and participant reply messages were directed to the duty research clinician's cell phone with replies being monitored 24 hours a day. The initial protocol dictated no response to participant replies that were positive or neutral, responses directing participants to resources if participant replies included requests or indicated distress, and an immediate phone call if the participant's reply indicated suicide risk. However, based on participant feedback the procedure was changed to include positive minimal responses to positive or neutral participant replies. The authors found no significant difference between groups on the primary outcome measures of current suicidal ideation, likelihood of a suicide risk incident (medical evacuation or psychiatric inpatient admission) or ED visits. However, the text message group had lower odds of any suicidal ideation during the study period and lower odds of a suicide attempt. These findings indicate promising initial results for CC delivered via text messaging and there are multiple registered trials continuing to investigate this type of support (Berrouiguet, Alavi, et al., 2014; Larsen et al., 2017; Nelson & Comtois, 2016; Stevens et al., 2019).

2.6.6 Conclusions on the efficacy of CC

Given the mixed results of these studies, what can be concluded about CC type interventions? In a systematic review of the literature, Luxton et al. (2013) concluded that the evidence that this kind of intervention can prevent suicide, repeat suicide attempts, and suicidal ideation is promising. A meta-analysis of brief contact interventions found that interventions were associated with a significant reduction in the number of repeat episodes of self-harm or suicide attempt per person (Milner et al., 2015). However, the difference between the intervention and control groups in the number of participants who had a repeat episode of self-harm or suicide attempt was non-significant. A more recent systematic review and meta-analysis looking exclusively at CC interventions found that there was not yet strong evidence for CC interventions reducing suicide mortality, but there is evidence of a protective effect for suicide attempts (Skopp et al., 2022). In all instances the authors concluded that more research into the effectiveness of CC interventions was needed before it can be considered an evidence-based intervention and incorporated into practice on a wider scale. In conclusion, it appears that CC type interventions cause some form of positive psychological phenomenon for some people who are at risk of suicide, but understanding of this phenomenon is limited.

2.6.7 Service users' perspectives on CC

It is important to understand service users' experiences and perspectives on interventions. A small number of studies have aimed to investigate and assess the acceptability of CC type interventions. In a recent study, Reger et al. (2019) sent out a questionnaire to American war veterans who had accessed psychiatric inpatient support. The questionnaires utilised a five-point Likert scale and assessed several elements of CC interventions. The authors found that 85% of respondents agreed or strongly agreed that they would like to receive CC support, and that 84% believed that CC could be helpful for suicidal individuals. The preferred frequency was monthly contact for the duration of one year. Participants also indicated a preference for postal mail over email or text message communication. By collecting data through a questionnaire, the authors were able to get input from a greater number of participants than if they had collected data through interviews.

While this method may increase the generalizability of their findings within military populations, the findings may not generalize to non-military populations. Additionally, as respondents were not free to respond in their own words, these findings fail to develop an understanding of how or why these factors are important to service users.

Cooper and colleagues (2011) also investigated the acceptability of CC to service users as well as service providers. The authors conducted in depth semi-structured interviews of participants' perspectives on the possible anticipated benefits and issues of contact-based interventions and extracted common themes. These themes highlighted that service users and providers identified the need for support and encouragement, early intervention (messages being sent soon after discharge), genuine contact and that the possible mechanisms may relate to a gesture of caring and promoting engagement with services. Practical issues that were raised included the immediacy of the mode of contact, frequency of contact (with there being no clear consensus on ideal frequency), that it should be delivered by mental health specialists, and that it should be integrated with the person's existing support services. Barriers to uptake were identified including issues of anonymity (with service users not wanting to respond to messages when they do not know the sender), the difficulty of maintaining contact (for instance due to changing address or phone number), and the possibility that people would have a negative reaction to the contact depending on their mood. The possibility that messages could trigger low mood states has implications for the risks versus the benefits of this type of intervention. These findings provide an in-depth understanding of the anticipated value and concerns service users and service providers have in relation to CC interventions. However, as the study did not provide the participants with any form of CC, the conclusions are limited to the anticipated acceptability. While findings provide some important insights for implementing this kind of intervention, these are based on participants' anticipations of what might happen rather than their experiences of what actually happened if they were to be provided with this type of care.

In their study evaluating CC by postcard, Hassanian-Moghaddam et al. (2011) collected information on the extent to which participants believed the postcards were helpful. They found that participants who recalled receiving more cards were more likely to believe the cards were helpful. The belief that the cards were helpful was associated with lower odds of suicidal ideation and suicide attempts. These findings demonstrate the importance of understanding what factors of the intervention make the experience helpful for participants.

In a feasibility study for a contact-based intervention for patients discharged from a psychiatric inpatient unit, Bennewith et al. (2014) conducted follow-up interviews with 13 of the participants who received the intervention. The authors reported that participants felt they were adequately supported without the intervention, and that in some cases the intervention served as a negative reminder of being in the hospital. Therefore, in contrast to other studies of acceptability of this type of intervention, the authors concluded that this form of support had limited usefulness. The authors suggested the limited additional value of the intervention was due to recent changes to the policy for local crisis mental health teams that required face-to-face follow-up contact be made with the patient within 48 hours of being discharged with a total of six contacts being made in the first two weeks following discharge. In this instance, the letters partnered with intensive face-to-face contact with the crisis mental health team may have been overwhelming. It is worth noting that in this contact intervention, the letters included appointment reminders and pamphlets for local support services and as such did not keep with Motto's principle of the contact being non-demanding. This additional information may have contributed to the poor reception of the intervention. The authors also noted that participants' experiences with mental health services seemed to influence their views of the intervention. Therefore, there are several contextual reasons which may have resulted in the intervention not being well accepted. This study also emphasises the ways that the availability of other existing support systems may affect the acceptability of this type of intervention.

Robinson et al. (2012) examined the acceptability of a CC by postcard intervention for young people. The authors used questionnaires and found the majority of participants who responded indicated the postcards were helpful and used the sources of help identified in the messages. However, the questionnaire format did not allow participants to indicate what they liked and/ or disliked about the intervention.

Both Robinson et al. (2012) and Bennewith et al. (2014) examined the experienced acceptability of CC delivered by post. However, there is a growing interest in the potential and possibilities of delivering CC by digital communication. In the questionnaire survey of veterans by Reger et al. (2019), participants reported a preference for postal mail over email or text messages. Similarly, participants in the study by Cooper and colleagues (2011) thought that initial contact by phone call would be best followed by letters. However, in a study of CC in a military population, when given the choice of receiving contact by post or by email, 72% of participants chose email (Luxton et al., 2014). Preferences seemed mixed, especially when comparing hypothetical preferences to actual choices. When comparing these findings, it appears that participant preferences may differ depending on whether participants are being asked to report their preference in a survey compared to if they are being asked to choose a form of support they will actually receive. As a result, it is necessary to consider how CC delivered by digital communication are experienced, and whether it is acceptable to service users.

One study that aimed to test the feasibility of CC delivered by text messaging also examined acceptability of the intervention as a secondary outcome (Berrouiguet, Gravey, et al., 2014). Fifteen participants took part in standardised interviews that only allowed for yes or no responses after receiving the intervention. Fourteen of the participants thought the contact had a positive psychological impact and that it had a positive impact on further medical follow up. While these findings suggest that generally the intervention was viewed and received positively, this methodology does not facilitate insights or understanding that may help in the development or implementation of this type of intervention.

In a similar study, Chen et al. (2010) conducted a pilot study of CC by text messaging and conducted follow-up interviews with participants. Twelve of the 15 reportedly appreciated the texts and there were no suggestions for any improvements. However, there are several limitations. First, similar to studies previously discussed, the messages included directives such as “Do not give up” and “Compliance with Doctor’s suggestion would be good for your health”. Additionally, the contact was limited to four messages sent over one month. One month is a much shorter duration and fewer contacts than most CC studies. This protocol does not allow for any understanding of the psychological impact of regular long-term contact. Secondly, the study was not conducted with sound qualitative methodology (Tong et al., 2007). There was no information included as to the research team’s personal characteristics or reflexivity, there was no discussion of theoretical framework, an interview guide was not included, and there was no information on how the data was coded or quotes to support the findings. Therefore, the findings of this study have not enhanced or developed an understanding of the intervention or what it means to participants.

It is critical to consider what benefits an intervention has, how and why those benefits are brought about, and for whom. While these questions can be approached from multiple perspectives, the importance of including service users’ lived experience has been highlighted. Research into service users’ experiences of CC has focused nearly exclusively on acceptability. Additionally, this research has often been approached from a quantitative perspective with reports on the percentage of participants who agreed that the intervention was acceptable. Where in- depth qualitative interviews have been reported, either contextual or methodological issues have meant the findings provide limited insights into service users experiences of what works about the intervention and why, also referred to as the mechanisms of the intervention.

2.6.8 Mechanisms of CC

Relatively little is known about the mechanisms of CC interventions. Milner et al. (2016) have reviewed the proposed mechanisms in published articles assessing CC style interventions. The proposed mechanisms included increasing social support, improved suicide prevention literacy, and learning of alternative coping behaviours. Increasing social support and connectedness leading to a suicide preventative effect is consistent with the IPTS. However, these were only proposed mechanisms. None of the studies reviewed by Milner and colleagues (2016) collected quantitative or qualitative data to evaluate the mechanisms. For instance, no measures of social support were included, and no participant experiences were reported. More recently, in their RCT evaluation of CC delivered by email, Luxton et al. (2020) included measures of perceived burdensomeness and thwarted belonging and found no differences between the intervention and control groups. There were also no differences on any measures of suicidal behaviour. By including measures of perceived burdensomeness and thwarted belonging, it is possible to conclude that the messages failed to increase perceived social support, and in turn had no effect on suicidal behaviour rather than erroneously concluding CC delivered by email have no effect on suicidal behaviour. Specifically, these findings suggest elements of the study design meant the intervention failed to activate the causal mechanisms. For instance, the message wording used by Luxton and colleagues may have diluted the message of social support that the email was supposed to convey. It is therefore critical to include measures of proposed mechanisms and consider what factors facilitate or prevent the messages from activating these mechanisms.

There is a growing body of literature highlighting the promising potential of CC interventions. However, studies are generating inconsistent results, which may reflect the limited understanding of the underlying mechanisms of the intervention. There has been a call by researchers of CC for further investigation and empirical validation of proposed mechanisms (Comtois et al., 2019; Luxton et al., 2020). However, to understand the possible mechanisms, qualitative investigation is necessary. While several studies have investigated the acceptability of this type of intervention, methodological limitations have resulted in few meaningful findings that may assist in the future design and implementation of this type of intervention. The current study addresses this gap in the literature by taking a qualitative approach to understanding service users' experiences of receiving CC that have been delivered by text messaging.

2.7 THE GROWTH AND DEVELOPMENT OF MOBILE HEALTH INTERVENTIONS

CC delivered by text messaging is an evolving field in the research literature with little currently known about factors that may impact the success of delivering this type of support via text messaging. However, there has been extensive research into the use of mobile phone-based interventions in other areas of health. This section will discuss the utility of mobile health interventions and review the evidence of the efficacy of these interventions for behaviour change. This is followed by a specific consideration of mobile health interventions for psychological distress, how digital communication impacts the therapeutic alliance, and how service users experience this kind of support.

2.7.1 Introducing mHealth

Mobile Health (mHealth) has been defined as "medical and public health practice supported by mobile devices, such as mobile phones, patient monitoring devices, personal digital assistants (PDAs) and other wireless devices" (WHO, 2011, p. 6). Specifically, mHealth interventions tend to capitalise on people often carrying their mobile phones with them, allowing information and services to be delivered by voice or text message directly to the appropriate individual at appropriate times (Whittaker et al., 2012). Globally, mobile phone subscriptions are high with a 96% penetration rate (Berrouiguet et al., 2016). These rates are even higher in New Zealand, with penetration rates of 114% and with a lack of disparities in mobile phone access suggesting mHealth interventions may help target underserved or disadvantaged populations (Whittaker et al., 2012).

2.7.2 mHealth for behaviour change

Text message based mHealth interventions have been used to support a variety of health-related behaviour changes. A recent systematic review found that text messaging-based interventions lead to improved medication adherence, knowledge and attitudes for people managing chronic illnesses including HIV, diabetes, or chronic obstructive pulmonary disease (Ebuenyi et al., 2021). Similarly, a meta-analysis of text messaging interventions for health promotion found interventions had a significant, small to moderate effect on behaviour change outcomes such as smoking cessation or increasing physical activity (Head et al., 2013). These findings suggest that text messaging-based interventions can be effective in promoting behaviour change in order to enhance a variety of health outcomes.

2.7.3 mHealth for psychological support

While a majority of the research has focused on physical health outcomes, there is growing interest in utilising mHealth to enhance mental health outcomes (Fiordelli et al., 2013). A literature review by Berrouiguet et al. (2016) has found that text messaging has been used as a tool in supporting people living with mental illness including schizophrenia, affective disorders, eating disorders, PTSD, and substance use disorders. Text messages were used as supportive messages, appointment reminders, providing information, or to prompt self-monitoring. In all of the reviewed studies, text messages were sent as an adjunct to, rather than substitute for, consultation and treatment. Outcomes reported included increased appointment attendance and satisfaction with service care. However, the authors highlight that the majority of studies were pilot studies and there is a need for more RCTs of text messaging interventions for mental health.

More recently, a randomized pilot trial conducted by Agyapong et al. (2017) evaluated supportive messages for service users that met criteria for Major Depressive Disorder (MDD). Service users who presented to a community mental health clinic and who met criteria for MDD were invited to participate. They were randomly assigned to receive the intervention or control condition text messages. The intervention consisted of cognitive behavioural therapy (CBT) formulated supportive text messages delivered unidirectionally, two times a day by a computer programme. The control condition included fortnightly text messages expressing gratitude for participating in the programme. Both were delivered for a period of three months. Participants in both conditions were encouraged to also utilise other recommended forms of support such as continuing to attend appointments at the clinic. The intervention group had a significantly greater reduction in mean scores of depressive symptoms relative to those in the control condition. The authors concluded that text messaging may enhance treatment outcomes for clients struggling with depression.

Similarly, positive outcomes were reported in response to a supportive text-message subscription service in response to stress associated with the Covid-19 pandemic (Agyapong et al., 2020). Participants in Canada had the opportunity to self-subscribe to daily supportive text messages that were informed by CBT principles for a six-week period. There was a significant reduction in measures of stress and anxiety for the 766 participants who completed initial and follow-up questionnaires. While there was a significant decrease in the number of participants who would likely meet criteria for a generalised anxiety disorder, there was no change in those who would likely meet criteria for MDD. Together these findings suggest that text messaging interventions as an addition to usual care can improve outcomes for people experiencing psychological distress.

2.7.4 Can caring connections be established through digital communication?

The IPTS may predict that interpersonal connections are likely key to suicide prevention interventions. Therefore, it is important to consider whether the quality of therapeutic relationship is impacted by engagement using digital communication systems. A meta-analysis of remotely delivered psychological therapy (i.e., therapy delivered over phone or video-call) found a small significant effect of the therapeutic alliance on therapeutic outcomes (Kaiser et al., 2021). The authors highlight that this effect is similar to findings for face-to-face delivered therapy. In a study of 325 participants randomized to either receive face-to-face CBT or telephone-delivered CBT, there were no differences in measures of therapeutic alliance (Stiles-Shields et al., 2014). Similarly, an evaluation of a telephone-delivered parenting programme reported measures of therapeutic alliance that were consistent with face-to-face normative data (Lingely-Pottie & McGrath, 2006). These results suggest therapeutic relationships can be established through non-face-to-face engagement, but less is known about the therapeutic alliance in text-delivered interventions.

2.7.5 Service users' experience of text support

It is important to also consider service user perspectives and preference for intervention features. A thematic analysis of young people's experience of the New Zealand text counselling service, Youthline, found participants appreciated the privacy, autonomy, anonymity, and accessibility that text messaging allows (Gibson & Cartwright, 2014). Few studies have made similar analysis of adults' experiences, however several studies have reported adults' acceptability of mHealth interventions from forced choice questionaries (Berrouiguet et al., 2016).

The reviewed findings show that text message-based interventions can be effective in promoting behaviour change and in decreasing different forms of psychological distress. There is evidence to suggest that meaningful therapeutic connections can be established via remote communication but less is known about text-based communication. While there has been some exploration of the factors young New Zealanders value in text message-based support (Gibson & Cartwright, 2014), less is known about how adults experience support provided by text messaging.

2.8 THE CURRENT RESEARCH

As has been illustrated above, CC shows promise as a suicide prevention intervention. There is a particular growing interest in delivering this type of intervention by text messaging. However, relatively little is known about the mechanisms. Where mechanisms have been discussed in the literature, it has been approached from academic theoretical perspectives. Service users have had little opportunity to have their voices heard or make meaningful contributions to the development of this type of intervention. The lack of meaningful service user input and poor understanding of the mechanisms may explain why the research findings into the efficacy of the intervention have been mixed, as there is no consensus on the critical elements of the intervention. Additionally, for successful implementation, consideration must be given to the attitudes and innovation culture of potential adopters at the level of individual providers and the organisation.

The aim of the current research was to address the gaps in the knowledge translation and implementation processes for CC. Specifically, the primary study explored service users' experiences of receiving CC delivered via text message. This exploration included service users' perspectives on the benefits (if any) of this type of support, how these benefits were brought about, and the possible limitations of this type of intervention. The secondary study aimed to identify and describe possible barriers and facilitators to successful implementation of CC within a local crisis mental health team setting. The secondary study was conducted in response to experiences of partnering with the Crisis Resolution Service (CRS), a local crisis mental health team in recruiting participants for the primary study. While knowledge translation models emphasize the importance of triangulation of service user, provider, and researcher perspectives, given the lack of consumer involvement in shaping CC and the historic side-lining of consumer voices, I have aimed to privilege service user perspectives while supplementing these with context from service providers.

Chapter 3: Methods

Methodological techniques within social sciences are informed by philosophical positions and assumptions that need to be made explicit. Hathcoat et al. (2019) explain that the mental models used to approach social enquiry contain implicit philosophical positions that in turn inform methodological decisions. Mental models are considered to be the broader overarching theoretical positions, values, commitments, and experiences of the inquirer. In this chapter, I will outline the commitments of translation and implementation science as the broader mental model that informed the current research. This will be followed by a discussion of how translation and implementation science align with the philosophical positions of critical realism. This will then contextualize the methodological decisions and processes that will be described.

3.1 TRANSLATION SCIENCE

There are many terms used to describe the process of producing new knowledge that can have a helpful and meaningful impact on healthcare (Kemp, 2019). A widely used and accepted term is 'knowledge translation' which is defined as "a dynamic and iterative process that includes the synthesis, dissemination, exchange and ethically sound application of knowledge to improve health, provide more effective health services and products and strengthen the healthcare system." (Canadian Institutes of Health Research, 2016 para. 1).

Translational science is a systematic research process to support this shift of scientific discoveries to sustainable and widespread implementation of clinical innovation (Kemp, 2019). While there are various models of knowledge translation (Proctor et al., 2009), there is consensus in there being distinct phases to this process, moving from theoretical research, to controlled human studies, to translation and implementation within the community. Each phase addresses different research questions with different research methodologies (Straus et al., 2013). However, Kemp (2019) discusses how this process needs to be reflexive and non-linear to prevent interventions being trialled that are either not relevant or not fit for purpose in real-world settings. Kemp emphasizes that the focus on internal validity in order to "prove" that clinical outcomes are a direct result of the intervention limits understanding of the impact of the context of the intervention. Therefore, to produce research findings that are considered translatable, research needs to consider the role of context in both the intervention and the research process.

The emphasis of context within translation science impacts on the types of research questions asked, and the outcomes measured. Rather than assessing the clinical treatment outcomes of the intervention, research may focus on understanding how features of the intervention impact on identified implementation outcomes such as the acceptability, feasibility, or sustainability of the intervention in a specific setting (Proctor et al., 2011).

To answer these types of research questions, models of implementation science recognise the importance of context and collaboration in producing new knowledge. Specifically, it is recognised that traditional models of unidirectional knowledge diffusion from academic institutes to clinical practice are unsuccessful and have contributed to the gap between what is known to be effective and what occurs in routine clinical practice (Straus et al., 2013). Instead, translation science promotes transactional models where the unique vantage points of researchers, practitioners, and consumers are valued equally (Proctor et al., 2009). As a result, research should be a reciprocal, interactive, and collaborative process where all parties benefit from their involvement, leading to an overall improved public health impact of research findings.

3.2 CRITICAL REALISM

The research commitments of translation science that have been outlined fit well with the philosophical position of critical realism. Critical realism combines a realist ontology with a constructivist epistemology (Maxwell, 2012). Critical realism assumes there is a real-world that exists independent of our perception or concepts of the world. However, any knowledge of the world is socially constructed and is therefore theory-laden, from specific perspectives (Maxwell, 2012). Therefore, no knowledge is objective.

Specifically, Bhaskar (1998) distinguished the overlapping domains of reality being the real, the actual, and the empirical. The domain of the real includes physical or social structures and their potential causal mechanisms which exist independent of human knowledge (Sayer, 2000). The domain of the actual refers to events that occur when causal mechanisms are activated. Finally, the domain of the empirical refers to what are observable or experienced outcomes of activated mechanisms.

Given these assumptions of reality, at any given moment many causal forces are interacting to lead to or prevent observable outcomes. Critical realists believe that these causal forces cannot be separated or isolated and that outcomes are more than the sum of their parts (Maxwell, 2012). Critical realists aim to discover the causal mechanisms and under what conditions they are activated (Maxwell, 2012; Sayer, 2000). As a result, any understanding of these causal mechanisms will be contextual rather than leading to generalizable rules (Maxwell, 2012).

This emphasis on context is proposed to be well suited to the translation of research findings to real-world interventions (Kontos & Poland, 2009). Critical realists reject positivist notions that causation can be inferred from the empirical co-occurrence of phenomena. Therefore, critical realist evaluations of interventions shift the focus from if an intervention "works" to more closely examine how an intervention will work for specific stakeholders in a given setting (Kontos & Poland, 2009).

3.3 REFLEXIVITY

Critical realists' beliefs that knowledge of these causal mechanisms is theory-laden and subjective, highlight the importance of acknowledging what the researcher brings to the research (Maxwell, 2012). In this section, I will summarise aspects of my identity, experience, and training as they relate to the current research.

I identify as a Pākehā (New Zealand European) cisgender woman. The current research has been completed as part of my training in the Doctorate of Clinical Psychology programme at Massey University, Wellington. The clinical components of my training have been structured through cognitive behavioural frameworks that have been taught through the lens of the science-practitioner model (School of Psychology Massey University, 2021). My prior research experience has been in quantitative research methods. Before the current research project, I have had experience as a volunteer phone and text helpline counsellor and have attended suicide prevention training which aligned with person-centred models of care.

My identity, as well as my role as researcher and training clinician, affords me several privileges that could contribute to a power differential when I engaged with potential participants as service users. However, given translation science commitments to a collaborative and reciprocal approach to enquiry that values service users perspectives, I endeavoured to approach engagement with potential participants, as well as the data analysis, in a way that centred service users as the experts.

3.4 RESEARCH METHODS

The study aimed to understand service users' experiences of receiving Caring Contacts delivered by text messaging. Specifically, the aim was to understand the factors that impact service users’ acceptability of the intervention. A qualitative methodology was selected as the most appropriate in order to address the study’s aim of understanding (rather than explaining) the experience of receiving Caring Contacts by text messaging. The qualitative research paradigm has been described by Braun and Clarke (2006) as treating words (rather than numbers) as sources of data. The focus is on the meanings of the data rather than a reporting of behaviours or internal cognitions. These meanings are always tied to the context in which they were generated. As such, qualitative research is not concerned with the quantitative notion of generalizability, as knowledge and findings cannot make sense in isolation from their context. In this sense, the qualitative research paradigm embraces the subjectivity of both researcher and participants as being connected and not separate from the social processes we seek to understand.

3.4.1 Intervention design

The text message wording was designed to keep with Motto’s (1976) original premise that the contact needs to express care and concern for the individual, while asking nothing of them in return. The wording was kept similar to that of previous studies (Reger et al., 2017). Service user and cultural consultations were part of the intervention design process. These were provided by John Tovey, 3DHB consumer advisor consultant, and Dr Simon Bennett, Kaimatai Hinengaro Matua: Māori Clinical Psychologist and Senior Lecturer (Massey University). Consultation with John Tovey included discussion as to what the most appropriate way was to approach potential participants, when it is best to approach participants, and the appropriateness of the message wording. There were no suggested changes to the protocol. Outcomes of consultation with Dr Simon Bennett included providing the option to receive the messages in Te Reo, and advice on having participant engagement guided by the Hui Process (Lacey et al., 2011).

The project also involved collaboration with clinical management staff from the ED and Crisis Resolution Service (CRS). Initially, the text messages had included the 1737 helpline number if participants wanted to receive more support. CRS staff requested this be changed to the Te Haika (the local mental health triage service) phone number, as this is the number to which they direct their clients in their safety plans. In preparation for recruitment, I attended a shift shadowing my research supervisor, Dr Silke Kuehl, ED Nurse, to familiarise myself with the department. I also attended CRS team meetings to introduce myself to the wider CRS team, and explain the research project, and recruitment process.

3.4.2 Procedure

Recruitment.

Many people who are discharged from the ED do not attend follow-up appointments (Larkin & Beautrais, 2010). Therefore, participants were recruited from within the Wellington Hospital ED rather than approached to participate after ED-discharge. Recruitment occurred over eight-hour shifts on Thursday, Friday, Saturday, and Sunday evenings from the 9th of November 2018 to the 16th of December 2018. These days were chosen due to higher numbers of ED presentations over weekends (Ministry of Health, 2016). The recruitment period was extended to include Mondays from the 3rd of January through to the 28th of January 2019. The timing of shifts was originally set to be from 3 pm to 11 pm. While people did tend to present during this timeframe, they were not always seen or discharged in the afternoon/evening. Several different times were trialled to try and have the best chance of seeing people once they were discharged. In total 344 hours were spent recruiting over 43 days. The initial aim was to recruit 30 participants with an expectation that with rates of attrition between 16-50% (Morrison-Beedy & Visovsky, 2018), approximately 20 participants would complete interviews.

CRS staff identified potential participants. The study inclusion criteria were having presented in the ED due to suicidal ideation or attempt, being over 18 years old, in a mental state able to consent to participate in research, having access to a personal mobile phone, and ability to read simple worded text messages. Exclusion criteria included inability to provide informed consent, being intoxicated (by alcohol and/or other drugs), being admitted to the psychiatric ward, having a service-wide care plan in place, or previously being enrolled in the study. People who had been seen by CRS staff and were safe to leave hospital care to return to the community were considered to be in a safe mental state to determine if they wished to participate. Once the person had been seen by CRS staff, the CRS staff would inform the person of the opportunity to take part in this research project and ask their permission to be introduced to the researcher. This reduced the risk of people feeling pressured to participate. If the person agreed to speak with me, I was then introduced to the person, I explained the project, provided them with an information sheet and answered any questions. These conversations would happen in the CRS assessment rooms, in the whānau (family) room, or by the person's bedside depending on where they felt most comfortable to talk.

Engagement with prospective participants was done in a culturally appropriate way consistent with the Hui Process framework outlined by Lacey et al. (2011). This included offering refreshments while discussing what research participation would involve. Participants were informed that a limitation of the study was that the text message communication was one-way as we could not provide a text-helpline service and therefore could not respond to any reply messages. They were informed of other text helpline services including 1737 and given a wallet card with this number. Participants were also informed that they could reply "stop" to stop receiving the text messages. It was explained that if they did text "stop" that I would contact them by phone call to see if they would still like to take part in the interview or if they would like to withdraw from the study. Participants were informed that they could withdraw from the study at any time. Those who were interested in taking part, then read and signed the informed consent form, indicated if they would like to receive the messages in English or Te Reo Māori, and participated in an initial interview to collect background information.

The background questions related to demographic variables, suicide history, and mental health supports. Previous studies have indicated that this type of intervention may have a different impact for people who have a longer history of suicide attempts compared to those with few or no prior attempts (Hassanian-Moghaddam et al., 2011). This may relate to the relationship people with longer suicide attempt histories have with mental health support services. Therefore, it was important to collect information relating to any prior suicide attempts and what forms of mental health support people have received.

Intervention protocol.

Once a participant had completed the background interview and left the hospital, they were sent text messages on the schedule outlined in Table 1. Texts were sent from a phone that was used exclusively for this study. The phone was passcode protected. An automated text delivery system was not considered for this study due to the limited number of participants. Texts were saved as templates on the phone.

Table 1

Text Message Delivery Schedule

Text Number	**Delivery day**	**Template message content**
1	One day after recruitment	Kia ora [name]. It was nice to meet you yesterday! If you need some more support you can free phone Te Haika at 0800745477. Thanks, from Olivia.
2	One week after first text	Kia ora [name]- Hope you’re having a good day. You can free phone Te Haika at 0800745477 if you want to talk to someone about how things are going. Take care, from Olivia.
3	2 weeks after first text	Kia ora [name] It’s Olivia here. Hope things have been going well for you. You can free phone Te Haika at 0800745477 for support.
4	3 weeks after first text	Kia ora [name] Just wanted to say Hi and wish you well. You can free phone Te Haika at 0800 745 477 for someone to talk to if you need it. Thanks, from Olivia.
5	4 weeks after first text	Kia ora [name] Hope you’re having a good week. All the best, from Olivia. You can free phone Te Haika at 0800745477 at any time for support.
6	5 weeks after first text	Kia ora [name], Olivia here again. Hope all is well with you and your whānau. You can free phone Te Haika at 0800745477 any time if you want to support.
7	6 weeks after first text	Kia ora [name]. Hope life is going well. To get support at any time free phone Te Haika at 0800745477. Take care, from Olivia.
8	2 months after first text	Kia ora [name] Wishing you all the best. You can free phone Te Haika at 0800745477 if you want someone to talk to. Thanks, from Olivia.
9	3 months after first text	Kia ora [name] It’s Olivia here. Hope you’re doing ok. For support or a chat free phone Te Haika at 0800745477.
10	4 months after first text	Kia ora [name] Hope things have been going well for you. You can free phone the folks at Te Haika at 0800745477 if you need support. Wishing you well, from Olivia.
11	5 months after first text	Kia ora [name]. Hope all is going well for you. Free phone Te Haika at 0800745477 for someone to talk to. All the best, from Olivia.
12	6 months after first text	Kia ora [name] Hope you’re having a good day. You can free phone Te Haika at 0800745477 if you want to chat. Take care, from Olivia.
13 (Optional)	Birthday	Happy Birthday [name]! We hope it’s been a good one and that this year brings you good things! From Olivia.

Six months after the first text message was sent, participants were contacted by phone call and offered the opportunity to arrange a time for the follow-up interview. Interviews were conducted at the Massey University Psychology Clinic. A senior clinical psychologist was on-site in the event of participants disclosing safety concerns, however, no safety concerns were raised. The ethical approval for the study was amended to offer phone interviews for participants who had moved out of the area or were unable to travel into the clinic. One participant took part in the phone interview and 11 participants were interviewed at the Psychology Clinic. Participants were reimbursed for their time with $20 supermarket voucher.

The interviews were semi-structured. The interview guide was developed to try and capture the constructs of healthcare intervention acceptability outlined by Sekhon et al., (2017). These include how the person feels about the intervention, effort required to participate in the intervention, the fit between the intervention and the person's values, the person's understanding of how the intervention works, the opportunity costs of the intervention, the perceived effectiveness, and the person's confidence that they can participate in the intervention. This interview guide was developed in consultation with the supervision team, including role-playing and refining the questions included. Interviews began with information-gathering questions such as confirming that they received the texts, and what other follow-up care they had received. Further exploratory questions focused on participants' experience of receiving the texts, as well as contextual factors such as participants' expectations, and how the texts were experienced in conjunction with other supports. The interviews concluded with a discussion of suggested changes and improvements that participants would make to the process, including specific prompts for any changes to message wording, duration, or frequency. The full interview guide can be found in the appendix. The duration of the interviews was between 22 to 61 minutes with the mean interview time being 35 minutes.

3.5 PARTICIPANT CHARACTERISTICS

Twenty participants were recruited to receive the text messages. Four participants were not able to be reached to arrange a follow-up interview with an average of five follow-up attempts made per participant. Four participants agreed to be interviewed but did not attend, and were either not able to be reached or did not have time to reschedule an interview. Twelve participants completed interviews. One of these participants had texted STOP after receiving four text messages but still wished to participate in the interview. One audio recording file was corrupted leading to 11 transcribed interviews.

Of the 11 transcribed interviews, eight participants identified as women and three as men. In regard to ethnicity, five participants identified as New Zealand European, two identified as New Zealand European and Māori, and one each as Cook Island Māori, European, Māori, and Filipino. Participants' age ranged from 22 to 52 years with five participants in their twenties, three in their thirties, one was in their forties, and one was in their fifties. These details are summarised in Table 2.

Participants who took part in the interviews reported a variety of mental health histories with most reporting being diagnosed with depression and/or anxiety. Other reported diagnoses included Obsessive Compulsive Disorder, Post Traumatic Stress Disorder, Borderline Personality Disorder, and Schizophrenia. Three participants reported having no mental health diagnosis. Six participants had presented to the ED due to suicidal ideation and five due to a suicide attempt. The majority of participants reported having a history of suicide attempts ranging from one to 10 prior attempts. Of the nine participants with a suicide attempt history, seven had occurred in the previous two years, and two were historic (over two years ago). Nearly all participants were receiving support for their mental health from their General Practitioner (GP) as well as some form of face-to-face counselling or support (from a counsellor, social worker, psychologist, psychiatrist, caseworker etc). Seven participants were already using digital resources such as web pages, for example the Centre for Clinical Interventions website, (Department of Health Western Australia, 2022), and four were using phone resources, such as helplines or phone apps including Headspace Inc (2021) as forms of mental health support.

Table 2
Summary of participant characteristics.

Pseudonym	Gender	Age range	Ethnicity
Sarah	Woman	20-24	New Zealand European
Lani	Woman	30-34	Cook Island Māori
Amanda	Woman	30- 34	New Zealand European
Tom	Man	45-49	New Zealand European
Lucy	Woman	25-29	New Zealand European
Rebecca	Woman	25- 29	New Zealand European and Māori
Sophia	Woman	25-29	Philippian
Hana	Woman	35-39	Māori
Steven	Man	50-54	European
Josie	Woman	25-29	New Zealand European and Māori
Roy	Man	50-54	New Zealand European

Regarding follow-up care plans, participants had engaged with one or multiple services. Five participants had follow-up appointments with CRS staff, two had appointments with their GP, two had appointments with their existing mental health service provider, and two intended to seek out private talk therapy. Other support plans included a referral to community mental health, seeking support through the Accident Compensation Corporation (ACC) sensitive claims, a short stay at respite services, and drug and alcohol rehabilitation services. Three participants reported having repeat episodes of suicidal crisis during the study period with one participant using the provided crisis line number to seek support, one re-presenting to the emergency department, and one seeking private inpatient mental health care.

3.6 ANALYSIS

The interview data were analysed using thematic analysis. Thematic analysis is a qualitative research method that allows for the systematic identification and organisation of patterns of meaning across multiple participant interviews (Braun & Clarke, 2006). Braun and Clark have discussed and outlined the process of thematic analysis at length and have identified the key advantages of thematic analysis as the accessibility and flexibility of the method (Braun & Clarke, 2012, 2013; Terry et al., 2017). Specifically, its accessibility makes it a suitable method for researchers who are new to qualitative research. Additionally, its accessibility makes qualitative research results available to a wider audience and is therefore suitable for feeding back results to service users with variable research knowledge or experience. Given the exploratory nature of this research project, the flexibility of thematic analysis also benefited the fit between the project and the methodology.

As thematic analysis is a flexible methodology, clear and explicit choices need to be made regarding how the analysis will be applied (Braun & Clark, 2006). It is necessary to clarify the underlying theoretical assumptions of knowledge and how the research process relates to the production of knowledge. The analysis was approached from a theoretical position of critical realism as has been outlined at the beginning of the chapter.

I orthographically transcribed the audio recordings from the interviews, transcribing all spoken words and non-semantic utterances. To protect participants' identity, names were changed to pseudonyms and identifying information was removed after initial transcription. Participants had the opportunity to review and amend the transcripts. One participant requested to review their transcript and no amendments were suggested. Presented quotations have been edited for readability. I compared these quotes to audio recordings to ensure the meaning has remained the same. However, false starts, hesitations, and repetitions have been removed. Where unnecessary or irrelevant details have been excluded from quotations, this has been marked by the signifier […].

The transcription of audio recordings also allowed for the familiarisation phase of the thematic analysis. Once transcripts were completed, they were checked against the audio recordings for accuracy. Each transcript was read again closely with notes being made of the overall meaning. These were also read, and notes of initial impressions made by one of my research supervisors.

Phase two of the thematic analysis, the generation of initial codes, was aided by NVivo software (QSR International Pty Ltd., 2020). This allowed for the digital highlighting of data, labelling, and organising of codes. Data were coded manually rather than from other software features. Coding was done semantically and inductively to try and stay close to participants' understandings and meanings of their experience. However, Braun and Clark highlight the importance of rejecting naïve realist views that research can simply and directly 'give voice' to participants as the data analysis is an active process that is influenced by the researcher's theoretical perspective and epistemological assumptions (Braun & Clarke, 2006). The theoretical perspectives and assumptions that have informed this analysis have been outlined at the beginning of this chapter.

Codes were then organised into six initial candidate themes. Upon review of the data extracts within the candidate themes, they were collapsed into four themes. The transcripts were then re-read and re-coded. In beginning to write the Results section and position the themes into a coherent narrative, further refinement occurred in defining the themes. This included some codes being reorganised into other themes.

3.7 ETHICS AND CULTURAL CONSIDERATIONS

This study received ethics approval from the Health and Disability Ethics Committee (study reference number 18/NTB/145). As this project involved working closely with participants who have sought help due to suicidal thoughts or behaviours, several ethical considerations were made. Specifically, participant safety was a primary concern. Potential participants were only approached once they had been seen by the CRS team, their risk had been assessed and a plan for managing risk was completed by CRS, and they were assessed to be at a low enough level of risk to be leaving the hospital. Participants were informed that the intervention was limited to one-way text communication and were provided with information for supports available including 1737 wallet cards and the Te Haika helpline number. As the intervention was provided as an addition to usual care, ongoing suicide risk was managed by the participants' care provider. Participants were informed they could stop receiving the messages at any time by texting stop and that I would get in contact with them by phone call to check-in and offer a follow-up interview. The messages also all included the Te Haika helpline number to access immediate phone support in the event the messages evoked distress. Safety was managed in the follow-up interviews by conducting the interviews in the Massey University Psychology clinic with a senior clinician on-site in the event of any risk concerns being discussed. An ethics amendment was made to conduct interviews over the phone for participants who had moved out of the area who still wished to participate. In this case, phone calls were still made with a senior clinician being available. I also discussed with participants where they were calling from, if they had privacy, and if they had support people available to check in with after the interview.

Cultural issues in this study related to ensuring that recruitment, intervention, and interview procedures were conducted in a culturally sensitive way that supported Māori individuals to participate if they chose. Suicide rates are higher among Māori compared to non-Māori, particularly youth suicide rates (Coronial Services of New Zealand, 2017). It is therefore critical that Māori voices are included in shaping any suicide prevention interventions. Recruitment and interview procedures were informed by the powhiri process outlined by Lacey et al. (2011). To consider and reduce any possible barriers to participation the study procedures received cultural and consumer consultation from Kaimatai Hinengaro Matua: Māori Clinical Psychologist and Senior Lecturer (Massey University), Dr Simon Bennett, and 3DHB consumer advisor consultant, John Tovey. Participants were also given the option to receive the text messages in Te Reo Māori. The text message schedule was translated from English to Te Reo Māori by Eleanor Brittain and can be found in the appendix.

Chapter 4: Analysis

4.1 SUMMARY OF THEMES

The thematic analysis of the interviews resulted in four themes: *Caring Connection*, *Safety and Security*, *Reflections on Recovery*, and *Limitations*. The theme *Caring Connection* refers to participants' emotional responses to the messages and features of the study design that brought about this emotional response. *Safety and Security* relates to the variety of supports available and participants' confidence in accessing supports. *Reflections on Recovery* relates to how the text messages would prompt participants to think about how they manage their well-being and how this changed across the study period. Finally, *Limitations* include the negative emotional reactions the text messages could prompt and the ways the text messages were at times unhelpful for participants.

4.2 CARING CONNECTION

The dominant theme in the data related to the feelings of care and connection from another person that participants reported experiencing in response to receiving the text messages. Participant's discussion of this caring connection is presented in three subthemes; 'to feel cared for', 'expectations of text messaging', and 'expectations of clinical communication'. These subthemes are outlined below and are followed by an overarching summary of the *Caring Connection* theme.

4.2.1 To feel cared for

The theme of *Caring Connection* related to how receiving the text messages made several participants feel cared for by another person. This feeling was often linked to the idea that receiving the text message provided evidence that the sender had been thinking about them.

I: *What about it do you think you found helpful?*

Rebecca: *Just because, when you're a drug addict, you kind of lose touch with your family. So no one really texts you. So, it was like a reminder, sort of. Yeah. If that makes sense.*

I: *Can you tell me a bit more about what it was reminding you of?*

Rebecca: *Oh, just that, I don't know how to say it. Like someone remembers you sort of thing. Yeah. That's what it felt like. Like "Oh yeah, remember that person?". Yeah sort of like that.*

In this example, Rebecca discusses how the text messages may serve to ward off feelings of loneliness or isolation by showing participants that they are being held in mind by someone who cares about their wellbeing. Another participant described a similar experience around Christmas time.

Hana: *Because at one point like on Christmas Day I was down because I had no one on Christmas Day [...]So I was actually quite down and depressed and my whole family went away, so I just stayed in my room by myself. I didn't have Christmas. It was like any other day and so that, that made me feel good. At least someone– There was someone, you know. It just sort of reminds you. So yeah, there's that.*

While a text message is not the same as sharing the company of others in person, here Hana appears to suggest that the text message reminded her that someone was thinking of her and lifted her low mood. Hana’s description may suggest that even without physical company, having a text message remind you that someone is thinking of you is protective against the low mood of loneliness and isolation. Of note, no text messages were sent specifically on Christmas Day.

While Hana described her experience in the context of thwarting low mood, others described how knowing that someone else is thinking of them can create an emotional shift and generate positive feelings.

Josie: *I really liked getting the texts. I just thought it was like– I don’t know it was sort of like when things were dark and then you’d get this nice sort of little “oh yeah, someone cares”.*

Sophia: *There'd be times where I'd just be feeling down, and then I'd get that text and like "oh someone's thinking of me" and so I do feel very happy and I guess just like that warm loving feeling that you get. So yeah. So that was really nice*

Sophia describes this emotional experience as warm and loving, perhaps like the comfort derived from the presence of a close friend or family member. This description also may suggest that when she is “feeling down” she begins to believe that no-one cares or is thinking of her. Therefore, it is possible that receiving the study text messages serves to disrupt negative thinking.

In discussing their experiences, many participants focussed more on the implicit meaning of the message rather than the explicit content. Participants commonly described the meaning of the messages to be “someone is thinking of me” or “someone cares about me”. Participants described how this meaning would bring up emotions of feeling cared for and supported. In turn, this emotional reaction may create a positive shift if the person is experiencing low mood. In this sense, the positive impact of the intervention is possibly connected to the text messages bringing to mind the feeling of a caring connection to another person. This emotional reaction shared by multiple participants is central to the theme. While participants could struggle to articulate the impact of this emotional reaction, they would describe how the text messages contrasted with their expectations of text messages.

4.2.2 Expectations of text messaging

When describing the feeling of being cared for in response to the text messages, participants contrasted this with their expectations of text communication.

Lani: *It didn't feel like there was no feelings behind it, you know like it was genuine, it's genuine texts. It's not an automated or generic one. It just felt genuine and yeah I just got a sense of like belonging and support.*

Participants discussed that, through using digital communication, the message can be interpreted as automated, impersonal, and therefore inauthentic. However, Lani highlights the importance of feeling like the text messages were sent due to genuine care for her wellbeing rather than being sent on an automated schedule. Therefore, positive feelings associated with the text messages were likely contingent upon feeling as though the implicit meaning of the message (that “I am thinking of you”) is in fact truthful or “genuine”.

Tom: *Yeah it came across as subtly personalized. I think if you think that it's just an automated message and like it's coming through automatically and a robot is just programming it off, you’re kind of like (sigh). But what you’re actually hoping is “yeah there are people out there that care about me”, so that's a good thing. If* *the text messages are personalized, I guess that's a good thing. If they are coming across as very automated– But I didn't feel that way with your text messages, I was like "oh, yeah, cool" you know. Yup, I remember Olivia.*

Tom identified that in order to feel cared for, you need to think the text message is coming from another person and not an automated computer programme. However, he also highlights that the experience of receiving texts as part of the study could be ambiguous and people can question if the texts are genuine. While he asserts that the study text messages did not feel automated, other participants came to different conclusions.

Lucy: *I did appreciate the kind of pseudo contact, I guess it's not real contact, but I felt that if I had of– That there was no path from getting a text message to getting any more help*

I: *Can you tell me a bit more about it not being real communication?*

Lucy: *I'm not sure how you did it, but it just felt like a spam or a bot or it was something like that it didn't– I didn't get the impression that there was like any person behind it*

Here Lucy describes a feature that many participants discussed, of not knowing the mechanics of how the text messages in the study were sent. While many participants interpreted this ambiguity in a way that they felt the messages were personal, Lucy experienced them like “spam” or automated digital communication lacking in human connection. Lucy’s experience further highlights the idea that if communication is not interpreted as genuine, it is unlikely to have a positive emotional impact.

All participants discussed numerous factors that led them to interpret the communication as being either personal or like “spam”. A factor to which many participants ascribed importance was having the opportunity to meet with the sender of the text messages.

Amanda: *I think having had the interview with you to start with gave me a face to put to what felt like someone was caring. Whereas, if it was just random text messages from some random source, that I had no face to go with, that probably wouldn’t be as effective for me. Whereas kind of having you pop up, and you being a positive, it sort of had an ongoing effect.*

Here Amanda highlights that the feelings of caring connection began at the point of invitation to participate in the study. The recruitment process allows the participant to identify the sender of the text messages and creates the context for an ongoing sense of connection. Therefore, having a sense of the text sender’s identity may be critical for interpreting the text as “personal” and “genuine”, rather than as “robotic” or “spam”.

Lani: *I was comfortable that it was coming from you. Because we had spoken that day. So I already felt that there was a connection there already. And I had already– sort of yeah, I did put my trust in your hands. I'd feel uncomfortable if it was somebody else sending me that texts. Um. Maybe because I'm one of those people that sort of needs to be connected you know.*

Lani describes the importance of the initial meeting for forming the sense of connection. This description may highlight that it is not enough for participants to know who you are but that there also needs to be a building of trust and a sense of mutual understanding in order to form the initial connection on which the text messages then build.

The importance of the initial connection may be consistent with Lucy and Rebecca's experiences. Both participants described interpreting the text messages as being impersonal, and both described having changes in their medication soon after recruitment that they felt impacted their memory during the early stages of the study.

I: *So how did it make you feel to receive the texts.*

Rebecca: *I don't know. I don't know if I can remember. It's hard to say. Because I always use to receive them when I've taken my pills and they make me dopey. They're like– How do you say? They sort of sedate my mood. So it feels like I'm just always tired. When I do take it. Yeah it's hard to say.*

I: *So you can't really remember what emotions–*

Rebecca: *Na not really ae. Not from the beginning. Because they had to tester. The dose they had me on was way too high. I was just sleeping heaps, and getting texts.*

Lucy: *I think to me it's important that it comes from a person, like a person that I know, not that I remember you but, like it's someone that I know that I've met. Yeah, that's important to me. Otherwise, it just can be more spammy right*

These experiences might suggest that if participants do not have a memory of forming a positive connection with the person sending the text messages, the messages are more likely to be interpreted as spam and not reflecting genuine care.

People also described how the use of names in text messages would help build on the initial connection formed at recruitment.

Steven: *well I think the fact that– It sounds stupid because if you're intelligent you notice that it's a generated thing. But you see your name, and you see your phone number. So that immediately makes it personal. I think that part worked well.*

I: *So that inclusion of your name?*

Steven: *Yup, my name and your name. Because it comes from Olivia. Yeah. So it's really personal*

Here Steven discusses that the text messages may have been automated but the inclusion of names led the texts to feel personalised. The inclusion of names possibly highlights that the message is intended for them individually and is being sent from a person with whom they already have a sense of connection. Therefore, the inclusion of names may also be important for creating a sense that the messages reflect "genuine" care.

Amanda: *I feel like if it was someone you knew then it would work for me. Whereas if it just said "from the crisis team" I might not be as invested in it. Or it might not have the same effect.*

The wording of the text messages was another factor that the participants discussed with respect to its influence on how they interpreted the messages.

I: *what would you change or want to improve about the way we sent the text messages?*

Rebecca: *Probably not the same thing over and over.*

I: *It was too repetitive?*

Rebecca: *yeah, probably not so– Because it seems like you're a robot. And instead if you changed it a little bit, then yeah. They might actually listen.*

I: *Is there anything in particular about it that you think may have made it feel more mechanical?*

Lucy: *I guess the thing that made it feel like that was just that there was– It was so– The texts itself was so generic so you could have sent that to any person in the world and it would have made sense kind of thing. Yeah.*

Here, the general language of the text messages and their repetitive nature are described as features that contributed to messages being experienced as robotic and impersonal. However, in contrast, other participants noticed differences in the wording of each message.

Josie: *Just how the wording always changed. It just felt more personal, rather than just like, sort of like a–*

I: *generic template or a–?*

Josie: *Yeah or like an EDM* (Electronic Direct Mail used within marketing). *Yeah it just felt quite nice that it was always different. I noticed that.*

In both instances, participants highlight how overly repetitive wording leads to feeling as if the text messages are likely being sent by an indifferent computer program rather than a genuinely concerned individual. Therefore, participants described their expectations and experience of receiving the text messages as a dichotomy of being either “spammy” and “robotic”, or “personal” and “genuine”. In order to have the positive emotional impact of feeling a caring connection from the text messages in the study, participants needed to experience them as personal. Factors that participants described as influencing how they attributed the text messages included having a memory of forming an initial face-to-face connection with the sender, the inclusion of names in the messages, and avoidance of overly repetitive wording.

4.2.3 Expectations of clinical communication

Similar to how participants contrasted the feeling of care they received from the text messages with their expectations of text messaging, they also contrasted the messages with their expectations of communication from mental health professionals.

Sarah: *It also felt like I was really cared about, because they were acknowledging that I had been through stuff and they were checking up on me to make sure that I was– It felt like, it wasn't just like "Hi there, reminder you have an appointment at blah blah blah time" it was from like– I mean the text was from you but it was from like professional– It was like instead of it being like an admin kind of clinical "hi there you have this appointment at blah see you then", it was more personal, and it was nice to have the texts*

Sarah describes how her expectations of non-face-to-face, between appointment communication from mental health professionals or services are administrative in nature, such as the confirmation of appointment times. She describes her usual expectations of this communication from professionals as clinical and contrasts this expectation to the study text messages, which she describes as being “more personal”. This contrast highlights that the impact of the text messages may also depend upon people’s experiences and expectations of mental health services.

Lani: *I didn't feel like a number. Which was really cool. I actually feel like– I don't know how it came about or how it started but it was done in a caring professional way and I could feel that already. Yeah probably more of like a holistic feel to it. And it was the service, the wording of the texts was in a way where it was sensitive to the cause. I don't know it was just it was really nice. It's a nice thing to receive you know a text that where you can feel the care and the support behind it.*

Again, Lani illustrates people's desire to be seen and cared for as a person rather than treated and managed as "a number". She links the idea of not being treated like a number to the sense that there were genuine emotions being communicated in the text messages. This contrast raises the question of whether there are specific features of the text messages or the way they were sent that helped combat the sense of being treated like "a number" within a system.

Josie: *Just because the other services, I don't know. I guess you spend a lot of time waiting and– I don't know. Something about it just felt– Like I know I signed up for it and you probably do it with heaps of people, but something about it just felt like, because you just get a little text, it just felt like quite personal. Like nobody else in the whole thing makes you feel like– It just feels like an extra touch. You sort of feel like, a little bit of just like a statistic in the whole system. And I know people do care and stuff. But they've got– I don't know. So that just made me feel like a little bit more of a human, you know?*

Josie's description of being treated as a number within a system conjures an image of service users' journey from entry to exit of mental health services as a mechanical and process-based one. Josie qualified this by stating "I know people do care", however it is possible when it seems that caring professionals are just following a process that the care they express can seem less authentic. Therefore, a text message simply expressing care and concern for her as an individual (rather than serving a function within a mechanical process of moving her through the services) may shift her perception of her experience from one that is process-based to one that is person-centered.

Sophia: *I didn't expect for it to go so long, yeah I would think maybe for a few months maybe you'll do it and then– Because I'm like that kind of person, like I'll do a little bit of follow up, maybe a month later, but afterwards you kind of forget about it. I guess for me I'm still pleasantly surprised that I'll get the message yeah.*

I: *Yeah, what did it mean for you, that it did go on for longer?*

Sophia: *Oh, that really meant a lot, that it's continuing on because then, I don't feel like just part of the health or the hospital system, like "oh you've been discharged, that's it". Somebody from the hospital is still like making sure that I'm ok, and if I do need to reach out or talk to someone then I know what to do.*

Here Sophia highlights how for her, the ongoing nature of the contact reflected that there was genuine concern for her wellbeing. She contrasts this genuineness to being "just a part of the health or hospital system". This may again reflect the expectations of the limits of care when one is receiving mental health support from the public health system. Her comment that "you've been discharged, that's it" possibly reflects beliefs that mental health care is delivered in a way that follows a process ending in discharge. Therefore, the text messages potentially defied these expectations by acknowledging that, while she may not currently need more intensive mental health support, services continue to be aware of the challenges she may face in her wellbeing and that she is welcome back if she feels she needs further support.

Another feature of the text messages that participants contrasted to their usual expectations of communication with mental health service providers was the non-demanding nature of the contact.

Lucy: *I think I was just happy to not have to do anything, yeah, like I was happy that I didn't have an extra thing that I had to do, so when I got the text messages and they didn't have anything in them like an instruction. It was just like a check-in without having to call someone or text someone or do anything, so yeah it was really good.*

Amanda: *I think it sort of felt like there was someone else on the team in a way. I wasn't sort of expecting too much of you. It was just a positive quiet influence in the background. Rather than having to deal with all the other stuff that you have to deal with other professionals. Like this was the easy part to deal with.*

I: *Can you tell me a wee bit more about that in regards to how it compared to other professionals?*

Amanda: *Therapy is hard, I'm not going to lie. As much as it is a– I know it's a long term gain short term pain situation. Whereas this there wasn't really much of that pain situation. And there was no having to talk about hard stuff or anything. So it was the positives without the hard parts. Which is nice. We need something like that.*

Participant’s contrast the text messages with contact from either crisis services that focus on assessment and therefore ask many questions of service users, or with ongoing therapy that presents people with challenges to change. The study text messages are presented as different to other forms of support in that the participant can just receive them and there is no expectation to respond. This difference may help make the experience of receiving the text messages feel more personal and not just another step in the process towards discharge.

Together these examples highlight participants experiences or concerns about being treated “like a number” when they receive support from mental health services. Participants have described how if they think they are being treated “like a number” then any support they receive can feel like staff following a process and doing their job. This interpretive lens can then lead to offers of support to seem obligatory rather than reflecting genuine care and concern for their wellbeing. People discussed this using the contrast of being treated like a number within a system versus being treated as a person by another person. This contrast further underscores the importance of the human elements of the intervention if it is to have a positive impact. Elements of the text content that people identified as being helpful include the non-demanding nature of the texts. By not including questions that reflect an extension of the assessment process or pragmatic information like appointment times, the texts do not feel that they are a part of any process driving participants towards discharge. The texts do not appear to be serving any purpose or needs of mental health services other than wishing the person well. The lack of explicit motive or agenda then further creates the sense of authenticity of care.

4.2.4 Theme summary

In summation, participants discussed the positive emotional impact of the caring connection that the text messages could communicate. They highlighted the importance of thinking that feelings of care being expressed in the texts were genuine. People's understanding and experiences of text communication were factors that could impact whether the texts were seen as genuine. People discussed the importance of feeling the texts were coming from a person and not a computer. The way the messages were attributed was linked to the importance of having formed an initial connection with the sender of the text messages. Elements of the wording such as including names, and changing the wording were also identified as factors that determine whether the text messages are received as personal or likened to spam.

Another factor that influenced whether the text messages were received as genuine were people's expectations or experiences of mental health services. People discussed the importance of not feeling like just "a number". Implicit to this discussion was participants' concerns about whether mental health staff genuinely care about their wellbeing or if they are just doing their job to try to move the person towards discharge. Participants discussed how the lack of pragmatic information or assessment questions in the text messages meant that the texts were seen as expressing genuine care rather than serving a purpose of the wider mental health system through which the person was being moved.

4.3 SAFETY AND SECURITY

Most participants discussed how the text messages contributed to feelings of safety and security. In the subtheme 'feeling of security from being connected to support systems', participants discussed their appreciation of being reminded that supports were available and how this reminder alleviated fears that they had been forgotten by support services.

Participants also discussed how the messages gave them confidence to reach out for help in the subtheme 'an internal sense of safety'. Finally, participants described using this knowledge and confidence to support others in the subtheme 'paying it forward': carrying the experience of security into the community'.

4.3.1 Feeling of security from being connected to support systems

Several participants explained how they experienced feelings of security because the text messages reassured them that support was available to them. They discussed that this reassurance was helpful even when they were already aware of services, that the messages helped to reduce worries that they may have been "dropped" by services, and that the text messages fitted in with other support available creating a more tightly woven "safety net".

Lani: *It was like a reminder. A reminder of my past experiences. And yeah, you know "we're here" and that was nice, it was nice to have. And it made me feel again: secure, safe, somebody was watching out for me or on hand. All those feelings would always come every time that I received that text.*

Rebecca: *Just to know that the help was there if you needed it. Because when you're in that headspace, it's pretty hard to come out of. So yeah, you know you can talk to someone if you need to.*

Here Lani and Rebecca highlight that knowing that support will be available when you need it leads to feelings of security central to this theme.

4.3.1.1 The benefits of being reminded of what you already know

Several participants discussed how even though they were aware of and familiar with the Te Haika phone line service, it was still helpful to be reminded of its availability.

Roy: *It was useful to know that was there. I already knew about Te Haika. I didn't need to be reminded as such but it was useful to get a text to remind me that it was there.*

I: *Yeah can you tell me a bit more about that in regards to that you already knew but it was useful to get it?*

Roy: *I guess, you know when you're suffering from mental health issues, everyone's different, but when you're down, and it feels like there's nowhere to go, even though you know a lot of things, to be reminded of them is a useful experience.*

Here Roy illustrates the text messages may help shift a person's thinking away from "there's nowhere to go" and "there is no help available to me" to recognise and recall the supports that they have used in the past and are available to them.

Sarah also discusses the idea of the benefits of being reminded of things you already know.

Sarah: *It's nice to have like a professional mental health support contacting me first to say "hey there, just checking in, hope you're ok, letting you know you can call this number, thanks" you know, and it was like oh, true, I can. You know I kind of forget. Like I know it's there, of course, I know it's there, I've called it so many times I know that the hospital's there I know I've talked to this person I can– But it was like from when the professional mental health would contact me it was like a sigh of relief.*

Sarah describes the emotions she feels in connection to being reminded of available services as relief. The description of feeling relieved may suggest an anxiety or tension that might exist if people are insecure or lacking confidence in knowing where they can turn to for support. The relief Sarah describes also highlights that while a person may have accessed a service such as Te Haika multiple times in the past, it does not mean that the person has confidence or feels secure that the service will be available to them in the future. This sense of insecurity about access to services may be why some participants described finding it helpful to be reminded of Te Haika being available even when they were already aware of the service. Sarah also attributes the feeling of relief to the contact being initiated by a mental health professional. In this sense, the messages may be seen as an invitation, that the person is welcome to call Te Haika should they need support. Therefore, as has been discussed in the theme of *Caring Connection*, people's experience of the intervention may relate to their experiences and expectations of contact from mental health service providers.

4.3.1.2 Fear of being forgotten

Participants discussed how they could feel fearful of falling through the cracks in mental health services. As such, participants discussed how the text messages provided a sense of security by reassuring them that others are aware of them and their situation.

Amanda: When you only sort of have crisis intervention it's sort of usually after the fact, if you're me, because I'm terrible at reaching out before. And you sort of feel like once the crisis is over, you go back to being sort of invisible again to services.

I: And so receiving that message you didn't necessarily feel invisible to services?

Amanda: Yeah, like my struggle is still there, it's just not at the point where I need to go get help right now for it.

Amanda discusses how once her imminent crisis has resolved, contact and support from mental health services can taper off. However, she highlights how this tapering can lead to feeling like she is “invisible” to services as she continues to experience struggles in managing her mental health. By contrast, she points to how the ongoing nature of the text messages can mean that she continues to feel seen and connected to mental health services rather than “invisible”.

I: *What difference, if any, do you think receiving the text messages made for you?*

Josie: *I definitely think it made a difference because I just felt less alone. And because you get referred to all these things and then sort of over time you just sort of feel like you get a bit dropped once you’re not in emergency mode. So it kind of felt like, just like a little lifeline. So, I definitely think it helped.*

Josie discusses how receiving support after a crisis may involve being transferred between different mental health teams. She also describes how she felt she had been “dropped” when she was no longer in immediate crisis. Thinking that you have been “dropped” by mental health services may contribute to the feelings of fear or unhelpful thinking that “there is nowhere to go” for help and support. Josie’s description of the text messages as a “lifeline” may suggest that the text messages can help people feel that they are still connected to mental health services and pathways to support, even when they are no longer requiring more intensive contact with mental health services. Therefore, this “lifeline” or ongoing connection may underlie the feeling of security participants described as being associated with receiving the text messages.

Steven: *I think it meant to me that I’m in the process of healing, and that there’s a lot of things in place. So it was just a confirmation of things being in place to make it work [...] Because you know that when you’re part of the DHB or something, it* *takes time. It takes time to get an appointment, it takes time for things. So, this was an extra. A support between those things. Especially in the beginning. Between the appointments and things, it was an extra.*

Similarly, Steven discusses the time that it can take to get appointments. He describes how he saw the text messages as confirmation that there are supports in place to help him in “the process of healing”. Steven’s description again suggests that people can feel anxious if they are not confident there are supports in place for them. This experience of anxiety and insecurity may be especially salient when a person’s care is being transferred between teams or while waiting for an initial appointment. Steven illustrates the sense of security people experienced from being reassured that supports are available to them especially during transitions in care.

4.3.1.3 Multiple supports forming a safety net

A few participants discussed how having other forms of support, as well as the text messages, was critical to this sense of security. Together, all the forms of support weave together to create a more tightly woven safety net.

Tom: *I tended to mention to my GP or my psychologist or whatever that I was receiving text messages that I was receiving help you know and all those mechanisms that lock in together is a huge weight off your shoulders you know so they all go together as far as I'm concerned.*

Here Tom describes the sense of relief experienced from being reassured that there are systems in place to support them. He also highlights the importance of these multiple forms of support “that lock in together”. This idea suggests that while the text messages might provide reassurance in between the gaps of time waiting to be seen by services, it is important that there are other services in place.

Roy: *Yeah they're fine. It was a good backstop… But getting those text messages was cool. It was a reminder that Te Haika is always there and a phone number to ring.*

I: *Yeah you called it like a good backstop. Can you tell me a bit more about that?*

Roy: *Someone to talk to right. When I'm really struggling and I need to talk to someone who's a professional and I can't wait for that professional to be available for me to meet with them, I can ring Te Haika and someone can talk me through stuff.*

Roy further describes the idea of interlocking supports. He describes the role of the text messages as a reminder that the helpline is available when you are experiencing distress at an intensity that requires immediate support rather than being able to wait for your next face-to-face appointment. In this sense, the text messages supplement the support that is available over the helpline, and the helpline supplements the support that is available from the face-to-face appointment. Together, this creates the "backstop" or sense of security that regardless of the time, place, or situation, there will be some form of support available.

4.3.2 An internal sense of safety

While people discussed the sense of security in the context of being reassured of services and systems being wrapped around to support them, people also discussed security in an intrapersonal sense. Specifically, they discussed how the text messages supported their self-confidence in knowing how to navigate any future crisis as well as overcoming internal barriers to asking for help.

Tom: *Well as your sort of slowly recovering there's something, there's one thing that you don't know. The great unknown is whether something from somewhere will come in from out of the blue and rock your world. And you go back into that crisis you know. And with the text messages, the first thing that you think about, and actually the first thing I did think about is– Because I actually thought about those crisis teams and those numbers, and I told my GP "if things go downhill I know who to call", you know? And that's really important, because actually I think you can make a really fatal mistake in between this period of thinking of taking your own life and forgetting actually that there is a number that you can call.*

Tom describes how being confident that there are systems in place to offer support also allows for building on his own confidence of how to navigate a crisis situation. He describes the anxiety or "the great unknown" of feeling like you are only one stressful event away from being back in crisis. However, the idea of possibly experiencing another crisis may be less anxiety provoking if you have confidence that you know how and where to get help.

Tom also highlights that in moments of heightened distress you can forget about the supports available. This idea has been discussed above in regard to needing reassurance that supports are available. Here Tom points to the importance of also building confidence in yourself that in the event of a crisis you will know where to turn.

Lani: *For me no matter how good life could be going, there could be that one day that you know, something happens and I would need to resort to giving Te Haika a* *call. And knowing that I'm getting the support through the texts would just make it that much more easier to pick up the phone.*

Here Lani discusses the comfort and security of knowing that if she were to experience another crisis, she has a plan for what to do. She further notes how the text messages support her in having the confidence to execute that plan. The text messages "make it that much more easier to pick up the phone". In that sense the text messages are supporting a sense of security in herself that she is able to make that phone call. In this way, the internal feeling of safety participants described can be seen as having two elements: confidence that they will know who to call if they experience another crisis, and confidence that they will be able to make that call.

Lani: *If it got to that point where I went through another episode and– Yeah just the constant, that constant reminder. I think sometimes I need to be reminded. Because I won't ask. I'm the type of person that really won't ask for help until it's hit the fan. So having that constant reminder will always reiterate to me "make that call if you need to, they're here to help you". And that makes me feel a lot more secure*

Lani discusses how the text messages might be seen as encouragement or permission to ask for help when it is needed. If people are able to seek help when they begin to struggle with low mood this may be able to prevent an escalation to full crisis. Of note, Lani stated that she had used the text messages to call Te Haika during the study period. She explained that she was able talk through the stressors she had experienced and developed a plan for her ongoing support over the phone. She explained that this was a helpful de-escalation for her that meant she did not need to return to the emergency department or have a face-to-face appointment with CRS.

Sarah: *I just found it so helpful like the feeling like I could talk forever and ever because my brain goes like 1000 miles an hour so yeah– I was trying to think–*

I: *So it was kind of like a reminder that there is space that you can talk in that way?*

Sarah: *Yeah, that that it was a regular and friendly, personal reminder that I can offload absolutely anything that I want in a safe space and that I wouldn't be worrying– That was the nice part! That I wouldn't be worrying you or Te Haika or whatever if I called.*

Sarah reiterates the benefits of being reminded that supports are available. She particularly emphasises that her experience of the text messages gave her confidence that she "wouldn't be worrying" anyone by seeking support from Te Haika. Her wording suggests concerns about being a burden on others and that these concerns may deter her from seeking help. The text messages may be seen as giving permission to use support available to the person. In turn, this permission may help build people's confidence that they will be able to make the call if they need to. Interestingly, while Sarah stated that she could "talk forever" she denied having used the Te Haika phone number. Simply being aware that she has a "space" to talk without needing to worry about burdening others may provide enough relief rather than actually needing to talk.

4.3.3 "Paying it forward": Carrying the experience of security into the community

Participants also discussed how with their knowledge of support systems being available and feeling confident to utilise them, they have also been able to support their whānau (family) and community. "Paying it forward" was described along a continuum from providing emotional comfort of being checked on, to a level of recognising the need for intervention and directing others towards crisis supports.

Sophia: *It was very helpful like it's just a little thing, but it can really make your day or make your moment. And it's kind of taught me as well to do that a little bit with my friends and family just to say "Hey, how are you going?" you know, "Making sure that you're alright" so that's kind of like the effect on that. It's just made me– That sounds terrible but it made me kinder. Haha yeah like it's just, you know, I guess paying it forward, and I guess it does– Like doing a little thing it can mean so many things, it can mean a lot to someone, so that's what it was for me.*

Sophia describes her desire to "pay forward" the positive experience of receiving supportive text messages by sending similar messages to her friends. In doing this Sophia may help her friends to feel they also have a safety net of social supports around them. Sophia describes how her experience of receiving the text messages has empowered her to want to engage with and support others who might be experiencing distress. Sophia explains that sending a text message is only "a little thing", but that the impact can be more substantial and far reaching than expected.

This far-reaching impact is also evidenced in participants' talk of encouraging whānau to access mental health support.

I: *Yeah, did you call Te Haika at all?*

Rebecca: *Um. No. My cousin did though. Because he was being– He said, "I wanted to check out" and I was like "Here's the number! Here's the number!" He rung them too.*

Lani: *I have a cousin who's like going through the same thing, and he was going through a downer and then I said, "are you like at any in any way connected with Te Haika?" and he was like "ah yeah" but like laughed about it. And I was like "nah seriously, you need to give them a call", I was like "honestly it will probably be one of the best things that you can do". And he was like "are you serious?" and I was like "yeah!" I was like "Yeah! I'm actually using it! I receive the texts", and he was like "no way" and I was like "yes way I am and there's nothing to be ashamed you know". And he was like "Woah!"*

Both Rebecca and Lani describe recognising whānau experiencing low mood and encouraging them to seek help. Lani explains how she discussed how she was receiving supportive text messages to attenuate feelings of shame that may have inhibited her cousin from seeking help. In both examples, participants were able to use their positive experience of being connected with mental health supports to support their whānau. In doing this, the sense of security may be extended beyond the individual to help promote a sense of security within communities.

4.3.4 Theme summary

The theme of *Safety and Security* related to participants feeling confident in having support systems available to them and in utilising them where appropriate. As was seen in the theme of *Caring Connection*, participant's expectations and experiences of receiving support from mental health services were contrasted to their experiences of the text messages in the study. Specifically, they discussed their concerns about losing connection or support from mental health services once they were no longer in crisis, or while they were transitioning between different services. In contrast, the text messages provided ongoing reassurance that supports were available to them, which in turn made them feel safer and relieved. They also discussed how having multiple avenues of support create a more tightly woven safety net.

Regarding confidence in themselves, people discussed factors that could inhibit them from “making the call” or asking for help. In this way the text messages were described as providing reassurance that it is “okay to ask for help”. Therefore, the theme of *Safety and Security* also related to people feeling secure in themselves; that if another crisis were to occur, they would be able to pick up the phone and keep themselves safe. Finally, participants discussed how their confidence to navigate future crisis situations was applied to supporting others through crisis. In this sense the theme of *Safety and Security* extends beyond the individual to include how whānau and social systems can be more secure.

4.4 REFLECTIONS ON RECOVERY

The theme of *Reflections on Recovery* mirrored the ways participants discussed how receiving the text messages fit alongside their journey of recovery after crisis. These discussions centred around the thoughts and reflections participants recalled having after receiving a text message. In the subtheme ‘reflecting on the moment’, people discussed how the messages would prompt them to consider their current wellbeing, and what they need to do to look after themselves. Additionally, people discussed their thoughts on their overall recovery progress in the subthemes ‘reflecting on time passing’ and ‘reflecting on where you want to go’. In the subtheme of ‘self-efficacy’, participants discussed how the non-demanding nature of the contact reinforced their sense of their ability to navigate their own recovery journey. Related to this was the subtheme of ‘preference for text messaging’ as a less demanding and invasive form of contact compared to phone calls. Finally, participants discussed how each person’s recovery journey is different, and therefore there is no ideal predetermined frequency or duration of messaging in the subtheme of ‘there is no “one size fits all”’.

4.4.1 Reflecting on the moment

Participants discussed how the text messages could prompt them to pause in the moment they received the message and consider how they were feeling.

Sophia: *I found it helpful, I think it's just, sometimes you can get lost in the day or whatever, and so that kind of like, I guess sometimes when I see those texts it just makes me stop to think a while and be like "am I doing alright, is everything ok?" so it really just kind of I guess anchors me in. […] When I catch that text, and I read that text, I'm like "oh". Like I guess it just gives you a little bit of space to think like, "do I need to talk to somebody about how I'm feeling? How am I actually feeling?" so it really just kind of, makes me sit down and think for a moment, to really think about myself for once, and make sure that I'm ok to continue on through the day, or just take a little break, yeah.*

I: *Just to sort of reflect on–*

Sophia: *Yeah! Reflect, yeah! Just yeah, catch my breath, and just yeah make sure that I've got everything that I need to keep going rather than just– Because I use to just keep going until I ran on empty, and even then, I kept running, but now I just, you know I want to make sure that I'm 100%. Yeah.*

Sophia describes how the text messages would prompt her to ask herself “am I doing alright?”. She describes a function of the text messages as promoting her self-awareness of her emotional state. She states that this could then prompt her to engage in strategies to manage her mood such as “take a little break”. Therefore, while the text message might not prompt her to seek help by using the attached crisis line number, it did promote her to actively care for her own wellbeing.

Hana similarly reiterated the idea of the text messages leading to awareness of the present moment when she said “It affected my day because it, it just– Well you know, maybe not your day but the moment. But yes day, because that moment made then another moment”.

4.4.2 Reflecting on where you want to go

Participants also discussed that the text messages prompted them to reflect on managing their wellbeing, not just in that moment, but more broadly in their lives. Josie described the encouragement she felt from the text messages as “It felt like I had a little bit of a cheerleader”. Similarly, Lani said “It was like, ‘Oh yeah, that’s right, I’ve got this!’”. Both of these examples show how the text messages were seen as encouragement and reinforcement of managing their mood as part of their recovery from crisis.

Sophia: *It was just, it's like a little nudge really, just to make me keep going. Yeah.*

I: *Yeah in that sense, did it change your experience or your motivation to engage with other follow-up or other supports?*

Sophia: *I think so, because I'm the type of person that, for example, if I go to the gym, or like do yoga, or whatever, like I can't do it by myself really. I have like my neighbours and my friends, we'll all go together, so it's good to have that call or text once in a while to be like “let’s go do something”, yeah. So it's kind of like that in a sense where it's “don't fall off track and just keep on going with your recovery”.*

The text messages did not include wording directing people to engage in any recovery oriented or wellbeing activities. However, Sophia describes how the text messages could bring to mind her own goals for managing her recovery and thereby remind her to not “fall off track”.

Steven: *The text message for me was just a “Hey, we’re there, do you need help? There is help”. So it was for me a message of, “Go on, do your thing, very good, but if you’ve got a problem, there is help”*

These interpretations of the text messages possibly reflect a positioning of the participant as the expert in knowing what actions they need to take to continue to progress their recovery from crisis. While no directions or instructions were included, the simple encouraging words of the text messages may have helped participants bring to mind what is important for them to do.

Tom: *They also remind you, "oh that's right I've got to see that counsellor, or I've got to see that psychotherapist, or I've got to see that psychologist, don't forget" Because it's so easy to just go "Oh, I'm alright now, I don't need this anymore" You know?... [the text messages] remind you "hey, don't forget that psychotherapist, don't let that slip your mind, that's the endgame, you know. Head towards that direction, remember that".*

Here Tom describes how the text messages would remind him that he needs to continue attending appointments for private mental health support. He discusses how once the intensity of crisis is over, it can be easy to lose motivation to engage in such support but how the text messages would prompt him to think about the “endgame” and to keep heading “towards that direction”. This description highlights how continuing to engage in therapy was made salient to him in response to the text messages as this is what he saw as important for his recovery.

> *Amanda:* *I think, having it ongoing means that when things might be a little bit low, and then you get that text message then that sort of positive feeling comes up and can help a little bit and it reminds me of the sort of direction I want to be going in, and not the one that my brain is telling me would be a good option at that point in time. And when you only sort of have crisis intervention it’s sort of usually after the fact, if you’re me, because I’m terrible at* reaching out before.

Again, Amanda describes how the text messages can lead people to reflect on the “direction” they want to be going in contrast to the direction “that my brain is telling me would be a good option at that point in time”. This contrast may suggest that Amanda sits with an internal tension between thinking of suicide or maladaptive coping strategies and thinking of adaptive ways of coping with distress. As Josie described, the text messages may then serve as a “cheerleader” or encouragement that she is able to engage in adaptive coping and take steps in “the direction [she] wants to be heading”. Amanda also makes the comparison of receiving this small support when she is feeling a “little bit low” rather than having “crisis intervention… after the fact”. In this sense she describes the text messages as possibly reinforcing her proactive coping with distress rather than having her distress escalate then receiving support once she is already in crisis.

4.4.3 Reflecting on time passing

Participants also discussed the text messages serving as a marking of the passage of time. They talked about how this could prompt them to think about how far they have come since their crisis presentation and recruitment to the study.

Amanda: *it would make me think that it's been a while since that happened which for me is quite a significant thing. It usually happens every three to four months. Whereas now it's been six months. So yeah it was sort of a reminder that I'm still doing alright […] I think it sort of helped as a benchmark of I got through another two weeks, and another two weeks, and another two weeks. So, it was almost like a little counter. Like a personalised– Well, not personalised, but a regular counter of things were still going ok. It wasn't just being offered in the crisis situation, that it was being offered when things were ok as well.*

Amanda discusses how she had identified a pattern of her having crisis presentations to the emergency departments every three or four months. However, she identified that she did not have a crisis throughout the study period. She also discusses how the text messages marked the passage of time and led her to reflect that she made it through that much time and "things were still going ok".

I: *Did any thoughts or feelings come up?*

Lucy: *Oh, I kind of think about how I was getting better, because yeah, it was kind of a privilege to be able to not worry about them because I felt like I was getting better.*

I: *When you say to not worry about them can you tell me a bit more about that?*

Lucy: *It was because they reminded me of my mental health and my mental health problems.*

I: *So they'd serve as a kind of reminder of what you'd gone through?*

Lucy: *Yeah and like a little check-in, like in my head, to say to kind of assess where I was.*

Again, here Lucy discusses how the text messages led her to reflect on how she felt she was managing her mental health. She suggests that these moments would reinforce in her a sense that she "was getting better" relative to the difficulties she experienced with her mental health prior to her participation in the study.

4.4.4 Self-efficacy

The theme of *Reflections on Recovery* included participants' discussion of how they owned the process of recovering after crisis. Specifically, they discussed how the text messages as a low intensity, non-demanding intervention supported their autonomy in navigating their own recovery.

I: *Can you tell me a bit more about how receiving the text messages fit in with the other support you were receiving?*

Steven: *I think they are all empowering. Because it's not fluffy words, it's to say, "you need to take this step, if you need help, call this number". So it's empowering.*

I: *Can you tell me a bit more about that?*

Steven: *It's not just somebody deciding, we're going to do this for you, and so, the problem is yours, you're going to solve it, but we are here, there is help. But it's not going to solve your problem, but there is help, if you need it. A safety net.*

Here Steven describes how the text messages highlight avenues of support while at the same time giving participants the space to decide for themselves if they “need to take this step”. In this sense, Steven describes the text messages as empowering as it leaves the decision-making in the hands of the participant.

Lucy: *It preserved my autonomy, so it was like "call this number" and then I knew it was there if I needed it but no one was intruding on my business, so I really like that, and I didn't feel an obligation or guilt, so I really liked that kind of thing about it.*

Lucy similarly describes the importance of the text messages being non-intrusive, further highlighting the importance of participants having space to navigate their recovery in a way that suits them. It is possible that if the messages included directives then this would have led to feelings of obligation to comply and guilt if the person chose to ignore them.

4.4.5 Preference for text messaging

Related to the importance of self-efficacy, participants discussed their preference for communication via text messaging as a form of support.

I: *So if it had been maybe delivered through postal mail?*

Lucy: *No, no that's scary. Like the thing is with text is that it's better than phone calls and it's better than letters because I don't get anxiety about text messages. But I do get anxiety about phone calls and letters because they're scary. Especially like private numbers and that kind of thing, it's awful!*

Here Lucy described her experience of anxiety in response to unexpected phone calls, something many participants mentioned. This anxiety might be related to phone calls or letters being interpreted as more intrusive than text messaging and being associated with unwanted feelings of obligation or guilt as Lucy reported above. Caring contacts interventions may be well suited to delivery by text messaging as a less intrusive mode of communication.

I: *Yeah do you have any thoughts about it being text opposed to like a postcard or email or call?*

Sophia: *Text is always the quickest, and like everybody has access to a mobile phone. Emails would be good, but then not everybody has access to the internet, so I think the text is perfect… Yeah, but I know like I'm not like, I guess I'm part of the generation like I don't like being on the phone heaps so text is great.*

While Sophia attributes her aversion to phone calls and preference for text messaging to being a part of a younger generation, older participants such as Steven also expressed the benefits of delivery by text messaging.

Steven: *It answers the whole thing of technology and things. But it's an easy technology. Everybody has a mobile phone now. So it's not a complicated tricky thing where there is usernames and passwords and things. Anybody can benefit from it.*

Here Steven highlights that mobile phones are easily accessible and create an opportunity for linking people into supports. However, using apps or websites can be complicated whereas text messaging is relatively simple.

Together these extracts may suggest that the emotional responses discussed in the themes of caring connection and security are related to participants receiving support through a means of communication that feels most comfortable for them. Text messaging may represent a form of communication that allows participants to remain feeling connected while also providing, as Steven described, “ongoing support without being full in your face”. The distance of not being “full in your face” allows participants to navigate their own recovery process.

4.4.6 There is no ‘one size fit’s all’

When discussing ways the intervention might be improved, participants continually highlighted how people’s needs change as they begin to recover from crisis, and that each person’s need will be different. As a result, participants emphasised the need for any intervention delivered in this way to be done collaboratively with service users in a way that will be adaptable to the service users’ needs.

Roy: *You know that’s person specific. I don’t know how long. Sometimes, you know, how long is the right long? You know? But you know, when you suffer from mental health illness, probably years, you know. But it’s about when people are stable. And sometimes when they’re not stable it might even need to do something about it. But can’t you link– If someone rang Te Haika, can you send them a text follow-up for the next three weeks? Or three months even?*

I: *That would be good?*

Roy: *Yeah, I reckon. Like touch wood I don’t need to go to Te Haika or seek serious mental health solutions through A ‘n’ E or other things like a hospital ward but there will be times where I might struggle and when I ring Te Haika just to check in or when I need someone to talk to because I’ve got no one to talk to at two in* *the morning on a Sunday. Can that trigger texts to go for the next couple of weeks, just a short period of time, just a text saying that "hey, just checking in" just the same text you've got there. "If you need someone to talk to ring Te Haika" just as a thought, just a reminder.*

Here Roy emphasizes that the length of time that someone would benefit from the support of the text messages will be dependent on the person's individual needs. He also suggests that people who have stopped receiving the text messages may wish to have this form of support reinstated should they have a period of heightened vulnerability. The idea of people being able to self-determine how long and how often they get the text messages may also relate to how the messages can help promote a person's sense of empowerment and self-efficacy in navigating the challenges of recovering after crisis.

Amanda: No, I think some people– Well everyone is different, so what works for one person isn't necessarily going to be helpful for someone else. So I think it's not forcing things on people is important

Hana: Maybe even just giving someone a call "Do you want to have a chat?". Yeah, yeah if it was more like– The texts were great but maybe call just to see? "Do you want us to keep going?" You know? Like you don't know like it's just gone six months and you don't know the journey. Yeah. So maybe do just a quick, "Do you want us to call, how are you going? Are you ready to– Do you need this? Or is it making you feel better" or something, "do you find the texts nice or annoying" or something you know?

Amanda and Hana highlight the importance of having a pathway for people to provide feedback on their experience of the text messages to ensure that it is not a form of intervention being forced on them.

4.4.7 Theme summary

Together, the theme of *Reflections on Recovery* demonstrates participants describing how the text messages could prompt self-reflection on their process of healing, and the importance of participants having a central active role in that process. Participants discussed how these reflections could include pausing to reflect on their coping and emotional needs in that moment, reflecting on the direction they want to be heading in, and reflecting on how far they have come in their process of recovery. In this way the intervention leaves the participants in control of their own recovery, and trusts that participants know what they need to do and can do what needs to be done to look after their wellbeing and keep themselves safe. Participants discussed how this trust made the intervention an empowering and non-invasive experience. The importance of the intervention being non-invasive was also linked to participants' preference for text messaging as a of communication that they were able to engage with on their own terms. Finally, participants discussed how each person's process of recovery will be different and their needs will change across time. As a result, participants concluded that there is no ideal timing or frequency and that this kind of intervention should be delivered in a flexible way to adapt to the individual's changing needs.

4.5 LIMITATIONS

Across the interviews, participants' talk of their experience of receiving the study text messages ranged from neutral to positive with most participants agreeing that it was a valuable additional support that should be offered to service users. However, participants were also asked specifically if they were able to identify any downsides of receiving the text messages. This theme does not represent broad patterning across the data set, rather, these were common or novel insights into specific questions about the downsides of receiving the text messages. As CC delivered by text messaging is a relatively novel intervention that is beginning to be implemented in more broad settings (Suicide Prevention Resource Center, 2015), it is critical to consider the possible harms and risks associated with this type of support. This theme represents a collation of the experienced and possible negative impacts of receiving supportive text messages that participants identified.

4.5.1 Reminder of the crisis

Participants identified how the text messages could serve as an unwanted reminder of their crisis.

Josie: *I guess like, in a way it would like remind me of what happened. I went through a phase of just wanting to pretend it didn't happen, which is like, obviously not the best way to deal with it. But yeah then it would sort of remind me that there is help there and yeah, just like I said, that there's someone that cares.*

I: *Yeah you said that it would make you think that someone cared, were there any other emotions that would come up?*

Josie: *Um, yeah like I guess there was like a sense of shame. But then I felt grateful, and then yeah. It was kind of a mix. But kind of toward the– Like at first, I think it was kind of a concoction of emotions. Like shame and then sad but happy that I was getting the message and it was nice and then toward like– As I started feeling a bit better they would just kind of make me smile like oh yeah that's real nice.*

Josie describes how initially after her crisis she did not want to acknowledge or reflect on what had happened, possibly preferring to be future-focused and "pretend it didn't happen".

However, she explains how the text messages prevented her from being able to do this as they would remind her of her experience. She describes how, in the initial period of receiving the text messages, this could bring up a wide range of emotions including shame. However, Josie explained that this emotional reaction changed across the study period as she began to feel better. This experience might reflect an important consideration that in the initial weeks after crisis, people might feel heightened emotional lability and experience feelings of shame as the text messages remind them of their crisis. Therefore, when offering this form of support to people, it may pay to discuss this possibility with them when they are deciding if this is a form of support they may want.

Sarah: *maybe, if I was having a really good day and not thinking about it at all and I'd be like "whoo" and then I'd get it and be like " oh yeah, like I was suicidal at that point" and it would kind of take me back for a moment. But then I kind of forget about it, because it was just a text, it wasn't like a long conversation, or like a long meet up with a friend, it was just like a, bloop "here's a reminder" so it was just like short term, you know like little snippets of things over a long period of time.*

Sarah similarly discusses how the text messages could remind her of her experience of having suicidal thoughts. She explains how this was an especially unwelcome reminder when she was in a positive mood. Similar to Josie, Sarah qualifies this by highlighting the brief nature of texts allowing her to quickly move past the reminder.

Lucy also identified how having a reminder of your crisis may be unwelcome depending on what social situation you are in.

Lucy: *There is a thing that I thought about is that just being at work I don't necessarily want my work to know about my mental health. They do, but not every workplace I've been at has known about that, so it was just– I guess it wasn't too intrusive, but I just thought if that popped up, I would have to explain it yeah. Yup, that was the only thing I could think of.*

Lucy had also explained that her phone was synced with her computer, making her text message notification visible on her computer screen when she was at work. This example highlights the importance of discussing with people when would be the most appropriate time for them to receive the text messages, and discussing with them who might see their phone notifications and if they may consider adjusting their message notification settings.

Tom explained that the way the text messages reminded him of the crisis is what led him to discontinue the text messages.

Tom: *The reason I stopped is because I wanted to– It reminded me that I've got, you know, major hurdles. And I actually tried to forget that I had all these issues. But that was a struggle to actually text "stop", you know it was like am I doing the right thing? Will I need this text message in a couple of weeks' time? Or you know, if what, you know… So I think that was at a point where I was just exhausted, I had enough and I didn't want to remind myself of what happened that day when you met me, which was probably, you know, one of the hardest days.*

Tom explains that, when he presented to the ED in crisis, it was “one of the hardest days” and how challenging it was for him to be regularly reminded of that day. He also explained his ambivalence about stopping the text messages due to concerns that he might need that support in the future. These examples of how the messages can be an unwanted reminder of crisis highlight the importance of having an easy way for participants to stop receiving the text messages.

4.5.2 The texts could bring up feeling of loneliness or isolation

Participants discussed the ways that the text messages could exacerbate feelings of loneliness or isolation.

Roy: *It was okay. It wasn’t destroying me but sometimes I got a message not long after waiting to– After trying to ring someone, and that could have actually been working the wrong way. You know.*

Here Roy describes how rather than fostering feelings of connection, security, or empowerment in that instant, the text message may have exacerbated any feelings of being alone and helpless. As was discussed in the theme of *Safety and Security*, this example highlights the importance of this intervention being delivered alongside other forms of support.

Lani: *But I do remember there was a moment where I wasn't receiving them. And I think it was around the time that I miscarried because I can't remember. Or maybe that was just me? Because I can't remember it going through. But yeah nah. At this stage, I can't fault it on anything… Nah the only downside was when I stopped getting the weekly– Yeah. That would be it. Because I noticed it. It– did make me feel like maybe I had dropped off the service.*

Similarly, Lani describes the insecurity she experienced when the text message frequency began to taper off. She explains that this was contextualised by her facing life stress at the time. That may have been a time when she would have benefited from receiving more regular support. This example suggests that it may be important to remind people when the messages will change in their frequency and possibly give people the choice to continue to receive them more frequently.

Tom: *and also that when text messages come through as you know the human response is sometimes "oh there's a message" and you know " I must get that" and there's a little bit of anxiety. Anxiety has not been my friend so I've, you know– And those messages when they come through you think it might be your ex, saying "Hey, how you doing? want to meet for a coffee, let's talk" You know, when it's not, it's actually... So, you know, so you go through those periods where you just want to shut off.*

Tom explains how text messages can bring up feelings of anxiety, especially if you are anticipating getting a message. In this sense, if a person is hoping to get a message from a friend who is reaching out, it might then be especially disappointing to receive a text message that may remind you of your crisis.

4.5.3 Sometimes no one is able to get through to you

Participants Hana and Roy spoke of times when they felt they were deeply entrenched in negative thinking. They explained that, in these moments, no attempts to create an emotional connection with them would be successful.

Hana: *They were always nice messages. But sometimes I get to a point where you could give me the world and I'd tell you to fuck off. Yeah yeah, so, not for long. I'd be over it pretty quick… Yeah, so it's just sometimes, I do get– It would take the world to get through to me. I'm quite strong like that. Like stubborn haha or whatever you call it.*

Roy: *You know sometimes when I was really down, there was nothing you could do. It wasn't your fault. I just fell further down. I don't think it was about the text message. I was already down in the dumps anyway. So there's not much anyone else could do about that.*

Both Hana and Roy's descriptions highlight the limitations of the text messages in shifting deeply entrenched beliefs during intense episodes of low mood. The limitations of the messages emphasize the importance of the intervention always being implemented alongside other forms of support.

4.5.4 Not being able to reply

Some participants also discussed how they would have preferred to be able to reply or have further support over text messaging.

Sarah: *one thing that was kind of hard was that I couldn't really– It was like you would message me say "hey you can have this support" and I kind of wanted to be like "thank you" and then if I had like a question? Because I know that I could call the number but it was almost like I kind of wanted to reply and be like "that's so nice" or like "thank you so much for that" that's really, you know. So not being able to reply was kind of a bit odd but yeah, yeah it was really helpful*

Sarah describes how it felt “odd” not being able to make small replies expressing gratitude. Amanda raised a similar point noting how this initially felt like going against social convention.

Amanda: *Maybe initially it felt weird to not reply, but that’s more around sort of social convention that if someone texts you, you’re meant to reply. But I’m terrible at replying in general. And then I think once the habit of it just popping up and then reading it and just keeping going, it just became what you did. It didn’t feel rude that I wasn’t texting you back.*

When participants were recruited, they were informed that due to the small nature of the study we were not able to offer ongoing text support and therefore if they replied to the messages, we would not respond further. Interestingly, some participants did routinely reply to say thank you. Having the capacity to provide text support may have also helped the messages to be received as personal and caring rather than robotic, due to the typical social convention of replying to text messages.

Josie: *Well like it was nice and stuff, but you can’t really just reply and have a chat. Which is fine because it’s like, you read it and sort of be like– You think about calling Te Haika and then you’re like “ahh I don’t know”, you know? But I think, having the sort of support of the text. messages, if they came from the whole thing, well then you’d have less of a sort of a negative association with getting in touch? Even though every time I’ve called Te Haika they’ve been amazing.*

Here Josie explains her desire for text messaging support to be available across mental health services including the Te Haika phone line. She explains how it can be difficult to reach out for help and therefore services might be improved if people were able to reach out for help by texting rather than making a phone call. The desire to seek help by text messaging may relate to the feelings of anxiety conjured by phone calls as discussed in the theme of *Reflections on Recovery*. This example possibly reflects feelings of alienation and incongruence of the study when participants were engaged with by text messaging but were directed to a phone line if they wanted further support. The intervention may be improved by being able to offer further support over text messaging if people are engaged via text messaging.

4.5.5 Theme summary

The theme of *Limitations* highlights important considerations of how supportive text messages can "work in the wrong way" and bring up negative emotional experiences for some people. Specifically, some participants discussed how the text messages would remind them of their crisis when they wanted to forget it, and how the text messages could make them feel lonelier. Some participants explained how the text messages could exacerbate their mood and were unhelpful in those moments. Finally, participants mentioned their frustrations with not being able to receive further support over text messaging. While these issues represent specific examples rather than broader trends across the dataset, they raise important considerations for how supportive text messages can be better implemented. Specifically, they raise considerations that may be important to discuss with service users when offering them this sort of support.

4.6 CONCLUSION

These themes reflect participants' descriptions of the mental and emotional impact of receiving supportive text messages after crisis. Given the low intensity of this form of support, participants described how the impact can be both minimal and meaningful. In the theme of *Caring Connection*, participants described how they were aware that people care for them, but receiving a message that showed a person cares about their wellbeing still had a meaningful emotional impact. Similarly, participants discussed being aware of supports available to them, but that being reminded of these supports brought about feelings of safety and security for them, which could even extend to supporting others. While these emotional impacts may be minimal, in the theme of *Reflections on Recovery*, participants identified how the non-intrusive nature of the support meant that they saw themselves as central agents in their recovery. Therefore, the low intensity of the support was seen to promote self-efficacy. However, participants also identified instances when the messages could lead to feelings of isolation as well as other possible unintended downsides of this kind of support highlighted in *Limitations*. In the Discussion (Chapter 6), these themes will be considered in the broader context of the existing literature on caring contact interventions, and how the current findings may inform future implementation of this form of support. The next chapter outlines the secondary study exploring crisis mental health staff attitudes towards features of CC via text messaging and the innovation culture within their team.

Chapter 5: Secondary study of facilitators and barriers to implementation

Previous chapters have emphasised the importance of knowledge translation in the development of interventions such as CC via text messaging. Specifically, it is important to incorporate the unique viewpoints of service users and service providers in order to implement new innovations successfully (Kemp, 2019). Given the limited meaningful service user involvement in the development of CC, the aims of the current project primarily related to promoting service users' voices. However, challenges faced during recruitment highlighted the need and opportunity to also articulate service provider and organisational factors that may affect the implementation of CC via text messaging. This chapter begins with a summary of service provider engagement and the challenges experienced in recruiting. Next is a brief summary of literature related to the challenges in conducting research and implementing programmes for suicide prevention. The section ends by outlining the aims of the secondary study. The methods section outlines how knowledge translation and critical realism informed the secondary study and is followed by descriptions of the procedures and ethical considerations of the study. Results from the secondary study are then presented and discussed.

5.1 INTRODUCTION

The researcher partnered with the local Crisis Resolution Service (CRS) for recruitment of participants for the primary study. During initial consultation with CRS management staff, it was identified that a significant proportion of their service users would meet inclusion criteria for the study. Four shifts a week over three months was assumed by management staff to be an ample recruitment period to reach the target of 30 participants. However, even after adding an additional recruitment shift, and changing the timings of shifts in an attempt to better align with discharge times, only 20 participants were recruited to take part in the intervention during the available time. During the recruitment period there were at least seven people seen by CRS staff who appeared to meet criteria but were not informed about the opportunity to participate in the study. When staff were available to discuss reasons for not informing service users of the research opportunity, explanations included: people leaving before staff had informed them, staff forgetting to inform them, or staff believing that the intervention would not be helpful for that person. These challenges highlighted the need and opportunity to formally identify barriers and facilitators to research engagement and implementation within CRS.

5.1.1 Literature review

There is demand and political will for improvements in suicide prevention (Ministry of Health, 2020; Patterson et al., 2018). However, there are significant challenges to conducting suicide prevention research and implementing new programmes. A thematic analysis of mental health clinicians' perspectives on implementing a 'Zero Suicide' initiative identified workplace culture as a significant barrier to implementation (Porter et al., 2021). Similarly, in a review of the impact and implementation of suicide prevention initiatives in Australia, Dabkowski and Porter (2021) found that clinicians can have deep connections to existing practices, time constraints limiting their opportunity to learn about latest Evidence Based Practices (EBPs), and pragmatic barriers leading to poor compliance with EBPs. These findings illustrate the importance of accounting for workplace culture, existing practices, and pragmatic limitations when considering implementing new programmes.

Similar challenges have been documented when conducting research on suicide prevention. Qualitative research in New Zealand has documented the challenges when clinicians act as intermediaries in recruiting service users for suicide prevention research (Knox et al., 2016). Specifically, the authors identified clinicians' paternalism and perceptions of risk of research participation for their patients as factors that negatively impacted research collaboration. The authors concluded that it is important to consider clinicians' perspectives about the relative risks and benefits of research participation. Intuitive appeal and similarities to current practices have been found to improve clinicians' attitudes towards, and adoption of, new EBPs (Aarons, 2004). To create a robust implementation plans for CC via text messaging it is important to identify clinician attitudes towards text messaging and extended follow-up contact as key components of CC via text messaging, how these are similar or different to current CRS practices, as well as their overarching attitudes towards suicide prevention, research utilisation, and innovation.

Accordingly, the broader aims of the secondary study were to identify facilitators and barriers to research engagement and implementation processes in CRS. Specifically, the aims were to identify i. provider level attitudes to key elements of CC interventions, and ii. organisational culture factors relating to research engagement.

5.2 METHODS

5.2.1 Knowledge translation and critical realism

Within knowledge translation a tension exists where focus on culture as context can negate any agency of individual clinicians, and alternatively focusing on individual clinician attitudes and behaviours fails to recognise how these exist and are perpetuated within a larger system (Kontos & Poland, 2009). It is proposed that critical realist approaches are able to "remedy the tendency to either strip agency of structure or structure of agency" (Kontos &

Poland, 2009, p.5), because critical realist approaches to causation and assumptions of reality can be stratified into the real, the actual, and the empirical (Bhaskar, 1998). These assumptions have been detailed in Chapter 3, section 3.2.

Critical realists are interested in how patterns within social structures can facilitate or block outcomes in naturalistic open systems (Leung & Chung, 2019). This philosophical position is in line with understanding how the current work and practices of CRS may facilitate or inhibit successful adoption of new interventions such as CC via text messaging. Additionally, understanding current research utilisation and engagement with suicide prevention initiatives will facilitate understanding organisation-level factors.

The aims of the secondary study related to describing contextual factors that may impact implementation in CRS. These aims align with a qualitative descriptive design. The aims are to identify provider level attitudes to key elements of CC interventions, and organisational culture factors relating to research engagement, rather than analysing latent constructs that may maintain these factors. Given the aims were limited to identifying explicit factors, a content analysis was conducted rather than the more interpretive thematic analysis that was applied in the primary study.

5.2.2 Data collection

Key informant interviews were conducted with clinicians from CRS to explore their attitudes to key elements of CC via text messaging. Given the lack of published RCTs of CC via text messaging interventions, there is not currently one standard protocol for intervention delivery. Therefore, clinicians were asked about their attitudes to and current use of different elements of CC via text messaging (for example text message communication, extended follow up contact, and non-demanding communication) as these can affect the intuitive appeal and uptake of an intervention (Aarons, 2004). Key informant interviews are considered a time and cost-effective method of collecting qualitative data (Marshall, 1996), and they are a flexible methodology that can facilitate the discovery of unanticipated challenges in the development and implementation of new programmes (Tremblay, 2003). Key informant interviews are considered to be appropriate when the aim of the inquiry is to understand the attitudes of a population or when the aim is to generate suggestions and recommendations (Kumar, 1989). Given the aims and the time limitations of the study, key informant interviews were considered to be an appropriate methodology.

The interviews were conducted in a semi-structured format that followed an interview guide (Appendix H). The interview guide was constructed to include questions about the existing work the team was doing (in relation to suicide prevention), the use of specific elements of the intervention (non-demanding communication and positive regard, text message communication, and extended follow-up contact), and the elements of team culture that may create barriers to uptake of the intervention (engagement with research and innovation). All interviews were audio-recorded. The interviews were between 25 to 45 minutes in length with an average of 37 minutes. The clinicians were reimbursed for their time with a $20 supermarket voucher.

5.2.3 Participants

All members of the 3DHB CRS teams were invited to take part in interviews. Study information and invitations to participate were sent to team members' work email addresses. Seven nurses from the team responded and took part in the secondary study. The number of years working in mental health ranged from 9 to 40 years. The length of time working for CRS ranged from 15 months to 20 years with the average being 10 years. These features suggest all of the clinicians interviewed were highly experienced in working in the scope of mental health, and the range of time spent in the service allowed for a variety of perspectives on the work and culture of the team.

5.2.4 Ethical considerations

The interviews and procedure were approved by the Northern B Health and Disability Ethics Committee as an amendment to the main study ethics application (application number 18NTB145AM02). To minimise participant burden, interviews were conducted at a time and place that was most suitable to the clinician. Most clinicians chose to meet at their workplace and one clinician chose a library meeting room. The clinicians were emailed a copy of the information sheet ahead of the interview, and this was discussed with any questions being addressed before the individual signed the informed consent sheet. Specifically, clinicians were informed that they could choose not to answer any question without justification or ask for the recorder to be turned off at any time.

5.2.5 Analysis

The interviews were audio-recorded. The recordings were listened to in order to generate interview summary sheets for each interview. Summary sheets are used in key informant interviews (Kumar, 1989). This method was chosen over verbatim transcriptions as it was considered to capture sufficient detail for the descriptive level of analysis and was more time efficient. The interview summary sheets noted each point that was discussed by the clinician in response to each question. The points from the summary sheets were then coded to identify similarities and differences across the interviews. This is consistent with a conventional type of content analysis described by Leung and Chung (2019). The results presented are a summary of the codes that relate to each of the original topic areas from the interview guide.

5.3 RESULTS

5.3.1 Suicide prevention

Clinicians estimated that the proportion of clients who are assessed for suicide risk ranged from approximately 70-80% to as high as 97% of all clients seen by CRS. All clinicians agreed that suicide risk assessment was involved in the majority of the presentations that they see. Three of the seven clinicians noted that this reflects a change in the nature of their work over time, with more clients presenting now than previously with suicide risk and an increasing proportion of their suicide-risk clients being younger people.

Clinicians recognised several roles of CRS in suicide prevention. One role is to provide a response and support in the face of a mental health crisis. One clinician described this as providing an instant response to the desire for help when a person is in despair. Clinicians noted that CRS's role is limited to the current crisis and the assessment of risk at the time the person is seen. However, it was acknowledged by several clinicians that often chronic social and financial factors contribute to a person's experience of suicidality. Working on those chronic issues was described to be outside of the scope of the crisis team's work. This was identified as a limitation to the CRS's ability to prevent suicide. One clinician noted that it would be good if the team had more services that could provide support for such issues, to which the team could refer people. This was consistent with several clinicians' views that a person's long-term recovery from a crisis will depend on the supports available to them in the community.

Clinicians identified CRS takes a major role in the recognition and management of suicide risk. This is done in collaboration with the person as well as their family and social supports. However, in instances where assessment is occurring under the Mental Health Act (Ministry of Health, 1992), the process of decision-making in risk management is less collaborative. In all instances, the least restrictive form of support is taken. Finally, several clinicians recognised the team's role in educating clients and their families as an important contribution to suicide prevention. Specifically, the team can provide education on emotion regulation, managing distress and identifying available avenues of support.

Several clinicians discussed the limitations of the team's ability to prevent suicide. Three clinicians mentioned that the team cannot prevent everyone from dying by suicide and that it cannot be determined which clients will go on to die by suicide. This was attributed to clients not disclosing information, or life events that happen to the person after the assessment once they have returned to the community.

Another limitation that was discussed was access to CRS. Clinicians suggested that people who die by suicide are not engaging with CRS. One clinician's response was to suggest that access to CRS should be promoted and expanded. In contrast, three clinicians discussed how some clients are presenting to ED when they could be sufficiently supported and managed by their GPs, thereby suggesting access to CRS should be limited to people who are considered higher risk. Some client presentations were described as not being "really" suicidal, rather, using the word 'suicidal' to mean intense emotional distress or discomfort (rather than relating to a desire to die), or using suicide as a way of "manipulating staff". The perceived intentions of possible manipulation were not specified. Staff attributed these kinds of presentations to primary and physical health care providers being risk averse, inadequately assessing and managing low-level risk, as well as service users describing intense emotional distress as feeling suicidal.

Staff also noted the pressures on them to improve suicide prevention. Specifically, that the scrutiny of mental health services in the media feels invalidating of how hard they are working, and that initiatives like "zero suicide" are unrealistic. One clinician noted that many members of the team frequently work overtime and that the team is "stretched very thin".

5.3.2 Service and support provided by CRS

When asked about what the CRS does best in supporting people struggling with suicide risk, the clinicians' responses generally related to the practical supports the team can provide and how the team can make people feel throughout the process. Concerning practical supports, most of the clinicians felt that the CRS can help people by offering follow-up support through phone calls with CRS clinicians, access to appointments with the doctor, or access to respite care. Two clinicians felt that CRS does have good resources for where they can refer people, and several clinicians spoke highly of the value of being able to offer respite care.

Several clinicians felt that the CRS is good at being there to listen to people, and that for some people having a kind person to listen to them is enough support to help them move through the crisis. In addition, three clinicians noted that the team is good at helping people with problem-solving and at diffusing the crisis.

The final practical support that was discussed was safety planning. Three clinicians discussed how the team's experience means that they are skilled at determining the appropriate level of support needed to help keep a person safe. Therefore, they are able to send people home with a well-constructed safety plan that also supports the person in knowing what supports are available to them.

Some clinicians suggested that while these practical supports are important, the core of the work is how the team can leave a person feeling. Specifically, while the team is engaged with a person, the team can help that person to feel emotionally held and contained, in a place of safety and non-judgment. Two clinicians noted that the team is able to give people the feeling that they matter. After the initial engagement, the team is able to leave a person feeling connected, in that they know they do not need to face their distress alone.

Finally, the team is able to leave people with a feeling of hope and knowing that recovery from a crisis is possible.

Clinicians were also asked about what more the service could be doing to support people at risk of suicide. Nearly all of the interviewed clinicians stated that the team could be doing more if more resources were available. Specifically, clinicians felt that the team needed more staff and that more respite beds are needed. Two clinicians stated that without enough staff, there was not enough time to look into ways the service could be improved. Several clinicians commented that without quality assessment of their work from service user feedback, it was hard for them to say what parts of their service are working well and what areas need improvement.

5.3.3 Follow-up care

Clinicians identified CRS offers several forms of follow-up support. The most concerted follow-up care is intensive home treatment, where clinicians will meet with a person in their home regularly. Alternatively, the team may check-in with follow-up phone calls. Almost all of the clinicians mentioned how time-intensive these phone calls can be for the team, with one clinician suggesting that a separate team could be set up to do this work. Another clinician suggested that guidelines for determining the frequency of phone calls would be helpful, as they find daily phone calls for people who are “well-settled” to be tedious work. Follow-up support may also include appointments with the doctor. Text messaging is used by members of the CRS team as part of their follow-up contact with people. However, the use of text messaging is limited to the communication of pragmatic information, such as reminding people of appointments or letting a person know the team is about to call them. The use of text messaging will be discussed in further detail in Section 5.3.4. Two clinicians suggested that the follow-up care offered by the team could be improved if they could offer people access to brief therapy in the weeks following the crisis.

Clinicians stated that for all forms of follow-up support currently provided, the clinician who is making the follow-up contact is not necessarily the same clinician the person initially saw, and each follow-up contact may be made by a different clinician again. One clinician commented that it is therefore important to begin the follow-up communication with building rapport with the person. However, the intention of the follow-up contact is to gather information in an extension of the assessment process. One clinician pointed out that the follow-up support currently offered by CRS is not consistent with the CC principle of communication being non-demanding, due to this focus on information gathering and assessment.

When asked about the timing of follow-up contact, clinicians stated that follow-up support from the team is currently limited to six to eight weeks, by which time it is expected that the crisis will have passed or resolved. Two clinicians discussed how the team will try and link a person in with their GP for longer-term support and continuity of care, but acknowledged that barriers such as the cost of a doctor's visit can prevent this. In regard to the ideal length of follow-up support, clinicians stated that this will depend on, and should be guided by, the individual. However, three clinicians mentioned an un-referenced research study that was circulated and discussed amongst the team several years ago, which suggested there is a spike in risk at three months and six months after an initial assessment. They suggested that the team could do additional follow-up calls at three or four months to do a brief check-in with people.

Clinicians held differing opinions about whether extended follow-up contact may be beneficial. Three raised concerns, and one stated that some patients may find too much follow-up contact to be invasive. Two clinicians questioned how much responsibility the team would hold for safety and risk management. Another two clinicians suggested that extended follow-up contact has limited value if the team cannot offer access to the practical supports discussed above if the person's situation has become worse. In contrast, two clinicians suggested that some clients would benefit from more follow-up contact than the service currently provides.

5.3.4 Text messaging

Most of the clinicians stated that texting is a good communication option for when people feel uncomfortable answering or talking on phone calls. Texting was identified as a quick and cheap communication option for service users. Two clinicians highlighted that people can take the time to think about what they want to say when communicating over text. Texting was also identified as being more private than a phone call as a person's responses will not be overheard.

Several clinicians emphasized that texting is the preferred mode of communication for young people. Specifically, two clinicians suggested that young people tend to be "more free" with what they say over text whereas over phone calls they may only give minimal responses. One clinician suggested that the team should be using texting more when working with young people and pointed out that texting is successfully used by other organisations such as Youthline.

The use of texting was discussed in a way that is consistent with a person-centred approach. Two clinicians highlighted the importance of being able to offer people support through their preferred mode of communication. One clinician discussed how texting can help to reduce the power imbalance that can exist between clinicians and the people they are supporting by allowing the person to engage with the clinician on their terms and at their own pace. This is contrasted with phone calls where the clinician making the call is deciding when the communication will occur.

Other advantages to the service were also identified, with two clinicians noting that texting allows for a digital record of communication. One clinician also identified that support such as CC via text messaging may have advantages of encouraging people to utilize their community supports and that it would provide some support in helping put a safety net around the person.

While these advantages of text messaging were identified, clinicians also voiced several concerns about the use of texting especially within their service. Most clinicians raised concerns about the way that people's reply messages get managed. Currently within CRS, text messages are sent to people from a computer system, and if the person replies, the reply is sent to the inbox of the clinician who sent the text, and no other clinicians have access. As a result, if the clinician who sent the message is on leave when a reply is received, the message may not get seen. There are negative implications for the people receiving support if their messages are not seen, and for staff who may then be left feeling as if they need to be constantly checking their inbox whether they are working or not. Conversely, staff do not want to send texts from their work cell phones as then people will have the cell phone number and may call at any time.

Several clinicians also had concerns about how their messages may be received. One clinician voiced uncertainty about what tone of language was appropriate to use over text messaging. Several clinicians also held concerns that texting may be seen as too impersonal or too informal, especially for older people. One clinician specifically questioned whether it was possible to convey caring over text messaging and suggested that a phone call may be seen as more caring.

Pragmatic issues with texting were also identified. Two clinicians pointed out that texting does not have the same immediacy as a call, as people can take their time to reply. Two clinicians also had privacy concerns in regard to the potential for the text to be seen by someone other than the person it was intended for. It was felt that with a phone call there is a greater level of confidence that staff are communicating with the right person. Similarly, two clinicians suggested that people may want to know what happens to their text messages and how this would affect their digital data privacy. Two clinicians also highlighted that people can frequently change phone numbers which would make it challenging to provide ongoing support over text messaging.

One clinician concluded that texting can be a useful tool, but not for the CRS. Two clinicians stated that it would be too challenging for clinicians to try and support a person and help them to navigate a crisis through text messaging. Two clinicians also stated that offering longer-term follow-up contact over text messaging could lead to an overwhelming workload for the team.

5.3.5 Research and innovation

Clinicians were asked about the services' engagement with research about evidence-based practice in regard to suicide prevention, and processes by which change and innovation occur within the service. All of the clinicians stated that the emphasis was on personal responsibility for engaging with relevant research. The clinicians identified factors that support their engagement with research. Several clinicians noted that the requirements for the Professional Development Recognition Programme (PDRP) supported engagement with research. However, one clinician noted that staff can fall behind on these requirements. Events such as the CRS annual training, Duly Authorised Officer (DAO) training, conferences, and optional education events put on by the DHB were noted by clinicians as helpful ways of engaging with updates in evidence-based practice. The circulation and discussion of research within the team were also considered helpful for keeping up to date. Despite these opportunities, two clinicians stated that the CRS does not manage to keep up with evidence-based practice.

Barriers to engaging with the research included lack of accessibility. Several clinicians noted that they had to go out of their way to find updates in suicide prevention or that the research was not “reaching staff on the ground level”. One clinician noted that due to time pressures during work hours, professional development tended to happen during personal time. Another clinician noted that awareness of learning opportunities can depend on the Clinical Nurse Specialist and the culture within the team.

In regard to innovation, clinicians noted that change within the service can come about as a result of clinician experience or discussion, top-down organisational change, in response to Serious Adverse Events (SAE) or from audits of documentation. Two clinicians noted that changes in practice are more likely to come about in reaction to an event rather than from research findings. Several clinicians noted that the issues that are being faced “on the ground” can take a long time or are not sufficiently addressed by research or by higher levels of management. One clinician noted that the hierarchical nature of healthcare systems can mean that it takes a long time for changes to trickle down. The same clinician also noted that within the healthcare system there can be challenges in finding the right balance between the risk of trying new interventions versus failing to make improvements in health outcomes.

Nearly all of the clinicians stated that the team is currently too busy “putting out fires” to be engaging with research or investigating wider quality improvements the service could make. As such, time and under resourcing of staff were considered the major barriers to innovation within the service. Two clinicians discussed the older age of many of the team as a potential barrier to adopting new technologies. One clinician pointed out that with the team being short-staffed they cannot afford to be sending staff to training events or conferences. Two clinicians also highlighted that stigma towards mental health from other areas of health may also prevent innovation. It was noted that when a person presents to ED with issues related to mental health and risk, they are promptly referred to the CRS. It was argued that this represents an “othering” of mental health issues when suicide prevention should be everyone's responsibility. If other healthcare providers were more active in assessing and managing risk and triaging people, this would take the pressure off of the CRS and allow them the capacity to innovate.

5.4 DISCUSSION

Findings from the secondary study highlight attitudes, and concerns, of CRS staff in relation to CC via text messaging implementation and research engagement. Staff described their role as having specialist clinical expertise in assessing risk and identifying the appropriate level of supports to manage that risk. Staff attitudes related to text messaging, principles of care and support, and heuristics for identifying support may affect their evaluations of the risks versus benefits of CC via text messaging thereby impacting possible implementation.

Staff identified a number of concerns related to how service users may experience text messaging. Staff believed that text messaging could be received as an overly informal, and uncaring mode of communication. These concerns directly contrast with participants in the primary study’s description of the messages communicating a caring connection. Staff stated concerns that text messaging would not be suitable for older adults. While older adults do tend to utilise technology less than younger people (Research New Zealand, 2015), older adult cell phone ownership is increasing (Atlas et al., 2020) and text message interventions have been effective in supporting older adults’ behavioural health changes (Müller et al., 2016; Tam et al., 2022). Finally, staff stated service users may have concerns about privacy of text messaging. One participant in the primary study described this as an issue but that this was also able to be managed or mitigated with changes in message notification settings.

Therefore, most of staff concerns about how service users may experience text messaging are either directly contradicted or not supported by the primary study and previous research.

Another possible barrier related to how staff tended to view supports. Specifically, staff tended to describe supports as providing access to tangible resources such as respite beds or doctors' appointments. This description is consistent with previous findings that service providers believe that in order for CC to be genuine expressions of care they need to be backed up by providing access to additional supports (Cooper et al., 2011). These previous findings contrast with the primary study results where service users identified communication style being important for support to seem genuine. If staff only see value in supports that result in access to tangible resources, they may not see value in simple caring messages. It is therefore important for implementation processes to integrate a robust theory of change so that providers can understand what the intervention is aiming to achieve and how that effect is brought about (Kemp, 2019).

Similarly, when identifying what supports are needed for clients, the staff described a general heuristic of the higher the level of risk the greater level of intensity of support. As CC via text messaging is a very minimal support delivered as an adjunct to TAU, staff may see it as only being a valuable addition to those who are considered low risk and requiring little in the way of support. However, findings suggest CC may be more effective for people with longer suicide attempt histories who may be classed as a higher risk population (Carter et al., 2013; Hassanian-Moghaddam et al., 2011). Again, this emphasises the need for education on the value this kind of support can offer to ensure successful implementation.

In regard to organisational and structural level factors affecting implementation of CC via text messaging, staff comments reflected concerns of responsibility and risk management. These concerns are consistent with previous findings that clinicians position themselves as "holders of the risk" and that they hold responsibility for possible future adverse outcomes to service users (Knox et al., 2016). The idea of clinicians as risk holders having ultimate responsibility, combined with only seeing as valuable supports that offer additional resources or services, may have informed assumptions that CC via text messaging would require CRS to offer a text counselling type service. Staff described wanting service improvements balanced against concerns of any changes that could lead to additional work or responsibilities. These concerns are likely underpinned by their descriptions of understaffing. Staffing and time constraints have previously been identified as significant barriers to implementing suicide prevention programmes in mental health services (Dabkowski & Porter, 2021; Porter et al., 2021). Nationally, the mental health workforce is under substantial pressure related to high caseloads, understaffing, and occupational burnout (Potter et al., 2018). These stressors on the mental health system likely contribute to fears that change without substantial additional resourcing will result in greater workload and responsibility being placed on them.

Staff identified the hierarchical nature of the DHB as a barrier to innovation. As a result, service changes were described as largely being changes in documenting for auditing purposes, and these were done in response to risk events. This finding is consistent with literature suggesting the hierarchical structures and public services tend to be less supportive of innovation (Aarons & Sommerfeld, 2012; Aarons et al., 2009). Despite many reviews and inquiries, there has been significant difficulty in improving the quality of service users' experiences of public mental health care services, both nationally and internationally (Patterson et al., 2018; Rosenberg & Rosen, 2012). This is not an issue exclusive to mental health, as the public health system has failed to adequately address many health inequities (Goodyear-Smith & Ashton, 2019). This lack of change may reflect top-down organisational factors stifling innovation culture in public health services. In contrast, non-government organisations that compete for health contracts are often required to have measures of service quality as well as to implement quality improvement plans, which will, in turn, positively impact the innovation culture (Ashton et al., 2004). Given the current public health structure, it may be challenging for research-informed innovation to penetrate into service delivery in a sustainable way due to entrenched barriers to innovation culture that exist at multiple levels of the health system hierarchy.

Barriers at the level of the individual provider may be able to be addressed by including easily accessible education for staff on CC as part of an implementation plan. Increased availability of training workshops has been identified as a facilitator of clinicians adopting new practices (Pagoto et al., 2007). The secondary study interviews also identified a number of facilitating factors that may be utilised as part of an education package to increase the intuitive appeal to CRS service providers.

While staff had concerns related to text messaging, they also identified service users' preferences for text messaging and how text messaging can add value to service users' experiences of support. Service providers place value on qualitative research findings and service users' lived experience in informing their practice (Dabkowski & Porter, 2021; Gyani et al., 2015). Results from the primary study can be used to validate the views of staff that service users have a preference for texting and to alleviate their concerns that it is seen as an uncaring medium of communication.

While staff primarily emphasized the value of practical supports, they also identified the value in how their engagement with service users can promote feelings of connection and security important for suicide prevention. Descriptions by staff of how they would like to leave service users feeling (i.e. emotionally held, safe, connected and not alone) are closely aligned with the themes from the primary study. The incorporation of these qualitative descriptors of the meaning of the intervention for service users may help staff see how the intervention supports their work and is a valuable addition to usual treatment.

Staff particularly emphasized the importance of being able to offer people respite beds and their concerns about this being a limited resource. This finding helps to identify useful metrics for being able to report quantitative outcomes. For example Carter et al. (2013) found that a one-year postcard CC intervention led to a 50% reduction in the rate of repeated self-poisonings per person and resulted in a saving of 2556 bed days over a 5-year period. Reporting efficacy results in the number of bed days saved may make the intervention more appealing and meaningful to staff than other outcome measures (such as changes in psychometric scores of suicidality) given the value they place on respite beds as a limited resource.

Finally, staff indicated a possible gap in their current service provision that may be able to be addressed by CC via text messages. Staff identified that follow-up calls can be a very labour-intensive part of their work. While for some service users, there is a necessity for ongoing assessment of risk and need, staff identified that continuing contact for service users who are "well settled" could be outsourced. This "well settled" group may be a population who could be more efficiently supported by ongoing engagement with their primary care provider and CC via text messaging, thereby placing less pressure on CRS as an acute service.

In conclusion, the findings from the secondary study highlight multiple possible education targets to improve the intuitive appeal and uptake of CC via text messaging. These findings will be discussed further in Chapter 6.

Chapter 6 Discussion

The aim of this study was to address gaps in the knowledge translation and implementation processes for CC interventions in a New Zealand context. By exploring service users' experiences of receiving CC via text message, the primary study provides insights into the benefits of CC via text messaging, how these benefits were brought about, as well as the possible limitations of the intervention. Understanding the mechanisms of change of CC via text messaging from service users' perspectives allows greater consideration of the implementation of CC via text messaging at the level of the intervention. Interviews with CRS staff members in the secondary study have also allowed for implementation considerations at the levels of the service provider and organisation. In this chapter, the themes of *Caring Connection*, *Safety and Security*, *Reflecting on Recovery* and *Limitations* will be discussed in relation to existing literature and possible mechanisms of CC. This section will be followed by a discussion of the implications of primary and secondary study findings for possible implementation of CC via text messaging in New Zealand crisis mental health team settings.

6.1 CONTEXTUALISING THE THEMES

The primary study has highlighted service users' perspectives of the benefits and limitations of receiving CC via text messaging, as well as their insights into how these changes were brought about. This section compares and contrasts the primary study findings to existing literature on CC, mHealth interventions, and service users' experiences of care.

6.1.1 Caring Connection

The theme *Caring Connection* was central to participants' talk of the benefits of the intervention. It appeared that the core benefit of the intervention was that participants interpreted the text messages to mean "someone cares about me" and had an associated emotional reaction. Previous research on service users' views on anticipated benefits of contact type interventions identified themes of 'messages as a gesture of caring' (Cooper et al., 2011). In their study the authors related this theme to ideas of reassurance, feeling looked after, feeling emotionally contained, and protection against feelings of loneliness. The previous study was conducted in England. These similarities in themes show consistency of service users anticipated and experienced benefits of contact type interventions across studies and in different country contexts.

The primary study findings also highlighted factors that can facilitate or prevent CC from being experienced as "genuinely caring". Communication styles that appeared "robotic" or "clinical" were seen to undermine interpretations of the messages as genuine expressions of care. Participants identified that they were less likely to experience messages as "robotic" if they remembered having met the message sender, if the names of recipient and sender were included in the message, and if there was variety in the message wording. "Clinical" communication was perceived as pushing people through the system with a process that ended in discharge from services. Factors that lead to communication being seen as caring rather than clinical included the extended/ ongoing nature of the contact, and that the messages required nothing of the participant in return. While previous studies have also highlighted the importance of CC being genuine (Cooper et al., 2011), this is the first study to date to elucidate the factors that impact service users' experiencing messages as genuine.

Findings about the factors that contribute to messages being seen as genuine are consistent with quantitative findings on text message intervention efficacy. Specifically, including names of recipients in text message interventions is more likely to effect behaviour change compared with non-personalised messages (Head et al., 2013). Therefore, this subtle personalisation of text message interventions can help reduce the risk of messages being experienced as robotic, possibly enhancing the efficacy of the intervention.

Participants' comparisons of clinical versus caring communication are consistent with the original hypothesis of Motto (1976), specifically that in order to be effective, the communication needs to ask nothing of the person. Non-demanding communication is aligned with the principles of person-centred therapy of genuineness, accurate empathy, and unconditional positive regard (Rogers, 1979). Sending positive messages to service users that ask nothing of them in return, on an ongoing basis, may help establish unconditional positive regard, which in turn, may be associated with improved outcomes for clients (Farber et al., 2018). In the primary study participants discussed how the messages made them feel cared for as a person rather than being treated as a number in a system, which is consistent with CC being experienced as a person-centred intervention. Principles of person-centred care support the importance of caring contact messages being non-demanding in order to communicate unconditional positive regard and result in desired outcomes.

Text messaging appears to be well-suited to the aims of the intervention to be non-demanding. Participants discussed how text messaging was less demanding and allowed more personal autonomy than phone calls, as participants could read and engage with messages when it suited them best. As a result, text messaging appears to be well suited to the non-demanding principles of CC interventions as originally proposed by Motto (1976).

Participants discussed their concerns of being treated like a number or a statistic when receiving crisis mental health care. These concerns were mirrored in He Ara Oranga, the Mental Health Inquiry, where service users talked about their difficulties in navigating complex systems of care (Patterson et al., 2018). A qualitative study of New Zealand service users who presented to ED for self-harm and also for other reasons (‘Mixed Presenters’) found that focusing on risk assessment and management resulted in participants comparing their mental health care to a processing plant (Kuehl, 2017). Minimal, ongoing, non-demanding communication such as CC may help improve people’s experiences of crisis mental health care.

Mixed findings in previous CC studies may be explained by features of CC being experienced as robotic and/or clinical. A New Zealand study failed to find a significant effect of a postcard intervention (Beautrais et al., 2010). The authors attributed this to the sample size being underpowered to detect differences, as well as differences in characteristics between treatment and control groups. However, fewer messages were sent, compared with previous studies, and message content was not as varied as other studies (Carter et al., 2005; Hassanian-Moghaddam et al., 2011). As has been highlighted in the primary study, variety in message wording as well as the ongoing nature of the contact can impact whether the intervention is experienced as genuinely caring and supportive. Similarly, in their caring letters studies, Bennewith et al. (2014) included follow-up appointment reminders and information on local services, and Robinson et al. (2012) included self-help advice. Both did not find a significant effect of the intervention. In their caring emails study, Luxton et al. (2020) included web links to four online support resources and three helpline numbers. They found the intervention had no effect on measures of social connection or suicidal behaviour. This type of directive information may undermine the intended message of care the intervention should communicate and therefore fail to increase social support.

6.1.2 Safety and security

While the theme of *Caring Connection* was consistent with previous studies, the theme of *Safety and Security* provides novel insights into service users experienced benefits of CC. Participants described the multiple avenues for support forming a safety net. Similar language featured in another study, where service users anticipated that CC could help form a safety net (Cooper et al., 2011). However, again the primary study has been able to expand on what features of the intervention contribute to a sense of safety and security, and the ways service users made meaning of this sense of security.

The theme of *Safety and Security* was underpinned by participants' fears of experiencing another crisis. Service users can continue to struggle with concerns of how they will cope with life stressors long after the immediate recovery from the index crisis episode (Scarth et al., 2021). In the primary study, participants described how the messages helped to challenge their thoughts that they would need to cope alone and brought to mind the services that were available to them. Participants described that the messages would bring to mind avenues of support that were not directly referenced in the message for example, family and friends, private counselling, or GP. The messages do not increase access to supports but rather they recall an already existing safety net of supports. In that sense, the text messages serve to make the invisible safety net visible and salient to service users. Similarly in a study of people's lived experience of suicidal behaviour, participants discussed the need to develop their own 'toolbox' for coping (Scarth et al., 2021). These findings may emphasize the importance of empowering service users to utilise their existing knowledge, networks, and coping skills when working towards long term recovery from suicidal behaviour.

Participants in the primary study reflected the benefits of being reminded of what they already knew. In their study, Bennewith et al. (2014) similarly reported participants stating that they were already aware of services. However, from this finding the authors concluded the messages have no value if they are not providing new information and are only reminding participants of what they already know. In contrast, the current findings clearly showed that participants noted the benefits of being reminded of services even when they were already aware of them. Specifically, participants in the primary study discussed how the invitation to call Te Haika alleviated concerns that they would be a burden if they sought help. Therefore, the current findings directly contradict the conclusions of Bennewith et al. (2014) and highlight that ongoing invitations to engage with services may help reduce barriers to help seeking.

The theme of *Safety and Security* may also support the predictions of Motto (1976) that the contact must be initiated by an individual concerned for the recipient's wellbeing. In the theme of *Safety and Security*, participants talked about the internal barriers that can prevent them from reaching out for help, such as fears of burdening others. They also discussed fears of being invisible or being "dropped" by services. These fears suggest that lack of contact from mental health services can be interpreted as a permanent end to connection to services. Therefore, the messages may help to challenge negative automatic thoughts that "there is no support available", or that they are not welcome to re-engage with services. The messages likely accomplish this effect by having the contact initiated by someone who is aware of the person's recent experience of crisis.

Participants also discussed the wider-reaching impacts of increasing social support. Specifically, some participants discussed how they began to send friends or family similar supportive messages. Thus, the intervention may indirectly encourage service users to socially engage with their natural support networks. Similarly, participants discussed how they also had increased confidence in calling for help for whānau (family) who were experiencing distress. No other studies to date have reported on this effect that a CC intervention may have on people's engagement with whānau and community. Future research could incorporate measures of engagement with whānau support rather than exclusively measuring contact with formal support services.

6.1.3 Reflecting on Recovery

The final benefit of the intervention that participants discussed is captured in the theme of *Reflecting on Recovery*. In this theme, participants discussed how the messages would prompt them to take a moment to reflect on their psychological and emotional wellbeing and consider if they needed any support. This prompting of reflection appears to be a possible benefit of CC interventions not previously discussed and may relate to the relatively novel delivery of CC via text messaging. Mobile phones are excellent tools for being able to look up resources and connect with other people (Research New Zealand, 2015). The text messages may serve to prompt moments of mindful awareness of the recipients' emotional needs and coping strategies. By delivering CC via text messaging there may be more awareness of, and opportunities to get, support in the moment the message is received compared to CC delivered via letter or postcard. Mindfulness is a common critical component in third wave cognitive behavioural therapies (Garay et al., 2015; Hayes & Hofmann, 2017). Mindfulness-based interventions have also been beneficial in treating people struggling with suicidal thoughts and behaviours (Chesin et al., 2016; Luoma & Villatte, 2012). Therefore, psychological benefits of CC via text messaging may also relate to indirectly prompting mindfulness skills and may be specific to text messaging as a communication modality.

In regard to recovery, participants also discussed how they felt the intervention promoted their sense of self-efficacy. The non-directive and non-demanding nature of the message wording meant that the participants were able to decide for themselves if they did need to call for support, use a different coping strategy, or if no action was needed at the time. By not including directions or suggestions, the messages may be interpreted by the recipient that they are the best judge of what would be helpful for them in that moment and, overall, in their recovery. Self-determination is a critical component of mental health recovery that has been promoted by New Zealand mental health services (O'Hagan et al., 2012). Further, participants recognised there is no single ideal message frequency or duration due to the importance of CC promoting self-efficacy and self-determination. Participants suggested that the frequency and duration of messages would best be developed with each individual to fit their personal support needs.

6.1.4 Limitations

As well as the experienced benefits of CC via text messaging, participants discussed the downsides and limitations of the intervention. Specifically, participants identified that the text messages could serve as an unwelcome reminder of their experience of crisis, possibilities of message notifications being seen by others, exacerbating isolation if they were then unsuccessful in seeking help, and wanting to be linked to two-way text support. These findings are consistent with anticipated practical issues and barriers to uptake identified by Cooper and colleagues (2011). Specifically, participants in the study by Cooper and colleagues (2011) reported wanting to have a mode of contact that allowed them to respond to the sender directly if they needed support, that reactions to messages may be dependent on a person’s mood state when they received them, and they were concerned about the possibility of privacy issues related to message notifications. These anticipated concerns are validated by the reported experiences of participants in the primary study. However, despite these issues participants in the primary study continued to report the intervention had a neutral to net positive effect and issues could be managed by requesting to stop receiving the messages and managing message notification settings. Additionally, issues identified by Cooper and colleagues (2011) such as disagreements about timing of messages were not observed in the primary study with no participants taking issue with the message frequencies used.

6.2 MECHANISMS AND THEORY OF CHANGE

The findings of the primary study have provided insights into the benefits of CC via text messaging and how these benefits were brought about. Having an underlying theory of change for how these benefits may convey a suicide preventative effect is critical for successful implementation (Kemp, 2019). In their review of brief contact interventions, Milner et al. (2016) identified social support, increased suicide prevention literacy, and learning alternative coping behaviours as potential intervention mechanisms. Social support was described as increasing feelings of connectedness. Increased suicide prevention literacy was defined as increasing people's knowledge of risk factors, supports available, and how to access them. Learning alternative coping was defined as the learning of functional coping behaviours as alternatives to self-harm. However, these were only proposed mechanisms and there has been a lack of research validating these mechanisms. The primary study findings can be interpreted as support for all three proposed mechanisms. These interpretations will be discussed below and linked to relevant theories of behaviour change.

The theme of *Caring Connection* provides support for the proposed mechanism of caring contacts leading to an increase in perceived social support. Intuitively it makes sense that an intervention that increases communication would increase a sense of connection. However, research to date has failed to include quantitative measures or qualitative descriptors of the relationship between receiving CC and recipients' experience of connection. The primary study results show that receiving CC via text messaging can lead to an increased feeling of connectedness. The importance of feelings of connection is also consistent with IPTS. Van Orden et al. (2010) have defined the IPTS construct of thwarted belonging as a combination of loneliness and a lack of caring relationships. The authors specify that caring relationships need to be experienced as positive and supportive. The theme of *Caring Connection* highlights how CC via text messaging can generate positive feelings of care and support. Therefore, the findings from the current study suggest that CC interventions may increase social support, and thereby decrease thwarted belonging, potentially leading to decreased suicidal behaviour.

The theme of *Safety and Security* may be interpreted as CC also influencing suicidal behaviour by increasing suicide prevention literacy. While the intervention did not lead to increased knowledge of supports, participants described that it contributed to increased confidence in accessing supports. Confidence in accessing supports related to seeking help for whānau (family) as well as for themselves. Participants considered that this effect was due to messages alleviating concerns that they would be seen as a burden if they were to seek support. By decreasing concerns of being seen as a burden the messages may decrease the psychological distress that contributes to suicidal ideation as stipulated by the IPTS (Van Orden et al., 2010). Therefore, the messages may also decrease perceived burdensomeness leading to a decrease in suicidal ideation, and increased confidence to access supports, consistent with the proposed mechanism of increasing suicide prevention literacy.

The link between suicide prevention literacy as a mechanism for CC and increased help seeking is consistent with results from preliminary case studies of an automated CC via text messaging study. Berrouiguet et al. (2018) published three case studies from their randomised controlled trial of CC via text messaging delivered by an automated one-direction protocol. All three participants utilised the text messages to seek support in response to experiencing suicidal ideation. Young people at risk of suicide believing that they do not need help has been identified as a barrier to seeking professional support (Czyz et al., 2013). Participants in the current study discussed, as detailed in the theme of *Reflections on Recovery*, how the messages made them more aware and self-reflective of their support needs. Included in the theme of *Safety and Security*, participants discussed how the messages made them feel more confident to pick up the phone. Therefore, the current findings, consistent with those reported by Berrouiguet et al. (2018), demonstrate how text messaging can be used to promote suicide prevention literacy.

The primary study findings may also support alternative coping as a possible mechanism. This finding is counter to the conclusion of Milner et al. (2016) that there is stronger evidence for social support and suicide prevention literacy as mechanisms of CC compared to alternative coping. In literature on the management of people who struggle with chronic suicidality, Paris (2002) highlights that for service users who struggle with loneliness and extreme isolation, the care and social connection they receive while in the ED may be experienced as rewarding. As a result, a pattern of maladaptive help-seeking may end up being reinforced. In the current study, participants described similar rewarding feelings of care, safety and security in response to the text messages. Behaviourally, the messages may be seen as increasing non-contingent reinforcement, thereby extinguishing patterns of maladaptive help-seeking in response to distress. As indicated in the subtheme ‘reflecting on where you want to go’, participants discussed how the messages were interpreted as encouragement to carry on with recovery and engage in life-affirming activities. While the messages may not directly promote the learning of alternative coping strategies, they may change emotional contingency patterns for people who experience chronic suicidality and promote an internal sense of positive coping. This proposed mechanism is supported by previous findings that the intervention may be effective at reducing the frequency of repeat presentations, especially for participants with longer suicide attempt histories (Carter et al., 2013; Hassanian-Moghaddam et al., 2011).

The primary study findings can be interpreted to support increases in social support, suicide prevention literacy, and alternative coping behaviours as possible mechanisms of CC underpinned by theories of change related to IPTS and behavioural principles. Further research is needed to empirically validate these possible pathways. By including measures of perceived burdensomeness, thwarted belonging, help seeking (from both professionals and whānau), and self-efficacy to cope with suicidal thoughts, clearer conclusions can be made about the critical elements of the intervention. Specifically, by including measures of all proposed mechanisms, future research should aim to determine whether these mechanisms act independently or are mutually reinforcing (Milner et al., 2016). Having a clear understanding of which mechanisms are associated with a suicide preventative effect and how the mechanisms interact will have critical implications for the implementation of CC.

6.3 IMPLICATIONS FOR CC VIA TEXT MESSAGING IMPLEMENTATION

Findings from the primary and secondary studies have implications for implementation of CC via text messaging. This section will begin with a discussion of the intervention level implementation considerations and is followed by individual provider and organisation level considerations.

6.3.1 Intervention considerations

When using qualitative feedback data to inform modifications to an intervention, it is useful to have criteria to assess and prioritise possible modifications. Yardley et al. (2021) has proposed four criteria for deciding whether to make a modification; is it important for behaviour change, is it in line with the interventions guiding principles, is it uncontroversial and easy to implement, and finally is it a modification suggested by multiple participants. These criteria can then be used to distinguish between features the intervention ‘must have’ and features the intervention ‘could have’. This section will discuss how findings from the primary and secondary studies relate to the first three of these criteria. All features of the intervention discussed will relate to issues raised by multiple participants and therefore this criterion will not be examined in detail.

Consideration of the factors of the intervention that relate to behaviour change necessitates consideration of the intervention mechanisms and theory of change. All three of the proposed mechanisms discussed above are underpinned by participants interpreting the messages as expressing genuine care. Therefore, CC via text messaging must incorporate factors that facilitate the sense that the communication is genuine. Participants in the primary study discussed the importance of the human component, stating a desire to receive the messages from a person rather than an automated system with several participants wanting two-way messaging. In the secondary study CRS staff tended to describe supports as being able to offer access to personal interactive services (such as counselling, doctors' appointments, or social services). Similarly, in a previous study service providers have equated genuine care with access to support services and resources (Cooper et al., 2011). These findings highlight assumptions that in order to be seen as genuine, messages need to be personal, and this is equated to messages being sent person to person rather than through a delivery system. However, in the primary study participants were sent one-way supportive messages on a set schedule from a pre-developed template. They were informed of this message-sending modality when they were initially recruited to the study. Participants discussed in hindsight the ambiguity as to whether or not the messages were automated, but in the moment they were received, they could interpret them as personal and genuine. These reflections suggest that factors other than how the messages are sent can impact whether the messages are seen as genuine. While personal message delivery may help messages be seen as genuine, it is not essential for messages to be seen as genuine. Therefore, service users' feedback of desire for personal message delivery is a modification that is not essential for behaviour change, and is therefore a modification the intervention 'could have' rather than 'must have'.

Participants in the primary study identified a number of factors that impacted whether they interpreted the messages as genuine, or as clinical and robotic. These factors have been outlined in section 6.1.1 of this chapter. From service user's perspectives and lived experience of receiving this type of support, these factors are more likely than the message sending modality to have a critical impact on whether the intervention is experienced as genuine. While the identified factors may help influence how the messages are received, there will still be individual variation in how the messages are attributed. For example, in the primary study two participants discussed how variation in the message wording meant they saw the messages as personal and genuine. In contrast, two participants described the same set of messages as repetitive. Therefore, findings from the primary study can be used to inform what factors are important in messages being experienced as genuine, but individual differences mean there is no one way of guaranteeing messages will be seen as genuine.

Criteria for intervention modifications outlined by Yardley et al. (2021) also highlight the importance of modifications being aligned with the principles of the intervention. As discussed above, findings from the secondary study validate the hypotheses of Motto (1976) that the intervention must be initiated by a concerned individual, ask nothing of the person in return, and continue over an extended period of time. Therefore, staying in line with original principles and factors service users have identified as important for communication to be seen as genuine, the messages must use non-demanding person-centred language, include the name of the recipient and the name of the sender. Participants identified the sender's name should be a person they have developed rapport with when they were signed up to receive the intervention. No ideal timeframe for duration of the intervention was identified, but participants in the primary study emphasized the importance of having self-efficacy. As such, messages could be delivered in an ongoing basis until the person indicates they would like the messages to stop.

Finally Yardley et al. (2021) suggests modifications should be easily implementable and uncontroversial. In the secondary study staff discussed how they have limited time and staffing- resources. This finding mirrors national patterns of stress on the mental health workforce (Potter et al., 2018). Consequently, for ease of implementation in current New Zealand mental health service settings, the intervention ‘must have’ minimal additional burden on staff time. Therefore, there is a stronger argument for automated over personal message delivery.

6.3.2 Provider level factors

As discussed in Chapter 5, even when clear inclusion and exclusion criteria have been provided, individual clinicians will still take these criteria into consideration alongside their own assessment of the risks and benefits of the intervention. The secondary study identified CRS staff attitudes towards different features of CC via text messaging that may impact their assessments of the risks and benefits. These findings highlighted that if CC via text messaging were to be implemented in a crisis mental health setting, easily accessible education would need to be provided to enhance staff’s understandings of the benefits and address concerns about the risks. Specifically, qualitative findings from the primary study can be used to demonstrate to staff the value CC via text messages can add to service users’ experience of care and recovery. Motivating staff to consult and sign people up to a CC via text messaging service will be a critical step for implementation that may be especially challenging when staff are already experiencing being overworked and under resourced. One motivating factor could be to support staff to complete education on CC via text messaging as part of their Professional Development Recognition Programme (PDRP). Additionally, if CRS staff names are used in messages as signing up clinicians, staff may need reassurance that this does not make them responsible for risk management for the duration of the intervention (risk management will be part of TAU for the persons ongoing care provider), and they will not receive reply messages.

6.3.3 Organisational level

The knowledge-to-action cycle outlined by Graham et al. (2006) emphasizes the importance of monitoring and evaluating outcomes and knowledge use as a dynamic iterative process of implementation. Therefore, an implementation plan for CC via text messaging will need to incorporate outcome, fidelity, and penetration measures. Measures could include audit requirements of documenting reasons suitable service users were not signed up. Information technology systems could support these aims by including automatic pop-ups for new client presentations or people who have not yet been signed up, and include mandatory reporting fields for reasons people were not signed up.

6.3 LIMITATIONS AND AREAS FOR FUTURE RESEARCH

While the current study was able to provide novel insights into service users' experiences of receiving CC via text messaging, there are also several limitations. Participants in the primary study were service users who signed up to trial CC via text messaging. The general acceptance and support of the intervention may therefore reflect a self-selection bias. The primary study findings cannot be generalised to draw any conclusions as to the overarching appeal or acceptability of this form of support to the target population of people presenting to ED due to suicidal behaviour. However, the study still provides valuable findings about what is effective about this intervention for people who do find it effective.

The number of participants recruited was smaller than intended. Additionally, eight participants who received the intervention were lost to follow-up. While themes did appear to reach saturation (Braun & Clarke, 2006), it is possible that the limited sample size may have reduced the insights from the primary study, especially as they relate to possible barriers or limitations to the intervention's efficacy.

Qualitative research has the advantage of being able to promote service users' voices within the research literature. In the current study, some service user voices were excluded. One group who were excluded were service users who had service-wide care plans in place. Consistent with NICE guidelines, (National Institute for Clinical Excellence, 2011) service users who would frequently present to services in crisis have service-wide care plans that detail what forms of support should be offered when they present to services. In order to not disrupt these care plans, participation was not offered to service users with a plan in place. While participants did have a variety of suicide histories, by excluding those with a service-wide care plan, this study has not represented the voices of service users who were currently experiencing a pattern of chronic risk. Previous research has also indicated that CC may have a greater effect for people who have a history of suicidal behaviour compared to people who had not made a previous suicide attempt (Carter et al., 2013; Hassanian-Moghaddam et al., 2011). As the intervention may be more effective for people with longer suicide histories, future research should investigate how people with service-wide care plans experience this type of support fitting in with their wider care plans.

In conclusion CC is a cost effective, scalable intervention with growing research interest in its variable applications and implementation (Skopp et al., 2022). The primary study findings have highlighted service users' experiences of receiving CC via text messages, providing insights into facilitators and barriers of possible intervention mechanisms. The secondary study identified crisis staff's current use and attitudes towards different aspects of CC via text messaging interventions. Together these findings have informed implementation considerations for CC via text messaging in a New Zealand context at the level of the intervention, provider, and organisation. Further research is needed into the efficacy of CC delivered via automated one-way text messaging. Future research should also incorporate measures of possible mechanisms discussed above to help further refine understandings of the critical elements of the intervention.

Chapter 7: Conclusion

This study has explored gaps in the knowledge translation process to improve the real world application of research related to CC as a suicide prevention intervention. Suicide is a significant public health priority and there is a need for implementable interventions and programmes. Knowledge translation and implementation science have emerged in response to a global gap between research findings and active use of findings in clinical real world settings (Straus et al., 2009). This study has demonstrated the value and insights that can be garnered from service user and service provider qualitative feedback on new interventions.

Primary study findings highlighted four themes related to people's experiences of receiving CC via text messages. These themes included *Caring Connection*, *Safety and Security*, *Reflections on Recovery*, and *Limitations*. The theme of *Caring Connection* related to participants feeling cared for. The theme of *Safety and Security* reflected participants' relief of feeling they had an ongoing connection to support services and their confidence in being able to access support if they need it. *Reflections on Recovery* related to participants talk of how the messages made them mindful of their well-being needs, the passage of time since their crisis, and where they wanted to go with their recovery. In the theme of *Limitations,* participants discussed how the messages served as an unwelcome reminder of their crisis, that the messages sometimes brought up feelings of isolation and their frustrations with not being able to reply to messages.

The secondary study arose out of insights from partnering with CRS in recruitment for the primary study. Previous research has identified challenges when using clinical staff as recruitment intermediaries (Knox et al., 2016). The recruitment process highlighted the need and opportunity to identify possible barriers and facilitators to implementing CC via text messaging in a crisis mental health setting. The findings illustrated staff attitudes and assumptions about different aspects of CC via text messaging which can be used to inform education packages as part of an implementation plan.

Findings from the primary and secondary studies have implications for the possible implementation of CC via text messaging. Findings of the primary study provide evidence to support proposed mechanisms that CC has a suicide preventative effect through increasing social support, increasing suicide prevention literacy, and promoting alternative coping behaviours (Milner et al., 2016). These mechanisms may be underpinned by theory of suicidal behaviour and behavioural principals. The primary study specifically identified novel insights into contextual factors that can facilitate or prevent the messages from being seen as ‘genuine’. These factors have direct implications for how the intervention should be implemented. The secondary study highlights individual provider and organisational level considerations for implementation. Specifically, these factors include needing to place minimal additional burden on staff, providing easily accessible information to staff on the benefits of the intervention and data to be collected by organisations to continue to evaluate and improve the implementation and efficacy.

Overall, the research findings presented within this thesis provide new knowledge into the experienced benefits and limitations of receiving CC. These findings can be developed upon by future research including quantitative measures of the proposed mechanisms and further efficacy studies of CC delivered via automated one-way text messaging.

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Appendices

APPENDIX A: PRIMARY STUDY PARTICIPANT INFORMATION SHEET

MASSEY
UNIVERSITY
TE KUNENGA KI PŪREHUROA
UNIVERSITY OF NEW ZEALAND

Acceptability of caring contacts by text messages.

Researcher(s) Introduction

Tēnā koe, my name is Olivia High. I am a student at Massey University (Wellington) enrolled in the Doctor of Clinical Psychology programme. I am undertaking a research project as part of this qualification. This project is being supervised by Dr John Fitzgerald, Professor Annette Beautrais, Dr Tatiana Tairi, and Dr Silke Kuehl.

What is the purpose of the study?

This study examines if receiving certain text messages helps people at risk of suicide to cope better after they get discharged from emergency departments. The texts, which express care and concern ("caring contact"), are sent over a few months. These caring brief text messages are used overseas, and we want to see if this approach can be used in New Zealand.

Who can participate?

People who have been seen in the Emergency Department (ED) after they have made a suicide attempt or been thinking about suicide, can participate if they have been discharged from the ED by their doctors and mental health team. They also have to be 18 years or older, have a personal cell phone, and be able to read text messages.

What would my participation in the research involve?

If you participate in this study, you will:

- Read and sign the Informed Consent form
- Provide contact details and answer background information questions about your mental health and suicidal behaviour (this will take 10-15 minutes)
- Receive 12 brief text messages over six months. You do not need to reply to these messages. An additional message will be sent on your birthday if it is in the study period.
- Be contacted towards the end of the six-month study period to arrange a feedback interview.
- You will come to the Massey University Psychology Clinic (at 24 King Street, Mount Cook) for a 30-minute feedback interview. I will conduct the interview and the interview will be audio recorded.
- You will receive a $20 supermarket voucher to compensate for your attendance at the interview. We can also reimburse reasonable travel expenses.

What happens after the Interview

I will transcribe the interview (make a written copy) and you will have the opportunity to review and delete any part of the transcript you are unhappy with. After the interview has been transcribed the audio record of your interview will be erased. A summary report of the research findings will be sent to you via email or post. All health information collected during the study must be held for ten years before it can be destroyed as per New Zealand law.

What happens if I change my mind?

Participation in the study is voluntary and you can withdraw from the study at any time before the end of the study period. If you decide you no longer wish to receive the text messages, you can reply STOP. If you reply STOP we will contact you to offer you the opportunity to have a feedback interview or ask if you want to withdraw from the study without a feedback interview.

What are the possible benefits and risks of this study?
Participating in this study will provide you with caring text messages in addition to your usual care.

This study is about one-way caring contacts by text messages. We are not able to respond to any reply messages. However, if you would like counselling support at any time you can free text the “Need to Talk?” 1737 helpline. We provide this number at the end of all of our text messages to you. If you were injured in this study, which is unlikely, you would be eligible for compensation from ACC just as you would be if you were injured in an accident at work or at home. You will have to lodge a claim with ACC, which may take some time to assess. If your claim is accepted, you will receive funding to assist in your recovery.

What are my rights as a participant?

- You are under no obligation to accept this invitation to participate in the study.
- You can withdraw from the study at any time before the end of the study period.
- You may ask any questions about the study at any time during participation by emailing or telephoning the researcher or supervisor (details below).
- Your identity and interview will be confidential. All of the information you share as a part of the research will be held securely at Massey University. A code name will be used to identify you in written copies of the interview. No material that could identify you will be used in reports from this research.
- You may choose to not answer any question without justification.
- You may ask for the recorder to be turned off at any time during the interview.
- This study will provide caring text messages in addition to your usual care. If you would like, your health practitioner can be informed about your participation in the research. They will not be contacted if you don’t consent to it.
- You may bring along a support person to the interview.
- You have the right to check and correct any information about yourself that is collected as part of the study.
- You will be reimbursed for your interview time with a $20 supermarket voucher, and reasonable travel costs will be reimbursed.
- You will be given a summary of the study findings when it is concluded.

Who should I contact for more information or if I have any concerns?
You can email me with any questions or concerns about the study at any stage. You can also email or telephone my primary research supervisor Dr John Fitzgerald.

Olivia High
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Olivia.High.1@uni.massey.ac.nz

Dr John Fitzgerald
Senior Lecturer in Clinical Psychology
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If you want to talk to someone who is not involved in the study, you can contact an independent health and disability advocate at 0800 555 050 or advocacy@hdc.org.nz
You can contact the Health and Disability Ethics Committee (HDEC) that approved this research at 0800 4 ETHICS or hdecs@moh.govt.nz. The reference number for this study is 18/NTB/145. For Māori health support you can contact Whānau Care Services at 0800 999442 or wcs@ccdhb.org.nz

APPENDIX B: PRIMARY STUDY PARTICIPANT CONSENT FORM

MASSEY UNIVERSITY
TE KUNENGA KI PŪREHUROA
UNIVERSITY OF NEW ZEALAND

Acceptability of caring contacts by text messages.

PARTICIPANT CONSENT FORM

- I have read, or have had read to me in my first language, and I understand the Participant Information Sheet.
- I have been given sufficient time to consider whether or not to participate in this study.
- I have had the opportunity to use, whānau/ family support or a friend to help me ask questions and understand the study.
- I am satisfied with the answers I have been given regarding the study and I have a copy of the information sheet.
- I understand that taking part in this study is voluntary (my choice) and that I may withdraw from the study at any time without this affecting my care.
- I understand that investigators are not able to respond to any reply messages as this study relates to one-way caring contacts by text messaging.
- I agree to be contacted to arrange a follow-up interview.
- I agree to the follow up interview being audio recorded.
- I understand that I can stop receiving text messages as part of this study at any time by texting STOP.
- I understand that my participation in this study is confidential and that no material, which could identify me personally, will be used in any reports on this study.
- I understand the compensation provisions in case of injury during the study.
- I know who to contact if I have any questions about the study in general.

Please tick to indicate you consent to the following

I consent to the researcher asking me background information questions, including questions about my mental health and suicidal behaviour.	Yes ☐	No ☐
I consent to the Crisis Resolution Service being informed about my participation in the study.	Yes ☐	No ☐
I wish to receive a summary of the results from the study.	Yes ☐	No ☐
I would like to receive text messages in:	English ☐	Te Reo Māori ☐

Declaration by participant:
I consent to take part in this study.

Participant's name: ____

Signature: ________________________ Date: __________________

Declaration by member of research team:

I have given a verbal explanation of the research project to the participant, and have answered the participant's questions about it.

I believe that the participant understands the study and has given informed consent to participate.

Researcher's name: ____

Signature: ________________________ Date: __________________

APPENDIX C: PRIMARY STUDY INTERVIEW GUIDE

Information gathering

1. Did you receive the text messages?
2. How many do you remember getting
3. In the last six months have you used any of these resources or services for help with your mental health? *-show card*
4. Have you had any other crises related to your mental health in the last six months?

Experience

1. What was it like for you to receive the text messages?
    Prompt-What would you think when you received a text?
    Prompt- How did it make you feel to receive the texts?
2. What difference (if any) do you think receiving the text messages made for you?
    Prompt- When you received a text, how did it affect your day?
    Prompt -Was it helpful or unhelpful? What about it was helpful/unhelpful?

Context

3. How did receiving the text messages fit in with the other follow up care you received?
    Prompt-did receiving the text messages change how you experienced any other care you received?
    Prompt-did it change how you felt about any other care
4. how did it align with your expectations?
    Prompt- Did it fit with any cultural or spiritual beliefs you have

Improvements

5. What would you change or want to improve about the way we sent text messages?
    Prompt-Would you change any of the wording of the texts?
    Prompt- Would you change how long the text messages get sent for (e.g., longer or shorter than 6 months)?
    Prompt- Would you change how often the texts are sent?
6. Where there any downsides to receiving the texts

APPENDIX D: TEXT MESSAGE SCHEDULE WITH TE REO TRANSLATIONS

Text Number	Delivery day	Template message content
1	One day after recruitment	Kia ora [name]. It was nice to meet you yesterday! If you need some more support you can free phone Te Haika at 0800745477. Thanks, from Olivia.
		Kia ora [ingoa]. He pai te kite i a koe inanahi. Ki te hiahia tautoko ana koe, waeatia atu ki Te Haika 0800745477. Ngā mihi, nā Olivia.
2	One week after recruitment	Kia ora [name]- Hope you're having a good day. You can free phone Te Haika at 0800745477 if you want to talk to someone about how things are going. Take care, from Olivia.
		Kia ora [ingoa]. Ko te tūmanako he pai tō rā. Waeatia atu ki Te Haika 0800745477 ki te hiahia ana koe ki te kōrero ki tētahi. Noho ora mai, nā, Olivia.
3	2 weeks after recruitment	Kia ora [name] It's Olivia here. Hope things have been going well for you. You can free phone Te Haika at 0800745477 for support.
		Kia ora [ingoa]. Ko Olivia tēnei. Ko te tūmanako e pai ana koe. Waeatia atu ki Te Haika 0800745477 ki te whiwhi āwhina.
4	3 weeks after recruitment	Kia ora [name] Just wanted to say Hi and wish you well. You can free phone Te Haika at 0800745477 for someone to talk to if you need it. Thanks, from Olivia.
		Kia ora [ingoa]. Koia rā he mihi ki a koe. Waeatia atu ki Te Haika 0800745477 ki te pīrangi ana ki te kōrero ki tētahi. Nāku nā, Olivia.
5	4 weeks after recruitment	Kia ora [name] Hope you're having a good week. All the best, from Olivia. You can free phone Te Haika at 0800745477 at any time for support.
		Kia ora [ingoa]. Ko te tūmanako he pai tō wiki. Ngā mihi nui nā Olivia. Waeatia atu ki Te Haika 0800745477 ki te whiwhi āwhina.
6	5 weeks after recruitment	Kia ora [name], Olivia here again. Hope all is well with you and your whānau. You can free phone Te Haika at 0800745477 any time if you want to chat.
		Kia ora [ingoa]. Ko Olivia tēnei anō. Ko te tūmanako e pai ana koutou ko tō whānau. Waeatia atu ki Te Haika 0800745477 ki te kōrerorero ana ki tētahi.
7	6 weeks after recruitment	Kia ora [name]. Hope life is going well. To get support at any time free phone Te Haika at 0800745477. Take care, from Olivia.
		Kia ora [ingoa]. Ko te tūmanako e hauora ana koe. Ki te whiwhi ana he āwhina, waeatia atu ki Te Haika 0800745477. Noho ora mai, nā Olivia.
8	2 months after recruitment	Kia ora [name] Wishing you all the best. You can free phone Te Haika at 0800745477 if you want someone to talk to. Thanks, from Olivia.
		Kia ora [ingoa]. He mihi maioha ki a koe. Waeatia atu ki Te Haika 0800745477 ki te hiahia ana koe ki te kōrero ki tētahi. Nāku nā, Olivia.

9	3 months after recruitment	Kia ora [name] It’s Olivia here. Hope you’re doing ok. For support or a chat free phone Te Haika at 0800745477.
		Kia ora [ingoa]. Ko Olivia tēnei. Ko te tūmanako e pai ana koe. Ki te pīrangi ana koe he āwhina, he kōrerorero, waeatia atu ki Te Haika 0800745477.
10	4 months after recruitment	Kia ora [name] Hope things have been going well for you. You can free phone the folks at Te Haika at 0800745477 if you need support. Wishing you well, from Olivia.
		Kia ora [ingoa]. Ko te tūmanako e pai ana tō mahi. Ki te hiahia ana koe he āwhina, kei reira te rōpū ki Te Haika 0800745477. Ngā mihi maioha, nā Olivia.
11	5 months after recruitment	Kia ora [name]. Hope all is going well for you. Free phone Te Haika at 0800745477 for someone to talk to. All the best, from Olivia.
		Kia ora [ingoa]. Ko te tūmanako e pai ana koe. Waeatia atu ki Te Haika 0800745477 ki te kōrero ki tētahi. Ngā mihi, nā Olivia.
12	6 months after recruitment	Kia ora [name] Hope you’re having a good day. You can free phone Te Haika at 0800745477if you want to chat. Take care, from Olivia.
		Kia ora [ingoa]. Ko te tūmanako he pai tō rā. Waeatia atu ki Te Haika 0800745477 ki te hiahia ana koe ki te kōrerorero. Noho ora mai, nā Olivia.
13 (Optional)	Birthday	Happy Birthday [name]! We hope it’s been a good one and that this year brings you good things! From Olivia.
		Hari huritau [ingoa]! Ko te tūmanako i tino pai tērā tau, ā, he painga hoki ā mua. Nā Olivia.

APPENDIX E: PRIMARY STUDY BACKGROUND INFORMATION COLLECTION FORM

Preferred name and or title **What name would you like the text messages to be addressed to?**	
Age **What's your date of Birth?**	
Cell phone no. **What's your cell phone number?**	
Gender **What gender do you identify as?**	☐Man ☐Woman ☐Nonbinary ☐Trans ☐Don't wish to say
Ethnicity **Can you tell me which ethnic group or groups you belong to:**	☐New Zealand European ☐ Māori ☐Samoan ☐Cook islands Māori ☐Tongan ☐Niuean ☐Chinese ☐Indian ☐Another ethnic group such as Dutch, Japanese, or Tokelauan, Please say what it is:
Mental Health diagnoses **Have you ever been formally diagnosed with a mental health disorder?** **What was it?** **Is this still a current diagnosis?**	

Suicide attempt history	**Are you in the hospital today because of :** ☐ **a suicide attempt** ☐ **or suicidal thoughts** **Have you ever made a suicide attempt (before today)** ☐ Yes ☐No If no, go to next Q. If yes, then ask: **How many suicide attempts have you ever made (not counting the one that brought you in to the ED today)? ___________________** **When was your most recent attempt (before today)** ____ **thinking about this most recent attempt did you get help at the time from**: ☐Family/friends ☐ED ☐Afterhours Dr ☐GP ☐Police ☐didn't tell anyone **Still thinking about this most recent attempt did you receive follow up care from** ☐ Crisis resolution service ☐Community mental healthcare ☐GP ☐Other counselling service_______________________
What forms of mental health support they have received **Have you ever used any of these services or resources for support for your mental health** *show card	☐ GP ☐Psychologist ☐Psychiatrist ☐Counsellor ☐social worker ☐Church ☐kaumātua ☐helplines eg youthline or lifeline ☐ support groups eg alcoholics anonymous ☐Apps eg smiling minds ☐Holistic health eg homeopath, ☐Self-help books eg Mind over Mood ☐online resources or website eg mood gym , depression . org ☐other _____________________
Follow-up care plan	**What plans have been made for your follow-up care today?** Have you been given an appointment ? with who? ☐To see GP ☐appointment with Crisis resolution services ☐appointment with existing counselling service ☐appointment with new counselling service community mental health team any other follow up plans ? new or existing counsellor

APPENDIX F: SECONDARY STUDY PARTICIPANT INFORMATION SHEET

MASSEY UNIVERSITY
TE KUNENGA KI PŪREHUROA
UNIVERSITY OF NEW ZEALAND

Acceptability of caring contacts by text messages information sheet.

Researcher(s) Introduction

Tēnā koe, my name is Olivia High. I am a student at Massey University (Wellington) enrolled in the Doctor of Clinical Psychology programme. I am undertaking a research project as part of this qualification. This project is being supervised by Dr John Fitzgerald, Professor Annette Beautrais, Dr Tatiana Tairi, and Dr Silke Kuehl.

Project Description and Invitation

I am doing my research on caring contacts. Caring contacts is a type of suicide prevention intervention that provides follow up contact by text messages to people who have presented to the emergency department due to suicide risk. I have worked with the Crisis Resolution Service (CRS) to identify people who may benefit or have an interest in this type of support. Given the role of the CRS team in this project, I would like to get a sense of the current work the CRS team does that is relevant to caring contacts as well as any suggestions or recommendations you might have.

Participant Identification and Recruitment

Experienced and knowledgeable members of the CCDHB Crisis Resolution Service are invited to take part in research interviews. I am looking to recruit between 5-10 staff members for these interviews. Participants will be reimbursed for their time with a $20 supermarket voucher.

Project Procedures

The interviews will be conducted at a time and place that is convenient for you. This may be at a community venue such as a public library, at your home or work place, or at Massey University. The interview is expected to take no longer than an hour.

If you were injured in this study, which is unlikely, you would be eligible for compensation from ACC just as you would be if you were injured in an accident at work or at home. You will have to lodge a claim with ACC, which may take some time to assess. If your claim is accepted, you will receive funding to assist in your recovery.

Data Management

The interviews will be audio recorded. The audio files will be used to generate interview summary sheets with the main points addressed in the interview. All information you share as part of the research will be held securely at Massey University for a 10 year period. The interview material will be kept confidential which means that no material that could identify you will be used in reports generated from this research. If you wish to receive a summary of the findings from this project please let us know and we will send them to you by email or post.

Participant's Rights

You are under no obligation to accept this invitation. If you decide to participate, you have the right to:

- *decline to answer any particular question;*
- *withdraw from the study at any time before the final report is produced, in which case all data collected from you will be deleted;*
- *ask any questions about the study at any time during participation;*
- *provide information on the understanding that your name will not be used;*
- *review your interview summary sheet and return it with edits (within a timeframe of a week);*
- *be given access to a summary of the project findings when it is concluded;*
- *ask for the recorder to be turned off at any time during the interview.*

Who should I contact for more information or if I have any concerns?

You can email me with any questions or concerns about the study at any stage. You can also email or telephone my primary research supervisor Dr John Fitzgerald.

Olivia High
Doctor of Clinical Psychology Student
Olivia.High.1@uni.massey.ac.nz
(04) 801 5799 extn. 63620

Dr John Fitzgerald
Senior Lecturer in Clinical Psychology
j.m.fitzgerald1@massey.ac.nz

If you want to talk to someone who is not involved in the study, you can contact an independent health and disability advocate at 0800 555 050 or advocacy@hdc.org.nz You can contact the Health and Disability Ethics Committee (HDEC) that approved this research at 0800 4 ETHICS or hdecs@moh.govt.nz. The reference number for this study is 18/NTB/145/AM01. For Māori health support you can contact Whānau Care Services at 0800 999442 or wcs@ccdhb.org.nz

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APPENDIX G: SECONDARY STUDY PARTICIPANT CONSENT FORM

Acceptability of caring contacts by text messages information sheet.

PARTICIPANT CONSENT FORM

I have read, or have had read to me in my first language, and I understand the Participant Information Sheet.

I have been given sufficient time to consider whether or not to participate in this study.

I have had the opportunity to use a legal representative, whanau/ family support or a friend to help me ask questions and understand the study.

I am satisfied with the answers I have been given regarding the study and I have a copy of this consent form and information sheet.

I understand that taking part in this study is voluntary (my choice) and that I may withdraw from the study at any time without this affecting my medical care.

I understand that my participation in this study is confidential and that no material, which could identify me personally, will be used in any reports on this study.

I understand the compensation provisions in case of injury during the study.

I know who to contact if I have any questions about the study in general.

I understand my responsibilities as a study participant.

I understand that if I decide to withdraw from the study, the information collected about me up to the point when I withdraw will be deleted.

I wish to receive a summary of the results from the study. Yes ☐ No ☐

Declaration by participant:
I hereby consent to take part in this study.

Participant's name: ______________________

Signature: ______________ Date: ______________

Declaration by member of research team:

I have given a verbal explanation of the research project to the participant, and have answered the participant’s questions about it.

I believe that the participant understands the study and has given informed consent to participate.

Researcher’s name: ____

Signature: __________________________ Date: ____________________

APPENDIX H: SECONDARY STUDY INTERVIEW GUIDE

Interview Guide

(Interviews will be semi-structured with the questions and prompts bellow acting as a guide. Interviews will begin with informal introductions and a short discussion of the participants work experience to build rapport and to build up to the body of the interview)

My PhD research project is about “caring contacts”.

Caring contacts is a simple, non-demanding suicide prevention intervention for people who have presented to the emergency department with suicide risk. The follow-up contact lets the person know they are being thought of while asking nothing of them in return and is provided as an addition to usual care. In this project we have provided people with this type of contact through text messages.

As part of the research project, we would appreciate your views, as members of the CRS team, on this intervention:

1. How does this kind of simple, non-demanding follow-up care fit into the work the crisis team does?
    a. Do you currently provide any simple follow-up care interventions in CRS?
    b. Do you plan to introduce any such programmes?
        i. If not, why not?
        ii. If yes, what type of programme?
    c. How long do you think people should be followed up with contacts in these types of simple non-demanding interventions?
        i. Why do you say ‘that length of time’?
    d. Are there any ways in which the follow-up care currently provided by CRS might be improved?

2. How is texting used within the crisis team to provide clients with support?
    a. Do you currently send text message to patients?
        i. (If yes) in what ways is texting being used? (e.g. as appointment reminders).
        ii. (If no) why not?
    b. What benefits do you see for programmes using text messages?
    c. Do you see any problems for text message programmes for patients?
    d. Does the CRS have guidelines for texting clients?
    e. Do you have any other comments about using text messaging programmes to support patients?

3. The original work on caring contacts drew on concepts of acceptance and unconditional positive regard. How do you think the concept of unconditional positive regard is currently used by CRS in working with suicidal patients?

4. What is the role of the crisis team in suicide prevention?
    a. Approximately what fraction of all patients the CRS sees involve suicide-related behaviours?
    b. What does the CRS do best for suicidal patients?
    c. Is there anything more that the CRS could be doing for suicidal patients?

5. It seems that a lot of new research and programmes are emerging in suicide prevention. How does a busy workplace like the CRS keep up to date with these changes?
    a. Do you have a journal club?

    b. Do you have an annual update in suicide prevention for the team?
    c. Where does leadership for suicide prevention lie within the CRS?
    d. Has the CRS introduced any new suicide-related initiatives recently (within the last two years)?
        a. (If yes), what are they?
        b. (If not), what do think some of the barriers to innovation might be?

6. In your experience, how do changes in clinical practice occur in CRS?
    a. Are changes to clinical practice in the CRS more likely to be introduced because of research updates or because of recommendations arising from serious adverse event (SAE) reviews, or other clinical experiences?

7. Do you have any final comments?

APPENDIX I: RESEARCH CASE STUDY

Case study 1

Learning during lockdown

A case study describing changes in psychology practice in response to a national lockdown

Olivia High

Doctor of Clinical Psychology candidate, Massey University Wellington

Clinical Psychology Intern at Infant, Child, Adolescent, and Family Service,
Hutt Valley District Health Board

This case study represents the work of Olivia High during her internship in 2020. Clinical supervision was received during the lockdown period from Rewa Murphy Senior Clinical Psychologist, Infant, Child, Adolescent, and Family Service. All names and identifiable information within have been changed to protect the confidentiality of the client.

Abstract

The Covid-19 virus created a global crisis leading to many countries including New Zealand needing to restrict the movements and interactions of people in the community. Across many sectors this allowed for innovation in the ways we work and connect with others. This case study outlines a process of adopting telepsychology practice to minimize the impacts and disruptions to client care and learning within an internship year marked by the covid-19 lockdown. This will include discussion of ethical principles, practice considerations, and research literature related to the adoption of telepsychology and conclude with reflections on how these related to my own practice.

In February 2020 the first cases of Covid-19 in New Zealand began to be reported. By March the number of new cases was growing exponentially leading to a nation-wide lockdown. In order to stop the chain of transmission, non-essential workplaces were closed, and people were required to stay home. Across the nation healthcare services including mental health had to quickly adjust to the "new normal" and adapt to allow clients and staff to stay home or minimize contact with others. In mental health services this meant rapid adoption and implementation of telehealth services. The need for speed and flexibility in adapting services needed to be balanced against careful consideration of the ethical, practice, and safety considerations of working through a new medium.

This case study will outline considerations of the ethical practice and safety considerations in adopting a telepsychology practice. This will include a discussion of the relevant practice governing documents, best practice guidelines, and a brief review of relevant research literature. The case study will conclude with a summary of how I responded to these ethical and practice considerations in my work as an Intern psychologist at Infant Child Adolescent and Family Services (ICAFS), as well as my reflections on being an intern during lockdown.

Telepsychology: Implications from The Code of Ethics

The practice of psychology within New Zealand is regulated by the New Zealand Psychologist Board (NZPB) under the Health Practitioners Competency Act 2003 (New Zealand Psychologist Board, 2018). When making practice decisions the Code of Ethics and Core Competencies outlined by the NZPB should be consulted concerning these decisions and potential outcomes.

The New Zealand Psychologists Board (2002) Code of Ethics is divided into four principles defined by value statements and that relate to specific practice implications. These principals are *respect for dignity of persons and peoples, responsible caring, integrity of relationships,* and *social justice and responsibility to society*. The principle of *the respect for dignity of peoples and persons* identifies the values of privacy and confidentiality, as well as informed consent. The code emphasizes people's right to privacy and outlines the exceptions to maintaining confidentiality.

In typical face-to-face clinical settings, there are practical factors that can be difficult to control for that can limit service user's privacy, such as being seen in a clinic waiting room, or a lack of soundproofing in clinic rooms. However, working in a digital space presents a unique set of limitations to service users' privacy that can seem more ambiguous. In any online activity there is a degree of uncertainty as to who may access your information. Different platforms have different levels of security to protect the privacy of communication, ensuring communication is not able to be accessed or “hacked” by an unwanted party. Different platforms also collect, record, and share information about the use of the platform. In adopting a telepsychology practice, careful consideration must be given to the platform used.

Accordingly, a full understanding of the privacy of the digital platform in which therapy is occurring is necessary for informed consent to take place. In order for service users to be able to consent to the clinician working remotely, they need information about the potential limitations to their privacy in working this way. Therefore, it is important for clinicians to understand and be able to communicate the data the platform might record to be able to have informed conversations with service users about whether accessing services this way is the right choice for them.

The principle of *responsible caring* requires psychologists to select appropriate assessment methods, use respectful and effective interventions, and to provide these psychological services until the professional relationship is properly ended. In determining appropriate assessment methods and effective interventions that can be delivered through telepsychology, the research literature must be consulted. I have reviewed the relevant literature in a subsequent section. In regard to providing services until the professional relationship can be properly ended, the restrictions placed on services during the lockdown could have resulted in an abrupt cessation of therapy for a number of clients. Offering telehealth services tempered this issue by providing an alternate forum for therapy to continue therapeutic engagement.

On the other hand, responsible caring requires clinicians to practice within their areas of competence and to support client’s participation in decisions related to their care. Therefore, in adopting telepsychology, clinicians must have a sufficient knowledge of their communication platform and skills in remotely supporting clients including managing risk. As discussed, earlier knowledge of the platform is also important in supporting clients to decide if telehealth is right for them.

The ethical principle of *integrity in relationships* also relates to the differences in telepsychology practice (New Zealand Psychologists Board, 2002). This principle emphasizes the importance of maintaining appropriate structure in relationships with people with whom we work.

When working in a clinic, the physical space can provide some of that structure. Clinic rooms might be considered a neutral space where clinician and client can meet to work together. The set-up of the room can offer structure as to who sits where and offers some formality in the meeting. However, when working digitally, some of this structure can be lost. There can be benefits to this in that clients can turn up to sessions and can posture themselves however they feel most comfortable. For instance, when working by videoconferencing, a client can be lying on the floor, or leaning against a bench, or sitting with a pet. Whereas in a clinic room, the set-up can create demands or expectations to be a certain way (e.g. sitting in a chair). While we may aim to make clinic rooms a neutral space, the space can also communicate power differences between the client and psychologist and working remotely may help to reduce these power differences. However, the lack of this structure may also affect the relationship, making the relationship feel more casual and less professional. This might also be compounded by many people's familiarity with using digital communication for more casual communication with friends and being less familiar with engaging with health services this way. Nice section Olivia, I also wondered about social justice and societal responsibility and whether online platforms marginalized those who don't have access to fast, unlimited and stable internet connectivity or a device to be able to connect virtually.

Core competencies

Clinicians must only work within areas where they are competent. Here I will discuss New Zealand Psychologist Board (2018) Core Competencies that are most relevant to adoption of telepsychology. The core competency of knowledge of psychopathology, psychological problems, and psychological models of theories of change will largely remain the same when working through digital communication compared to face-to-face work. However, the scientific evidence for many manualized approaches or therapies are based on face-to-face delivery rather than online delivery. Therefore, the research literature must be reviewed to ensure we have adequate knowledge of the types of interventions that remain effective when derived online. This also relates to competencies of intervention and service implementation.

The competency of communication addresses a clinician's need to build and maintain rapport and collect relevant information (New Zealand Psychologist Board, 2018). Even when working through a video call, we have less information than when you are sitting in the same room as someone. For instance, if someone begins to react to the sight or sound of something in the room, you can see if it is there or might be a hallucination. Whereas on video call, if someone is reacting to something behind the camera, you will not know if it is there. Adjustments might need to be made to our normal communication style to make up for this lost information and to help build and maintain rapport when working online. This can include needing to use more minimal encouragers, clarifying more information (especially if working by text communication), and checking in more frequently with how the client is feeling. The competency of intervention also emphasizes the importance of the process of the therapeutic relationship (New Zealand Psychologist Board, 2018). The research on the ability to build and maintain a therapeutic relationship when working online will be reviewed below.

The core competencies also address cultural competency with a focus on the duties and obligations of psychologists to uphold te Tiriti o Waitangi (New Zealand Psychologist Board, 2018). In relation to telepsychology we must consider how to continue to observe tikanga and engage in whakawhanaungatanga when connecting with tangata whaiora in a digital space as opposed to a physical space. This may include allowing more time in the session to build a connection, considering you are not able to connect over the shared experience of being in a room together. There may also be space for creativity in considering how to build connection, such as sharing images or videos of important whenua you or the client may feel connected to.

Practice guidelines for telepsychology

So far, I have selected and spoken to specific ethical principles and competencies may having an impact on the differences in practicing psychology through digital communication compared to face-to-face. While many subtle differences could be considered, I have restricted my writing here to the differences I consider to be substantial. The New Zealand Psychologists Board (2012) has also published guidelines for best practice of telepsychology which will address some of these more specific issues. These guidelines outline regulatory issues, perceived risks and benefits of telepsychology, and ethical considerations. The regulatory issues relate to using telepsychology outside of New Zealand and will not be reviewed here. Similarly, some of the risk and ethical considerations have already been discussed and therefore will not be repeated.

Regarding risk, the New Zealand Psychologists Board (2012) guidelines question the accuracy of assessment done digitally, as there is less available information about the person’s presentation and therefore greater risk of miscommunication. These points relate to all digital communication but more so to text-based communication. The guidelines also address technology issues including whether service users have easily accessible Wi-Fi or data caps that might lead to additional costs to service users, and advise planning what to do if a connection is lost. The guidelines also highlight that there are increased risks in the ability to manage any crisis that may arise. In regard to handling emergencies, the guidelines advise planning in advance who would be contacted in a crisis situation.

Ethical considerations related to telepsychology highlighted by New Zealand Psychologists Board (2012) included considering the intake procedure to assess if the client and their goals are suited to working online, and if not, offering alternatives. Considerations of competence are also discussed, including the specification that psychologists should not practice in areas where they have not demonstrated competence face-to-face. In working with young people, the guidelines state that consent should be sought from the person’s caregivers. The guidelines point out the importance of availability and suggest making sure messages are checked regularly during times that the psychologist is unavailable. The guidelines encourage psychologists to consider legal risks including accountability for diagnosis made or treatment provided with insufficient information.

Available technology and telehealth research are rapidly changing. Therefore, the ethical and practice considerations identified from the guiding documents are unlikely to be extensive. Recently McCord, Bernhard, Walsh, Rosner, and Console (2020), have reviewed best practice guidelines from Psychological Associations in New Zealand, Australia, America, Ohio, and Ontario to develop their practice cube model of telepsychology. This model identifies telehealth practice domains and then considers how these may be applied in different settings (e.g. community clinics, hospitals, prisons, etc.) and using different delivery modalities. This provides further structure around the considerations in adopting a telehealth practice and broadens the discussion of practice implications identified within the New Zealand Psychologist Board guidelines.

Literature review

Based on this review of the code of ethics, the core competencies, and best practice guidelines several questions have been raised that have focused my review of the research literature. These questions are:

1. What impact does working digitally have on our ability to collect robust psychological information for assessment?
2. What impact does working digitally have on the efficacy of evidence-based interventions such as CBT?
3. What impact does working digitally have on the building of therapeutic relationships?

Additionally, I have considered the research on service user’s preferences for and acceptability of telepsychology.

In regard to assessment, Hilty et al. (2013) reviewed the literature on the efficacy of tele-mental health services. The authors identified a wide range of assessment scales that have been validated for use over videoconferencing with children, adolescents, and adults. The authors also found that evidence supported good interrater reliability of diagnosis of psychiatric disorders for children and adults, but that there is less research available for older adults. Similarly De Weger, Macinnes, Enser, Francis, and Jones (2013) in their review found across the literature there was a high consensus in assessments that were done face to face compared to videoconferencing. Both reviews conclude there is sufficient evidence to suggest psychological assessments can be reliably conducted over videoconferencing.

In regard to treatment, a review of the outcomes of interventions for children and adolescents found that in randomized control trials treatment delivered by videoconferencing had equal or superior effects compared to face-to-face interventions (Slone, Reese, & McClellan, 2012). In a systematic review of treatment for anxiety disorders delivered by videoconferencing, the authors concluded that videoconferencing-based treatment can be as effective as face-to-face treatments for reducing anxiety symptoms (Rees & Maclaine, 2015). However, a meta-analysis and systematic review of treatment for depression delivered by telephone found that interventions were effective when compared to a waitlist control but not when compared to active controls (Castro et al., 2020). Another review found that interventions delivered by videoconferencing were as effective as face-to-face therapy in the treatment of anxiety, depression, PTSD, and adjustment disorders (Varker, Brand, Ward, Terhaag, & Phelps, 2019). Therefore, there is some contradiction between different literature reviews as to the efficacy of teletherapy interventions compared to face to face. The review findings that telephone delivered treatments were not effective when compared to waitlist controls might relate to the focus on the treatment of depression or the use of telephone rather than video conferencing (Castro et al., 2020). The active controls may have provided more behavioral activation (a key component in the treatment of depression), through needing to attend appointments at a clinic. However, there is consistency in findings that interventions delivered by videoconferencing can be effective in reducing symptoms of a range of different forms of psychological distress when compared to waitlist controls.

In considering the impact of working digitally on the therapeutic relationship, a survey of eight adults and their clinicians (who participated in 11 months of therapy delivered through videoconferencing) assessed therapeutic relationship (Richardson, Reid, & Dziurawiec, 2015). Participants reported that technical difficulties had minimal impact on the therapeutic alliance or clinical outcomes. Nelson, Bui, and Velasquez (2011) found in the studies they reviewed that assessed therapeutic alliance, there was no difference between videoconferencing and face-to-face interventions. In a systematic review of research on therapeutic relationship in e-therapy, Sucala et al. (2012) found only 11 out of the 840 identified studies assessed the therapeutic alliance. While their review found that the therapeutic relationship was similar in e-therapy compared to face-to-face therapy, the authors state that more research is needed in order to make firm conclusions about the nature of the therapeutic relationship in digital environments.

Reviews of research on tele-mental health services has shown that young people report high levels of acceptability, liking the use of technology, and that it provides a sense of personal choice (Hilty et al., 2013). It has also been suggested that tele-service may be preferable for some client groups such as those with Autism spectrum disorder (Hilty et al., 2013). Reviews have also emphasized high levels of satisfaction reported by clinicians as well as clients from a range of populations and diagnostic groups (Nelson et al., 2011). This has been linked to evidence suggesting that tele-health reduces costs associated with travel, needing time off work, and childcare needs (Nelson et al., 2011). In a study of eight adults who received 11 months of videoconferencing telepsychology, participants reported high levels of satisfaction, with some participants feeling more comfortable to make sensitive disclosures due to the distance that the medium provided (Richardson et al., 2015). Similarly, another study surveyed healthy aging and mildly cognitively impaired adults who participated in neurocognitive tests administered both face to face and by videoconferencing (Parikh et al., 2013). The results indicated 98% of the participants reported being satisfied with the videoconferencing assessment, and 60% reported having no preference for one modality over the other. These results suggest service users are comfortable with using technology to access mental health care services, and in some instances may prefer to receive services this way.

Taken together, this brief literature review suggests that communication technology, such as videoconferencing, can be used to conduct a comparable mental health assessment to traditional face-to-face assessment. The efficacy of teletherapy compared to face to face may be variable depending on the presenting problem (i.e. depression compared to anxiety) or the technology used (i.e. telephone compared to videoconferencing). However, the research reviewed suggests that therapy delivered by videoconferencing can help reduce symptoms and is better than remaining on the waitlist for services. There is no evidence to suggest that working by videoconference has a negative impact on the therapeutic relationship, however this is an under researched area. Research on acceptability indicated that service users are open to the use of digital communication to access services. This review supports the use of telepsychology practice to allow clients to continue to access services. However, this review has taken a general scope.

Personal reflections

In the following section, I will discuss how these principles and steps were applied in my work at ICAFS, specific challenges for working with teletherapy during a nationwide lockdown, and my reflections on how the lockdown has impacted my learning and development as an intern clinical psychologist.

Soon after the lockdown was announced, ICAFS formed a working group to focus on the implementation and practice of tele-health within our service. I brought to this group lessons from my experience as a Youthline phone counsellor, and a research interest in the implementation of digital communication in services. In selecting a videoconferencing platform, Zoom was chosen due to its end-to-end encryption, and as it was endorsed by the DHB and ACC. A member of the working group read and summarized the privacy statements for Zoom as well as WhatsApp, as this was a platform many of our service users are familiar with. As stated in the ethical considerations, this was helpful for being able to have informed conversations with clients about the privacy limitations of working by videoconferencing and allowed us to guide them through how they may adjust their settings to increase privacy if they had concerns.

Many of the documents reviewed above work from an assumption that the decision to do teletherapy was a process that had been negotiated between service user and service provider, with the option of face-to-face work being available. However, in the current setting, many clients had consented to working together on specific therapy goals in a face-to-face setting before lockdown suddenly prevented this. As a result, we needed to contact clients, establish what they were wanting or were able to work on over lockdown, and discuss if they were comfortable doing this by teletherapy. For many clients this meant a change in how we were working together, and what we were working on. For some families, a lack of privacy in their homes, lack of access to technology, or changes in motivation meant they chose to put their work with ICAFS on hold, creating ethical issues of the equity of access to services. Some families also found that lockdown increased the positive time they were able to spend together as a family, and the presenting concerns were no longer a problem, leading them to be discharged from the service.

I continued to work with two families with whom I had already established a good working relationship and continued with processes for referrals and discharge for another two families I had met with before lockdown. Another family chose not to continue our work over lockdown, instead prioritizing putting time and energy into supporting their children’s learning and doing activities together as a family.

Another way that lockdown affected the teletherapy process was the limitations to privacy within the physical space. Many people were in lockdown with a house full of people either working or learning from home. This made it challenging for some clinicians and service users to find space in their homes to have private conversations. As such, the working group advised the team to wear headphones where possible to avoid clients being overheard by other people in the house. Other recommendations the working group made included talking to clients about how to get back in contact with the clinician if the call is lost, and who else is in the house.

In regard to risk management, the working group outlined a process for getting in contact with the team and the person’s family and making an emergency response where appropriate. For clients who had safety plans in place, these needed to be accommodated to recognise lockdown restrictions and advise clients that they should still attend the emergency department in an emergency.

The working group also put out guidance on how to try and best utilize the technology. This included consideration of framing, creating a therapeutic space, camera placement to try and replicate eye contact, increased use of minimal encouragers, and encouraging clients to turn up to Zoom appointments in a similar way as they would turn up to appointments at the clinic. Discussions were also held around the impact of the space, and the impact of not being able to leave hard conversations behind in the space of the clinic.

Given my experience working on the helpline, I was eager to quickly move ahead with teletherapy. I did not place much value on having a detailed review of guideline documents and explicitly outlining steps and processes that to me seemed like common sense. Then I had a client's family member join a Zoom session while lying in bed, not fully dressed. I was taken aback by this. This experience emphasized the importance of not making assumptions. If I had had a clearer process of engaging in teletherapy with this family, including explaining the importance of attending Zoom sessions in a similar way as they would attend sessions in the clinic, then the situation may have been avoided. Instead I needed to address this issue when it came up. After having now done a thorough review of the code of ethics, core competencies, and practice guidelines, I see the value of engaging in this process for any significant changes in practice. Being able to set up work with processes in place for any anticipated challenges is preferable to needing to reactively respond to challenges as they come up. While we will not be able to anticipate all of the challenges that may come up, having processes that anticipate and plan for problems that might seem like common sense allows for a smoother way of working through them.

In reading the guideline documents I was struck by the focus on what is lost when working with a client through teletherapy compared to being in a room with them. Rather than holding face-to-face appointments up as the gold standard and focusing on the ways that videoconferencing fails to reach that standard, the focus could shift to the ways the two modalities are different, and what each has to offer. In my experience of working with teletherapy during lockdown, crucial family members who had previously been unable to attend appointments were now able to be more actively involved in the therapy process. I was also able to do an initial assessment for a 12-year-old who had been in contact with the service several times in the past. After the session his mother emailed to say that he had never been that talkative or forthcoming at a first appointment. I see this as relating to one of the perceived benefits highlighted by the New Zealand Psychologists Board (2012) that teletherapy can reduce the power difference between psychologist and client by allowing the client more choice and control. While some psychologists can feel anxious or uncomfortable with giving over some of this control to the client, I think there is a lot to be gained in working this way, especially for clients who may otherwise find it difficult to engage with services.

The uncertainty of lockdown lead to heightened anxiety for many people including myself. While I had plenty of work to carry on with, I had concerns about what the disruption to my internship would mean for my skill development and how this might impact my ability to pass the final exam. However, the crisis allowed for different learning opportunities. I found working over Zoom a good way to do co-work with my supervisor, Rewa. Being able to have Rewa sit in on sessions with a microphone on mute gave me more confidence in running sessions and allowed for her to provide helpful feedback and observations. We were also able to benefit from the 40-minute meeting cap on Zoom meetings as it allowed for an intermission where Rewa and I could briefly discuss what the rest of the meeting needed to cover. It was also exciting to be involved in a sudden spike in interest in teletherapy and to be able to support my colleagues in making the most of this technology. I hope that the work that has been done to equip services with teletherapy capacity will continue to be utilized to help increase access to services.

In summation, the Covid-19 lockdown led to a different learning experience than I had anticipated at the beginning of my internship. The experience provided an example of how to navigate crisis situations and adapt my practice. This included learning how to balance the need for quick responses against careful and considered clinical decision making. This case study has outlined a process for making these considerations and the implications for my practice at ICAFS.

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