Peer Plus: Trial of a Novel Model of Digitally Assisted Peer Support for Young People Experiencing Psychosis

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A thesis submitted in partial fulfillment of the requirements for the degree of

Doctor of Psychology (Clinical)

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Abstract

Peer support workers are increasingly being employed within mental health services, in which understanding the types of resources that can be used in peer support work sessions may be of value. The aim of this thesis was to develop and examine the feasibility, acceptability and preliminary outcomes of a novel model of digitally assisted peer support work for young people experiencing psychosis.

To achieve this, a participatory development process was used to create the digital resource, namely Peer Plus. The first paper outlines the development of this digital resource in collaboration with young people who have an experience of psychosis and a mental health service including peer support workers. This process involved the creation of lived experience videos, edited from interviews conducted with young people, across six themes identified as important in recovery from early psychosis: My Journey, Self-Care, My Identity, Connections, Life and Mental Health. A total of fourteen videos were developed via interviews with young people with an experience of psychosis sharing aspects of their own mental health, and how they navigated various challenges. The videos were designed to facilitate discussions and encourage a sense of hope and personal reflection in young people about their own mental health experiences. Creating Peer Plus including the lived experience videos by combining expertise from consumers, PSWs, the service and academic researchers was crucial in understanding peer support work and being able to develop a program that could be tailored to the preferences of whom Peer Plus is intended to benefit.

A case series trial was then employed to examine the feasibility and acceptability of Peer Plus. Exploratory analyses on recovery-oriented outcomes were also conducted. This is presented in the second paper of the thesis. A small group of peer support workers accessed the videos via a private website using a tablet computer (i.e., iPad) to facilitate discussions about recovery with young people across four face-to-face sessions. The results showed Peer

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Plus was a feasible and acceptable blended model of peer support work. In the majority of sessions, the lived experience videos were used to facilitate conversations between the peer support worker and young person, with four out of the five eligible participants (M_{age} = 21.80, SD= 2.39) completing the program. All four participants who completed the program reported feeling better following their participation, and no adverse effects were noted. The exploratory reliable change index analyses on participants outcomes revealed two of the four participants demonstrated reliable improvement in personal recovery, while the remaining two participants had no reliable change. These preliminary findings provide support for the feasibility and acceptability of using lived experience videos as a tool to facilitate discussions in one-on-one peer support work with young people experiencing psychosis.

The third paper of this thesis aimed to understand the perspectives of both consumers and peer support workers on the lived experience videos and their use in peer support work. The qualitative thematic analysis combined data from two groups of participants; actual and hypothetical participants (n= 15). Actual participants involved four consumers aged 18 to 25 years old (M= 21.25, SD= 2.36) and one PSW who completed the Peer Plus program as part of Study 2. Hypothetical participants involved seven consumers aged 20 to 25 years (M= 21.57, SD= 1.81) and three PSWs who completed a single qualitative interview about the videos and resource. The results identified three superordinate themes: creating space for conversations, promoting a hopeful life, and using lived experience videos. The findings supported the use of lived experience videos with young people experiencing psychosis, however how best to incorporate the videos into peer work practice was questioned.

Overall, this current research was the first to explore the use of a blended model of individual peer support work involving lived experience video material with young people experiencing psychosis. This thesis extends upon the existing research on paid peer support work and digital recovery narratives and provides preliminary support for the use of a highly

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novel blended model of peer work with digital technology in young people experiencing psychosis. What remains to be certain is how to best implement the videos within peer support work practice, which is subject to future research.

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Declaration

I, the candidate, declare that the contents of this thesis:

- 1. Contains no material which has been accepted by me for the award of any other degree at any other university or equivalent institution.
- 2. To the best of my knowledge, contains no material previously published or written by another person except where appropriate reference is made in the thesis.
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List of Important Abbreviations

- APA American Psychiatric Association
- FEP First Episode Psychosis
- EIS Early Intervention Services
- PSW Peer Support Worker
- DUP Duration of Untreated Psychosis
- IPS Intentional Peer Support
- CHIME Connectedness, Hope and optimism about the future, Identity, Meaning and purpose and Empowerment
- RCT Randomised Controlled Trial
- RCI Reliable Change Index
- TA Thematic Analysis

List of Peer Reviewed Publications

The following paper has been published.

Peck, C. E., Lim, M. H., Purkiss, M., Foley, F., Hopkins, L., & Thomas, N. (2020).
 Development of a Lived Experience-Based Digital Resource for a Digitally-Assisted
 Peer Support Program for Young People Experiencing Psychosis. *Frontiers in Psychiatry*, 11, 635.

The following paper is under review for publication.

i. Peck C. E., Williams, A., Lim, M. H., Hopkins, L. & Thomas, N. (2020). *Using lived experience videos in peer support work: A qualitative investigation*. Manuscript under review for publication.

The following paper has been submitted for publication.

i. Peck, C. E., Lim, M. H., Foley, F., Hopkins, L. & Thomas, N. (2020). *Peer Plus: A case-series trial of a novel model of digitally-assisted peer support work for young people experiencing psychosis.* Manuscript submitted for publication.

List of Conference Presentations

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- ii. Thomas, N., Farhall, J., Peck, C., Williams, A., Arnold, C., McLeod, B., & Nunan, C. (August, 2019). *Virtual Peer Work? Therapeutic Experiences Associated with Viewing the Lived Experience of Others with Severe Mental Illness*. Round table presentation at the Digitalta Conference, Melbourne, Australia.

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- Barbara Dicker Brain Science Foundation Student Grant of \$5,000 (2017).
 Digitally Assisted Peer Support (DAPS) for Young People with Emerging Mental Health Problems: A Novel Model of Technology-Enhanced Peer Work.

PART I: Background and Literature Review

Chapter One: Overview of the Thesis

1.1 Chapter Guide

The aim of this chapter is to provide an outline of the thesis objective and structure to help guide the reader through the document.

1.2 Thesis Objective

The overall objective of the thesis is to document the development and feasibility of a novel model of peer support work for early psychosis populations that uses lived experience video material as a therapeutic tool in sessions. Participatory methods involving young people, a mental health service, Peer Support Workers (PSWs) and academic researchers were used to inform the development of this novel model of peer support work. This included developing a personal recovery framework based on the lived experience accounts of young people, alongside creating a series of lived experience videos featuring young people with an experience of psychosis sharing their mental health experiences and navigation of difficulties. This development process led to the creation of a digitally assisted peer support work program, namely Peer Plus. A case series trial was conducted to examine the feasibility, acceptability and exploratory preliminary outcomes of the Peer Plus program, followed by a larger qualitative study on consumer and PSWs participants perspectives on using the lived experience video material within peer support work.

The work conducted is innovative in multiple ways. First, it examines the combination of a digital tool with face-to-face service delivery in mental health, often referred to as a form of blended intervention (Erbe, Eichert, Riper, & Ebert, 2017). The literature on blended interventions is at an early stage, and the use of tablet computers (e.g., iPad) to structure mental health work, both in the context of peer work, and in the context of early psychosis, explores new ground. Second, the project examines the use of lived experience video material, mirroring the PSWs use of their own lived experience in an

intentional way to promote change in the context of peer support work. Third, it considers the use of a recovery-oriented peer support work model with an early psychosis population. In spite of the significant development of peer support work within services, this is an area to be systematically studied. It is hoped the findings will inform the potential use of digital technology within peer support work, and its application to mental health services for early psychosis populations.

1.3 Thesis Structure

The structure is by three associated papers that are interrelated and will form the main body of the thesis. Each study has been prepared for publication in a peer-reviewed journal. The thesis commences with a review of the literature beginning in Chapter 2 and ending with Chapter 5 to provide the background information relevant to the overall objective of the present research and concludes with a summary and rationale. This leads into Chapter 6, which provides an overview of the research aims. Chapter 7 will present Study 1 and describe the collaborative development of the digitally assisted peer support work program. This will help provide an understanding of the novel model of peer support work that was created and later examined in Study 2 and 3. Both Study 2 and 3 share a similar methodology, in which Chapter 8 will provide a detailed description of the methodological considerations relevant to both studies. Any specific differences in the method for each study will be discussed in their respective chapters. Chapters 9 and 10 will then present Study 2 and 3 respectively, beginning with a case series trial examining the feasibility, acceptability and preliminary outcomes of the digitally assisted peer support program, followed by a qualitative exploration of both consumer and PSWs perspectives on the use of video material as part of peer support work. An overall discussion summarising the research findings and implications for future research and peer support work practice will be covered in Chapter 11.

Chapter Two: Psychosis

2.1 Diagnostic Overview of Psychosis

Psychosis is traditionally considered in terms of schizophrenia spectrum and other psychotic disorders, a cluster of mental health disorders that can involve hallucinatory and delusional experiences, disorganised thinking and disorganised or abnormal behaviours (American Psychiatric Association [APA], 2013). Individuals with psychosis may also experience negative symptoms including diminished emotional expression, apathy, lack of motivation in goal-directed behaviours and social withdrawal (APA, 2013).

A diagnosis of psychosis can be classified by the Diagnostic and Statistical Manual of Mental Disorders 5th Edition ([DSM-5]; APA, 2013) section on 'schizophrenia spectrum and other psychotic disorders' (i.e., schizophrenia, schizoaffective disorder, brief psychotic disorder, delusional disorder, substance induced psychotic disorder etc.). A first episode of psychosis occurs when an individual's experiences meets full criteria for one of the schizophrenia spectrum and other psychotic disorders on the first occurrence (APA, 2013). The specific diagnostic criteria depends on the symptoms present and their duration. For example, if an individual has been experiencing at least two symptoms of either hallucinations, delusions, disorganised speech or behaviour and/or negative symptoms, with one of the symptoms meeting criteria for hallucinations, delusions or disorganised speech for the majority of one-month over a total 6-month period, and the individual was also experiencing significant impacts on at least one area of their functioning (e.g., vocational, interpersonal, educational, personal etc.), and the symptoms were not better explained by another disorder, medical condition or effects of a substance, it is possible the individual may be experiencing a first episode of schizophrenia (APA, 2013).

According to the Australian Institute of Health and Welfare (AIHW) survey, one in four young people aged 16-24 years old experienced mental illness in the past 12 months,

with mental health being the second leading cause of burden of disease in this age group (AIHW, 2007, 2018a). In particular, the development and course of psychosis typically occurs between late adolescence and mid-20s, with approximately 64.8% of young people experiencing their First Episode of Psychosis (FEP) before the aged of 25 (AIHW, 2018b).

The initial 1 to 5 years following an individual's FEP is suggested to be a crucial time in shaping the long-term outcome of the disorder (APA, 2013; Bucci et al., 2015; McGorry, Killackey, & Yung, 2008). This period, also described as young adulthood, involves several transitions towards becoming an adult including developmental, personal, social, vocational and emotional challenges (Mackrell & Lavender, 2004; Roy, Rousseau, Fortier, & Mottard, 2013). Findings suggest that 90.4% individuals report deterioration in their level of functioning relative to similar-age peers including increased delays in financial and residential independence and educational achievement, as well as postponing involvement with a romantic partner (Morgan et al., 2012; Roy et al., 2013). This emphasises a critical period following the first episode of psychosis where relapse could have an influential role in an individual's social, vocational and psychological development (Mackrell & Lavender, 2004; McGorry, Purcell, Hickie, & Jorm, 2007).

2.2 Early Intervention Services for Psychosis

Since the early 1990s, Early Intervention Services (EIS) for psychosis have been established worldwide (i.e., Australia, United Kingdom, Netherlands etc.; Malla et al., 2016; Reading & Birchwood, 2005). This has involved specialised EIS providing support for people who are at a high risk of developing psychosis and those who are experiencing psychosis through engaging in early identification and detection, reducing the delay between the onset of symptoms and people seeking mental health support and providing support to people throughout the early stages of the mental illness (Albert & Weibell, 2019; Reading & Birchwood, 2005). These services tend to provide "comprehensive and multimodal

interventions" (Malla & McGorry, 2019, p. S182) consisting of pharmacological, psychological, social and vocational supports for a young person and their family, often delivered during the first two to five years of the mental illness (Hughes et al., 2014; Malla & McGorry, 2019). Delivering these interventions within an easily accessible and youthfriendly environment has been vital in attempting to engage young people into mental health services and work towards improving the outcomes for young people at risk of or experiencing psychosis (Hughes et al., 2014).

Research into the provision of EIS for early psychosis populations have shown these services are crucial in improving the outcomes of mental health and reducing the DUP (McGorry, Bates, & Birchwood, 2013). DUP is described as the period of time from the initial onset of psychosis-like symptoms to the person receiving mental health treatment (Alvarez-Jimenez et al., 2012; Harris et al., 2005; Hui et al., 2018). DUP has been identified as a significant predictor of clinical and psychosocial outcomes in young people experiencing FEP (Alvarez-Jimenez et al., 2012; Harris et al., 2005; Hui et al., 2018). For instance, studies have highlighted a shorter DUP was related to reduced likelihood of relapse, decreased severity of positive symptoms and improved quality of life and social functioning (Alvarez-Jimenez et al., 2012; Harris et al., 2005; Hui et al., 2018; Verma, Subramaniam, Abdin, Poon, & Chong, 2012). An 8-year follow up study revealed specialised EIS for psychosis led to participants experiencing fewer positive psychotic symptoms and a more favourable illness trajectory, as well as reduce treatment expenses compared to controls (Mihalopoulos, Harris, Henry, Harrigan, & McGorry, 2009). Additionally, a recent meta-analysis of 10 randomised controlled trials (RCTs) from a range of international studies compared EIS that involved multiple interventions (e.g., psychopharmacological, psychosocial, family therapy etc.) with treatment as usual (Correll et al., 2018). In support of EIS, the findings revealed improved clinical and global functioning outcomes for those engaged in the EIS compared to treatment

as usual (Correll et al., 2018). These findings provide evidence for the use of EIS to engage with people in the early phase of their illness to help alter the long-term trajectory.

Chapter Three: Personal Recovery

3.1 Defining Personal Recovery

Traditionally, recovery from mental health has been viewed as an individual achieving complete symptom remission (i.e., clinical recovery). Mental health services focussed on preventing ongoing symptoms or recurrent episodes in order to improve consumers health and wellbeing. However, a competing view of recovery arose within adult mental health services as part of the 'consumer/survivor recovery movement' (Adame & Leitner, 2008; Milner, 2017). This was driven by long-term consumers who expressed the importance of mental health services prioritising personally meaningful goals of consumers, relative to symptom remission (Milner, 2017).

Consumers advocated for the importance of personal recovery, which has been described as a "deeply personal, unique process of changing one's attitudes, values, feelings, goals, skills, and/or roles. It is a way of living a satisfying, hopeful, and contributing life even with limitations associated with illness. Recovery involves the development of new meaning and purpose in one's life as one grows beyond the catastrophic effects of mental illness" (Anthony, 1993, pg. 527). This view of recovery emphasises a process whereby individuals live a rewarding and satisfying life, often in the presence of ongoing symptoms (Adame & Leitner, 2008; Milner, 2017; Ramsay et al., 2011). Early intervention mental health services subsequently shifted towards a recovery-oriented approach to mental health treatment for young people and their family (McGorry et al., 2013).

3.2 Models of Personal Recovery

One method of conceptualising the different elements of recovery for people experiencing psychosis is through a theoretical framework. Leamy, Bird, Le Boutillier,

Williams and Slade (2011) proposed five personal recovery processes: Connectedness, Hope and optimism about the future, Identity, Meaning and purpose and Empowerment (CHIME). To develop the framework, Leamy et al. (2011) conducted a meta-synthesis of qualitative accounts on aspects of recovery that were highlighted as being important by adult mental health consumers in their own recovery. This framework was confirmed by a deductive and inductive thematic analysis that assessed the validity and generalisability of CHIME for current adult mental health consumers (Bird et al., 2014) and encompassed key aspects of recovery including relationships, hope, sense of self and stigma, making sense of experiences and empowerment (Stuart, Tansey, & Quayle, 2016). New themes were also suggested to be included in the CHIME framework including access to practical supports, issues related to misdiagnosis and medication and scepticism for recovery (Bird et al., 2014).

Across the literature, CHIME has been cited as an influential model for defining and examining personal recovery in mental health and has the potential to help provide an evidence-based approach to informing personal recovery in research programs and clinical practice (Bird et al., 2014; Shanks et al., 2013; Slade et al., 2014). This framework is, however, not without limitations. Researchers have argued the CHIME model encompasses an optimistic perspective on recovery, perhaps minimising the difficulties associated with mental illness (Hancock, Smith-Merry, Jessup, Wayland, & Kokany, 2018; Rayner, Thielking, & Lough, 2018; Stuart et al., 2016). This has been suggested to shift the focus away from the original 'recovery movement', which recognised the negative emotions, thoughts, and challenges associated with mental illness and recovery (Recovery in the Bin, Edwards, Burgess, & Thomas, 2019).

To better recognise the experience of recovery from severe mental illness, Hancock and colleagues (2018) conducted semi-structured interviews with thirteen people who experience severe mental illness to explore the processes involved in early mental health

recovery. The results identified recovery themes comparable to the underlying meaning associated with the existing CHIME model of personal recovery, with a few considerations related to the difficulties of mental illness. For instance, Hancock et al. (2018) suggested the presence of "secure and stable footing" (pg. 9), referring to the impact of participant's basic needs with housing, finance and food influencing their capacity to make decisions and engage in activities towards recovery, as a vital element. A focus on the interpersonal aspects of recovery was also emphasised, suggesting early mental health recovery can involve both the positive and difficult elements of recovery, alongside individual's relationships within their broader environment (Hancock et al., 2018).

A second criticism of the CHIME model was it being based on long-term consumers accounts of mental health recovery and not specific to younger populations experiencing psychosis, in which the framework's relatedness to young people, particularly those experiencing psychosis is uncertain. It is possible differences may be present within the model for a young person's experience of recovery given the differences in age and developmental characteristics of young people (Rayner et al., 2018). Rayner et al. (2018) conducted a thematic analysis of 15 young people aged 18 to 23 years and reported similar core recovery themes in youth relative to the CHIME model, although key areas of difference were apparent. They emphasised the importance of viewing mental health recovery within a broader ecological model including personal (e.g., self-acceptance, identity etc.) systemic (e.g., family, education etc.) and macro (e.g., lack of mental health awareness, stigma etc.) systems (Rayner et al., 2018). Specifically, the interactive processes that can occur within an individual's recovery and their environment were emphasised (Rayner et al., 2018). This relates to Hancock et al. (2018) relational context of recovery, which could be considered within an individual's ecological system including the social factors that may interact with one's recovery. These findings draw parallels between the CHIME framework and younger

populations, with some changes proposed to reflect the relevant characteristics of young populations (Mental Health Coordinating Council., 2014). Whether similar recovery processes occur within an early psychosis sample specifically needs to be explored.

3.3 Personal Recovery in Early Psychosis Populations

Empirical investigations into personal recovery in early psychosis populations is limited, despite early intervention mental health services readily employing a recoveryoriented model. Of the existing quantitative studies, O'Keeffe et al. (2019) conducted a 20year follow up investigation into the outcomes of 80 young people experiencing psychosis in Ireland. The results found 53.7% of participants identified as achieving personal recovery. This suggested that recovery as defined by the individual was possible for early psychosis populations (O'Keeffe et al., 2019).

Most of the current literature in personal recovery for young people with an experience of psychosis has tended to involve qualitatively explorations into their views on personal recovery (e.g., Connell, Schweitzer, & King, 2015; Lam et al., 2010; Windell, Norman, & Malla, 2012). For instance, Lam et al. (2010) conducted a series of focus groups with young people aged 18 to 30 years old who experienced a single episode of psychosis and identified four key recovery themes including meaning of psychosis experiences, meaning of recovery, stigma, and optimistic views on recovery. Windell et al. (2012) conducted a series of qualitative interviews with young people three to five years after their FEP. The Interpretative Phenomenological Analysis (IPA) identified three recovery themes: illness recovery, psychosocial and personal recovery and social functioning recovery. Lastly, Connell et al. (2015) conducted an IPA on 20 young individual's perceptions on recovery one-month following the FEP and reported two main themes of self-estrangement and self-consolidation that encompassed experiencing a loss in their sense of self and regaining a

stronger identity, strengthening connections and making sense of their experiences. While different recovery themes were identified across these studies, similarities were apparent.

A closer inspection of these findings revealed related underlying patterns believed to be important in personal recovery. This included strengthened relationships (Connell et al., 2015; Windell et al., 2012), hope and optimism (Lam et al., 2010; Windell et al., 2012), regaining sense of self and reduced stigma (Connell et al., 2015; Lam et al., 2010; Windell et al., 2012), meaningful understanding of their experiences of psychosis (Connell et al., 2015; Windell et al., 2012), and feeling in control of their mental health treatment and future (Lam et al., 2010; Windell et al., 2012). These findings provide some preliminary support for the relevance of the CHIME model for young people experiencing psychosis through drawing analogous recovery processes to those described in Leamy et al. (2011) theoretical framework. Future research is needed to explore the relatedness of the CHIME framework for early psychosis populations specifically, and further assess personal recovery outcomes for young people experiencing psychosis.

Chapter Four: Peer Support Work

4.1 Defining Peer Support Workers.

A key feature of recovery-oriented practice in mental health services that was supported by the 4th National Mental Health Plan (2009-2014; Commonwealth of Australia, 2009) was peer support, particularly the employment of paid Peer Support Workers (PSWs; Gordon & Bradstreet, 2015). The inclusion of PSWs within mental health services has continued to be supported via National and International government and organisational policies (Commonwealth of Australia, 2009; National Health Service, 2019), such as the World Health Organisation (WHO), who emphasised the importance of PSWs within mental health services recovery-oriented practice in the 2013-2020 Mental Health Action Plan (WHO, 2013). This has contributed to the employment of PSWs across mental health services within Australia, the United Kingdom, Scotland as well as in non-western countries (Bradstreet & Pratt, 2010; Davies, Gray, & Butcher, 2014; Gillard, Edwards, Gibson, Owen, & Wright, 2013; Tse et al., 2017).

Peer support workers, also known as peer providers or peer specialists across the literature, can be described as having "experienced mental ill health... and use these personal experiences, along with relevant training and supervision to facilitate, guide, and mentor another person's recovery journey by instilling hope, modeling recovery, and supporting people in their own efforts to reclaim meaningful and gratifying lives in the communities of their choice" (Stratford et al., 2017, p. 4). Of particular relevance is the premise of PSWs having their own lived experience of mental illness (Cabral, Strother, Muhr, Sefton, & Savageau, 2014; Walsh, McMillan, Stewart, & Wheeler, 2018). Central to the PSW role is the ability for the lived experience to create a sense of credibility and authenticity within the relationship with a consumer (Cleary, Raeburn, Escott, West, & Lopez, 2018). This can help develop a meaningful and trusting connection (Cleary et al., 2018). In addition, the unique and individualised lived experience has been described as a valuable resource for young people in creating a sense of understanding, trust, empathy, acceptance and support in managing mental health services and life in general (Cleary et al., 2018; Delman & Klodnick, 2017; Walsh et al., 2018).

Research investigating consumers perspectives on peer support work have described the importance of PSWs being at a point in their recovery where they are able to effectively support another during their mental health experiences (Ogundipe, Borg, Sjåfjell, Bjørlykhaug, & Karlsson, 2019). This went beyond simply having a shared lived experience of mental health to being able to be sensitive, open-minded and flexible, whilst also having adequate listening and communication skills and engaging in appropriate self-disclosure (Delman & Klodnick, 2017; Ogundipe et al., 2019; Walsh et al., 2018). Indeed, consumers

reported PSWs who were authoritarian, inflexible, and had rigid views on recovery and overcoming difficulties related to mental health were unhelpful (Ogundipe et al., 2019). These findings suggest that whilst the lived experience is crucial, additional attributes appear to be important in creating a positive and helpful peer relationship.

Similarly, qualitative investigations with PSWs have revealed key qualities and skills necessary to fulfil the role in addition to the shared lived experience. For example, Delman and Klodnick (2017) interviewed young peer providers (M_{age} = 24 years) and their supervisors and explored their perspectives on the role of peer support work for young people. The results suggested three key attributes for successful PSWs including having an appreciation for both the shared experiences and challenges associated with the role, being able to effectively cope with the stressors of the role for their own wellbeing and the consumers, and to understand and feel comfortable in their role and have confidence in their ability to be a PSW (Delman & Klodnick, 2017). An additional theme across studies on the peer support work role is the importance of role clarity and relevant supervision and training to support PSWs to further develop their skills and work meaningfully with consumers, whilst also maintaining their own self-care (Bradstreet & Pratt, 2010; Delman & Klodnick, 2017; Dyble, Tickle, & Collinson, 2014; Griffiths & Hancock-Johnson, 2017; Kemp & Henderson, 2012).

The opportunity for a PSW to have experience as being a consumer and an employee within mental health services has been proposed to help address the 'us and them' mentality that can exist in services between consumers and non-peer workers (Bradstreet & Pratt, 2010; Cleary et al., 2018; White, Price, & Barker, 2017). PSWs have been proposed to be in a unique position where they can build relationships with both the non-peer workers and consumers, and support consumers to engage with and navigate mental health services and feel empowered to express their concerns (Cleary et al., 2018). For example, Ehrlich,

Slattery, Vilic, Chester, and Crompton (2019) reported consumers sometimes need a PSW to 'vouch' for non-peer workers, which can lead to the PSW creating an avenue for consumers to engage with non-peer workers. PSWs can also help to shift the service towards using more recovery-oriented language within their practice, and advocate for consumers (i.e., in treatment planning; Bradstreet & Pratt, 2010; Cleary et al., 2018; Griffiths & Hancock-Johnson, 2017).

4.2 Model of Peer Support Work

Intentional Peer Support (IPS) is a flexible model that has been proposed for peer support work (Faulkner & Basset, 2012; Mead, 2005). It is based on the notion that the relationship between a peer and a consumer receiving support is formed intentionally as part of the paid position within the mental health service (Faulkner & Basset, 2012; Gillard & Holley, 2014; Salzer, Schwenk, & Brusilovskiy, 2010). IPS proposes three key principles: 1) learning together rather than problem-solving for the individual; 2) focusing on the relationship rather than solely on the individual; 3) creating a sense of hope rather than fear (Mead & Filson, 2017).

Within this model, PSWs have a role in truthfully sharing their personal experience in a manner that does not overwhelm the consumer but can create a space for the consumer to develop a better understanding of their own experiences (Mead & Filson, 2017). In this sense, PSWs can selectively and strategically share personal, yet mutual experiences to support another individual who is engaged with mental health services and currently experiencing mental health difficulties (Cabral et al., 2014; Repper & Carter, 2011). Doing this in a flexible and individualised manner helps to create authentic and genuine feelings within the peer-to-peer relationship (Rebeiro Gruhl, LaCarte, & Calixte, 2016). The shared lived experience can also create a sense of understanding, validation, and hope in consumers

(Bradstreet, 2006; Faulkner & Basset, 2012; Ley, Roberts, & Willis, 2010; Salzer et al., 2010).

Creating a sense of mutuality and reciprocity are also important in peer support, as both the consumer and PSW have their own lived experiences of mental illness and could support each other (Murphy & Higgins, 2018). Peer support work has become a valued part of mental health service delivery with the employment of PSWs, however the degree of mutuality in the peer-to-peer relationship may differ from voluntary peer support stemming from the original 'consumer/survivor recovery movement'. For PSWs who are paid to engage with consumers, researchers have proposed a reduced sense of mutuality, as the PSW has been trained to provide support to the consumer, rather than each person equally providing the support (Murphy & Higgins, 2018; Stratford et al., 2017). Understanding these key principles and how they align with paid peer support work is crucial in developing programs that are likely to meet the realities of peer support work practice within mental health services.

4.3 Evidence for Peer Support

In reviewing the existing evidence for peer support, it can be conceptualised into three broad categories: informal peer support, peer-led programs, and PSWs employed within mental health services (Bradstreet, 2006). Informal peer support tends to refer to relationships that can naturally occur in the community between two people who share similar experiences (Bradstreet, 2006). Peer-led programs or services includes people with a lived experience of mental health who are involved in engaging in a program with another experiencing mental illness (Bradstreet, 2006). These peer support programs often range from informal, flexible and non-directive groups to structured and more formalised recovery-focussed programs. This differs from PSWs in that PSWs are employed in a paid position to provide peer support work to another who is engaged with the mental health service (Bradstreet, 2006). Much of

the literature to date has focussed on peer-led group programs relative to individual one-onone peer support work within a mental health service for people experiencing severe mental illness. Studies on peer support groups have ranged from informal groups (i.e., flexible, nondirective) to more formalised peer-delivered group programs (i.e., Barbic, Krupa, & Armstrong, 2009; Cook et al., 2012; Cook et al., 2011; Druss et al., 2010; van Gestel-Timmermans, Brouwers, van Assen, & van Nieuwenhuizen, 2012).

4.3.1 Informal peer support groups. Informal peer support groups can be characterised by reciprocal relationships formed between group members who are all voluntarily attending the group (Bradstreet, 2006). For people with an experience of psychosis, hearing voices support groups have provided an opportunity to engage with peers who share similar experiences within a safe and welcoming environment (Dillon & Hornstein, 2013). Preliminary findings on these types of peer support groups from a sample of 29 people across seven locations have found more than half of the individuals reported feeling understood by others, reduced feeling of isolation and developed a greater understanding of their experiences of hearing voices, with 43% reporting an increased ability to cope with these experiences (Beavan, de Jager, & dos Santos, 2017). A larger investigation into the effectiveness of hearing voices groups conducted by Longden, Read, and Dillon (2018) examined one-hundred and one participants responses to a self-report survey assessing their experiences of the self-help peer group and potential impacts from engagement. The findings suggested the groups were helpful in providing a safe, non-judgemental space to meet people with similar experiences and be able to have conversations about shared difficulties (Longden et al., 2018). These groups were further reported to be able to provide support to participants in a manner that is often not available in other areas of the person's life (i.e., services; Longden et al., 2018).

Systematic investigations into these types of non-formalised peer support groups have been conducted by Castelein and colleagues (2008), who examined an 8-month, bi-weekly peer support group for people experiencing psychosis compared to a waitlist condition. A total of 56 participants engaged in the peer support group that was led by peers. Participants were able to choose and direct the focus of the conversations within these sessions (Castelein et al., 2008). Compared to the waitlist group, participants who frequently attended the peer support group showed greater social support, self-efficacy and quality of life relative to those who attended less frequently (Castelein et al., 2008). Participants in the peer support group also had fewer negative symptoms and experienced less distress from their symptoms (Castelein et al., 2008). These findings provided initial support for peer support groups to be of benefit for people experiencing psychosis.

4.3.2 Formalised peer-delivered group programs. More formalised peer-delivered programs have also been investigated and often focus on specific recovery programs for people with severe mental illness. These programs tend to involve paper workbooks, and structured sessions focussing on different aspects of mental health recovery. For example, Druss et al. (2010) developed and tested a pilot Health and Recovery Program (HARP) run by two certified peer workers. HARP was designed to improve medical self-management and covered information on exercise, pain and fatigue management, healthy eating and medication (Druss et al., 2010). Results showed the program was feasible in improving a range of self-management and health outcomes including improvements in participant activation and increased use of services (Druss et al., 2010). Additionally, Fukui, Davidson, Holter, and Rapp (2010) examined a personalised 12-week peer-delivered group intervention for recovery. Participants demonstrated significant improvements in self-esteem, self-efficacy, social support, spiritual wellbeing and psychiatric symptoms (Fukui et al., 2010).
However, these two studies are not without limitations. Druss et al. (2010) lacked adequate power to examine several outcomes and both studies lacked longitudinal assessments.

To address these limitations, Cook et al. (2012) administered a large-scale RCT of an eight-week peer-delivered group self-management intervention called Wellness Recovery Action Planning (WRAP), originally developed by Copeland (1997), compared with usual care. WRAP was co-facilitated by two peers and involved coursework, group discussions and personal mental health stories. A total of 233 participants participated in the WRAP condition and 279 were allocated to the control condition. Compared with controls, results showed improvements in participant's psychotic symptom severity, hopefulness, and quality of life at the end of treatment and at 6 month follow up (Cook et al., 2012). These improvements on symptom severity and feelings of hope were more pronounced for those who had more involvement with the group (Cook et al., 2012). Further research by van Gestel-Timmermans and colleagues (2012) conducted a longitudinal RCT to examine a 12-week peer-run "Recovery Is Up to You" course led by two trained peers relative to a waitlist group. Each session focussed on a pre-determined recovery theme (e.g., goal setting, personal experiences of recovery etc.) and paper workbooks were used to provide the recovery content and homework tasks (van Gestel-Timmermans et al., 2012). For the 168 participants who participated in the course, the results indicated significant improvements on empowerment, hope and self-efficacy, except not for loneliness and quality of life, with these improvements continuing until three months following the completion of the course (van Gestel-Timmermans et al., 2012). These findings were comparable to Barbic et al. (2009) RCT on a Modified Recovery Workbook program, which reported similar results for improvements on feelings of hope, empowerment, and recovery. These findings in support of formalised peer group programs may be explained by the presence of peers who have their own lived experience of mental illness and thus can normalise this experience and act as role models

through sharing these experiences related to the recovery discussions (Gidugu et al., 2015; Solomon, 2004; Stratford et al., 2017). This may increase participants motivation to take steps towards making sense of and promoting change in their own recovery.

While there are promising findings for the benefits of peer support group programs in mental health populations, it is questioned whether similar findings exist for individual oneon-one peer support work. This is especially pertinent for PSWs employed within mental health services who deliver peer support work, as the nature of the relationship differs from a voluntary reciprocal relationship to one where the PSW is employed and paid to provide peer support to a consumer (Murphy & Higgins, 2018; Walsh et al., 2018). This can raise concerns around the potential power imbalance and changes to the mutuality and understanding of the peer relationship, whereby the PSWs primary focus is on supporting the consumer to achieve their needs and goals, relative to their own personal recovery or benefit (Murphy & Higgins, 2018; Salzer & Shear, 2002; Walsh et al., 2018). Furthermore, the peer support group programs involve other consumers who also have their own lived experience of mental health that could be shared in a group setting relative to one-on-one peer support work sessions. These changes to the nature and dynamic of the peer relationship may influence the outcomes experienced for consumers who engage in individual paid peer support compared to other forms of peer support such as the group programs.

4.3.3 Individual peer support work. To date, there are a few studies that have been conducted into paid individual peer support work in mental health services for early psychosis populations. Current research has involved examining the role of peers as health-care assistants (i.e., Craig, Doherty, Jamieson-Craig, Boocock, & Attafua, 2004) or case-managers (i.e., Sells, Davidson, Jewell, Falzer, & Rowe, 2006; Solomon & Draine, 1995), as well as peer support work following discharge from hospitals (i.e., Johnson et al., 2018; Lawn, Smith, & Hunter, 2009), and in adult community settings (i.e., Mahlke et al., 2017).

More commonly, qualitative investigations into consumers and PSWs experiences of peer support work have been conducted (i.e., Crane, Lepicki, & Knudsen, 2016; Ehrlich et al., 2019; Repper & Watson, 2012; Walsh et al., 2018), with one study specifically exploring the impact of peer support on the EIS for young people experiencing psychosis (i.e., White et al., 2017).

Early research by Solomon and Draine (1995) employed a pre-post study design with a one year follow up assessment to examine case management delivered by consumer and non-consumer workers. In the sample of 96 adults experiencing mental illness, Solomon and Draine's (1995) a priori hypothesis predicted there to be no difference in participant outcomes for those who engaged with either worker. In support of this, the results showed no difference in mental health symptoms, hospitalisations and quality of life (Solomon & Draine, 1995). Differences were present with participants engaged with the consumer worker in reporting lower satisfaction with the support received, and less contact with their family (Solomon & Draine, 1995). Despite this, the authors suggested the consumers were able to provide a model of case management akin to non-peer workers. However, subsequent research comparing peers as health care assistants to standard case management in an outreach service found participants who had a peer were more engaged with treatment and had significantly fewer unmet needs (Craig et al., 2004). Participants appeared to benefit from having a peer who could act as a role model and advocate for the consumer to clinicians (Craig et al., 2004; Doherty, Craig, Attafua, Boocock, & Jamieson-Craig, 2004). However, Craig et al. (2004) reported there were no differences observed in social networks. A closer look at the study revealed this could have occurred because participants in the control condition attended social events run by the peers (Craig et al., 2004). Since both conditions engaged in the social events, it is possible both groups experienced similar changes in their social networks. With this limitation in consideration, more empirical research is warranted.

A longitudinal RCT comparing peer and non-peer case management over a 12-month period with individuals experiencing severe mental illness found participants reported a greater sense of understanding, acceptance and support from peers delivering case management at six months (Sells et al., 2006). These effects were reported to predict increased levels of motivation for treatment and involvement in self-help groups at 12 months (Sells et al., 2006). Consumers who were disengaged with the service and were allocated to the peer case management condition showed increased contact with services during the initial phase of treatment, whereas decrease in contact was evident for those with non-peer workers (Sells et al., 2006). It is important to note however, these differences started to disappear at 12 months. It is possible the non-peer case managers might have developed therapeutic relationships with consumers during this time (Sells et al., 2006). Nonetheless, these findings suggested peers may have the capacity to more readily establish relationships and engage consumers into mental health services (Sells et al., 2006; Walker & Bryant, 2013).

This is a key finding for young people experiencing psychosis, as systematic reviews have reported a tendency for this population to disengage with EIS (Doyle et al., 2014). A recent study examining the rates of disengagement at an early psychosis service found approximately 56.3% of individuals disengaged with the service on at least one occasion (Kim et al., 2019). Of note, 85.5% of these individuals re-engaged with the EIS, yet some subsequently disengaged and re-engaged, with a total of 7.6% disengaging and not returning to the service (Kim et al., 2019). These patterns of disengagement could have significant negative effects on an individual's recovery and the long-term impact of mental illness. In reviewing the factors potentially hindering engagement, research has suggested substance use, lack of family involvement, poor insight and severity of symptoms when first entering services as contributing factors to disengagement (Doyle et al., 2014; Kim et al., 2019). It is possible peers may be beneficial for young people who are accessing mental health services,

as this may create an opportunity for the PSW to help breakdown some of these barriers associated with receiving mental health treatment through providing a sense of normalisation, validation and most notably, a shared understanding of mental health and navigating services (Dixon, Holoshitz, & Nossel, 2016; Lal & Malla, 2015; Tindall, Simmons, Allott, & Hamilton, 2018; Walsh et al., 2018; White et al., 2017). Further considerations have been proposed for providing accessible and flexible EIS, and potentially the use of digital technology as a means of improving engagement with young people through incorporating novel and flexible digital tools (Dixon et al., 2016; Lal & Malla, 2015; Rus-Calafell & Schneider, 2019; Tindall et al., 2018).

In support of this, a metasynthesis of qualitative findings in adult mental health services by Walker and Bryant (2013) reported consumers more readily established relationships with PSWs compared to non-peer workers due to PSWs being less formal and "street smart". This was described as the PSWs having relevant knowledge about environmental factors related to substance use, and financial concerns (Dixon, Krauss, & Lehman, 1994; Walker & Bryant, 2013). In this sense, the peers lived experience of mental health including the difficulties experienced and navigation of the mental health system enabled a different type of understanding to that of non-peer workers. Research has reported PSWs also have the capacity to empower consumers and promote educational and personal development relative to non-peer workers who primarily focus on clinical care, alongside promoting consumers wellbeing and recovery (Crane et al., 2016).

Peer support work has also been suggested to help facilitate conversations about difficult topics with consumers that can sometimes give rise to stigma or discrimination (Repper & Watson, 2012). This is important as public-stigma (i.e., negative stereotypes in the community) and self-stigma (i.e., internalising stereotypes of devaluation, shame and withdrawal) are often experienced by individuals with psychosis (Gerlinger et al., 2013).

Gerlinger and colleagues (2013) found 64.5% of participants had perceived stigma, and 55.9% had experienced stigma. For individuals with psychosis, Lipfird (2015) stated peers were beneficial in reducing the effects of stigma through their ability to draw on relevant past lived experiences. Additional research has supported the idea that PSWs can destigmatise mental health through creating a welcoming and safe environment and educate other mental health professionals about recovery (Walker & Bryant, 2013).

Another avenue of peer support that has been investigated is within hospital settings. In an uncontrolled Australian study, Lawn et al. (2009) evaluated a peer-based mental health service targeted at providing discharge and hospital avoidance support to consumers of adult mental health services. Two types of 8-12 hours of support organised for a 1-2 week period were provided to i) meet consumers' needs and circumstances with discharge and ii) consumers who were at risk of admission (Lawn et al., 2009). Improvements were observed at discharge with PSWs compared to earlier admissions, with approximately 300 bed days being saved when peers were employed to provide individualised peer support (Lawn et al., 2009). More recently, Johnson et al. (2018) conducted a large RCT in England examining the use of a self-management program delivered by PSWs on re-admission rates. The program involved participants meeting with PSWs for a maximum of 10 sessions to complete a personal recovery workbook that involved personal recovery goals and crisis plans (Johnson et al., 2018). The results showed 29% of participants who engaged with the self-management program were re-admitted within 1 year, compared to 38% of participants for the waitlist group (Johnson et al., 2018). In examining recovery-oriented outcomes, further research has found no significance difference in outcomes such as hope, loneliness and quality of life when examining peer support work with usual treatment following discharge (Simpson et al., 2014). Overall, studies examining participant outcomes from peer support work after hospital discharge have tended to produce mixed results.

Quantitative investigations into individual peer support work within mental health services specifically, however, is an area of infancy. Investigations to date have primarily focused on participants experiencing serious mental illness (i.e., Mahlke et al., 2017; Simpson et al., 2014), whilst no empirical studies to the authors knowledge have been conducted on PSWs within specialised mental health services for early psychosis populations. For example, Mahlke and colleagues (2017) conducted an RCT exploring oneon-one peer support with people experiencing serious mental illness (e.g., psychosis, depression, bipolar disorder or borderline personality disorder). In this study, 216 participants were randomly allocated to a PSW or treatment as usual condition. Results showed participants who engaged with a PSW reported significantly greater self-efficacy scores at 6month following engagement (Mahlke et al., 2017). However, there were no significant results found for secondary outcomes including quality of life, global functioning and service use (Mahlke et al., 2017).

Much of the existing evidence base for individual peer support work stems from qualitative accounts from consumers and PSWs. For example, Repper and Watson (2012) explored the role of PSWs after engaging in one year of individual peer support with people in community mental health services in the UK. Results suggested peer support involved shared, mutual and reciprocal experiences that were conveyed through five key types of support including emotional, practical, social, care (e.g., access and understanding mental health services) and recovery (e.g., make sense of their experiences) support (Repper & Watson, 2012). Additionally, Walsh and colleagues (2018) found PSWs facilitated recovery through their lived experience functioning as a tool for developing rapport, placing people at ease and having conversations about recovery. In particular, PSWs were reported to have experience in recovery-oriented practice, knowledge on how to manage mental health services and lived experience in navigating recovery (Walsh et al., 2018). Further qualitative

studies have revealed improvements in consumers relationship with the mental health service, and sense of empowerment to take control on their recovery, learn new adaptive skills and feel hopeful about the future and their recovery (Bradstreet & Pratt, 2010; White et al., 2017). These perceived benefits of peer support work extend to the mental health services. The inclusion of peers within services has been proposed to strengthen recovery-oriented practice and increase awareness to the type of language used by non-peer workers when engaging with consumers and also in documentation (Bradstreet & Pratt, 2010; White et al., 2017).

Whilst the qualitative research provides a valuable source of information regarding the potential benefits of one-on-one peer support work in mental health services, empirical investigations are necessary to develop an understanding of what changes may occur for individual peer support work in mental health services particularly, youth early psychosis services. For instance, do participants who engage with PSWs experience significant improvements in recovery and hope outcome measures analogous to other peer settings? Until studied, it remains uncertain whether such changes occur in this context.

4.3.4 Reviewing the evidence for peer support work. Despite some of the preliminary outcomes reported for peer support work, a systematic review by Lloyd-Evans et al. (2014) argued there was insufficient research in support for peer work, but also acknowledged there was not enough evidence to suggest peer work was ineffective. This review of 18 peer-based studies revealed variability between participant characteristics, program content, poorly reported outcomes and biases in all but two studies (i.e., Cook et al., 2012; Cook et al., 2011). Additional methodological limitations were reported including a lack of consistency in the definition of PSWs and how PSW were trained and selected, as well as the nature of the peer support role employed (Bellamy, Schmutte, & Davidson, 2017; Dixon et al., 2010). Dixon and colleagues (2010) proposed a successful peer support work

intervention should have a clear understanding of the PSWs role and provide appropriate training.

More recently, Bellamy et al. (2017) systematic review noted similar methodological limitations to Lloyd-Evans et al. (2014), although acknowledged the increased evidence for peer support leading to positive impacts on recovery-oriented outcomes (i.e., hope, empowerment, quality of life, self-management, self-efficacy) compared to clinical outcomes (i.e., symptom remission, hospital rates). These findings appear consistent with the principles of peer support work. PSWs selectively share their lived experience to help connect and learn with the consumer and have dialogue about leading a meaningful life and creating a sense of hope, relative reducing symptoms (King & Simmons, 2018). Given this, it is possible that clinical recovery outcomes may not change significantly from engagement in peer support work, and perhaps the recovery-oriented outcomes are more likely to be sensitive to change (King & Simmons, 2018).

Indeed, PSWs are employed within mental health services to work alongside non-peer mental health professionals including allied health professionals and psychiatrists, in which PSWs typically have an adjunctive role when working consumers (Gidugu et al., 2015). Consumers have reported being able to engage with PSWs in a manner in which they felt unable to within non-peer relationships (Cabral et al., 2014). PSWs can share their lived experiences in recovery-oriented conversations to help connect with consumers, whilst mental health service professionals may focus on addressing clinical outcomes such as symptom remission as part of their recovery-oriented approach (Crane et al., 2016). There may be overlapping areas of discussion, however this is an important consideration to be made within the peer support literature when examining the efficacy of peer-based programs against clinical outcomes that may not be the key target of peer support work (King & Simmons, 2018).

In considering the outcomes of peer support work, King and Simmons (2018) have proposed guidelines for peer support interventions to help address the limitations of previous research and work towards improving the efficacy of future studies. In this review, King and Simmons (2018) recommended the assessment of recovery-oriented measures such as recovery, empowerment, hope, quality of life, social inclusion and self-efficacy, as well as measures to assess illness management and patient activation. Subjective measures of participant's level of distress or control of symptoms were proposed to be more sensitive to change relative to clinical assessments of participant's symptoms (King & Simmons, 2018). It is possible these recovery outcomes may be more likely to change in people engaged with peer work given the aforementioned systematic reviews and the notions of peer support work, however studies need to employ these recommendations to provide further evidence on peer support work.

A key consideration of existing systematic reviews on peer support is that studies have often combined results from a variety peer support contexts (e.g., informal and formalised peer support groups and employed PSWs). As mentioned earlier, the difference in the relationship between peers interacting voluntarily as part of a group program versus a PSW being employed to engage with a consumer and support them with their mental health experiences may lead to different results obtained (Murphy & Higgins, 2018). While this approach has most likely been undertaken as a result of the limited literature in the field, it is a limitation to be considered when reviewing the findings. An exception to this is Burke, Pyle, Machin, Varese, and Morrison (2018) who conducted a narrative synthesis and metaanalysis on the effect of peer support on empowerment, self-efficacy and stigma. The study separated the analysis into peer group interventions, one-on-one peer support work and services run by peers. Results revealed the peer group interventions led to significant improvements in empowerment and self-efficacy when compared with usual treatment, with

these effects maintained for three to four month follow up (Burke et al., 2018). However, there was limited evidence for one-to-one peer support work and peer-run services to be able to draw conclusions (Burke et al., 2018).

4.4 Applying Psychological Frameworks to Recovery and Peer Support Work

A number of theoretical frameworks have been proposed to help understand the changes in consumers' behaviour and engagement from peer support. Helper-therapy principle, social learning theory, social comparison theory, experiential knowledge and social support have all been reported (Gillard et al., 2015; King & Simmons, 2018; Salzer & Shear, 2002; Sells et al., 2006). Of these theoretical frameworks, social learning theory appeared important to consider in the context of peer support work due to the opportunity to examine the process of PSWs role-modelling recovery for young people experiencing psychosis. Developing an understanding of the mechanisms underlying the perceived improvements of peer support work can help create programs that are more likely to prompt changes.

4.4.1 Social learning theory. According to social learning theory, Bandura (1977) proposed behaviour and outcomes could be influenced through the observational learning of another's behaviour. This theory suggests that when individuals view others as being similar to themselves, and the role-modelled or described behaviour is valued or rewarded, it can motivate people to replicate the behaviour in their own life (Bandura, 2001). Alternatively, behaviours that hold negative outcomes or consequences reduce the likelihood of the behaviour being reproduced (Bandura, 2001). This form of learning can be helpful in providing people with new or alternative ways of thinking and behaving in situations, particularly if people are hesitant towards new behaviours, as it can offer successful exemplars (Bandura, 2001).

With the growing presence of digital technology in society, there is an opportunity for observational learning to go beyond the person's immediate environment (Bandura, 2001).

The use of digital videos can provide access to a range of models and learning experiences. For example, Steinwachs and colleagues (2011) developed an online intervention to empower consumers with psychosis to discuss their quality of care with mental health services. The experimental group watched videos of consumers (approximately 30 seconds) demonstrating communication skills, whereas the control group viewed one 22-minute video about schizophrenia treatment and received a brochure on treatment recommendations (Steinwachs et al., 2011). Results showed consumers in the experimental condition felt empowered to be more verbally active during mental health visits as indicated by longer visits and increased contributions in sessions, compared to controls (Steinwachs et al., 2011). It is possible PSWs may act as role models for change through sharing their real-life experiences and adaptive coping strategies, which may in turn motivate an individual to replicate the behaviour (Bandura, 1977; Steinwachs et al., 2011; Walker & Bryant, 2013).

The degree to which a behaviour is replicated can depend on an individual's selfefficacy, that is, the belief about their ability to have control over their functioning and events in their life (Bandura, 1977, 2001, 2004). Self-efficacy is vital in self-management interventions and peer role modeling because unless consumers believe they can produce the desired behaviour or outcome, there may be minimal motivation to act or continue in the face of challenges (Bandura, 2001). Preliminary research by Mahlke et al. (2017) conducted a multi-site RCT that compared one-on-one peer support with treatment as usual in a sample of 216 people experiencing severe mental health. Results showed participants receiving peer support reported significantly higher self-efficacy at 6 months post treatment (Mahlke et al., 2017). These findings highlighted the potential role of peer support in improving selfefficacy, which may lead to behaviour change through individuals having belief in their ability to model behaviours and navigate mental health difficulties (Bracke, Christiaens, & Verhaeghe, 2008; Gillard, Gibson, Holley, & Lucock, 2015; Mahlke et al., 2017).

Current models on the mechanisms proposed for peer support work in mental health services have involved social learning theory (i.e., Gillard et al., 2015). Gillard et al. (2015) suggested peer support work provides a space where trusting relationships can be established from the shared lived experience of mental health. This shared lived experience can further promote role-modelling of how to live a meaningful life with or without ongoing mental health difficulties through PSWs, who are further along in their mental health experiences, demonstrating their own recovery, and subsequently inspiring hope and empowerment in the consumer for their mental health and wellbeing (Gillard et al., 2015). While these theoretical mechanisms seem plausible, the mechanisms underlying peer support work are currently uncertain. Social learning theory is one of the proposed mechanisms, with other studies proposing broader psychological theories (i.e., social comparison theory, helper-therapy principles; Solomon, 2004), whilst others suggest specific processes (i.e., peers lived experience, emotional support for the client and PSW, strengths focused approach etc; (Watson, 2017). Understanding of the precise mechanisms by which peer support work may lead to changes in consumers is warranted by future research. This helps to ensure interventions developed are grounded in the relevant psychological theories and thus may be more likely to promote improved outcomes.

Chapter Five: Development of a Resource

5.1 Digital Recovery and Self-Management Tools.

Using digital technology in mental health services to support individuals experiencing severe mental illness is increasingly becoming an available avenue for service delivery. Self-management and digital recovery tools can provide a means for people experiencing mental illness to regain a sense of control of their care and provide an opportunity to engage in conversations about their needs with mental health workers (Williams, Farhall, Fossey, &

Thomas, 2019). A recent scoping review of the literature on digital self-management and recovery-based resources used by consumers and mental health workers identified fifteen studies, eleven of which were examined as part of mental health services (i.e., Williams et al., 2019). In reviewing the studies, Williams et al. (2019) reported digital tools that are supported by workers and integrated appropriately into the mental health service can help improve consumer-worker interactions and facilitate conversations towards the consumer's needs and preferences. Poorly integrated digital tools that lack a recovery-oriented and collaborative approach however, negatively impacted on their use within consumer-worker sessions (Williams et al., 2019). This highlights the relevance of involving workers and services in the development of recovery-based self-management digital tools in order create tools that have the capacity to be well-incorporated within existing mental health services.

In considering the use of digital programs within these blended forms of face-to-face support as part of mental health service delivery, understanding the workers perspectives are a key element of its use and implementation. Williams, Fossey, Farhall, Foley, and Thomas (2018a) interviewed 37 mental health workers across six adult mental health services via focus groups to explore their views on using digital resources in sessions with their clients. While mental health workers were limited in their current use of digital resources in their sessions, they could see the benefit of these types of resource for consumers, particularly in being able to hear a peer's lived experience of mental health (Williams et al., 2018a). The possibility for mental health workers and consumers to engage with digital programs together in face-to-face sessions could help create a collaborative-based approach towards supporting the consumer in their recovery (Williams et al., 2018a). Within EIS for young people experiencing psychosis, mental health workers similarly found digital tools to be acceptable within service delivery but identified key barriers that may impact on implementation (Bucci, Berry, et al., 2019). Specifically, workers reported concern for their own knowledge and

ability to use digital resources and for programs to be easily accessible and useful to service delivery and uphold appropriate data security (Bucci, Berry, et al., 2019). In line with Williams et al. (2018a), Bucci, Berry, et al. (2019) stated support for the use of digital technology tools from the mental health service is necessary to aid implementation.

Most of the self-management and digital recovery-based tools have been examined between consumers and mental health workers, with few studies exploring the use of digital technology resources with peers. As discussed, PSWs share their own lived experience of mental health to help support another individual through their own recovery towards leading a meaningful and satisfying life (Stratford et al., 2017). Digital recovery resources may have relevance in providing a tool that could be used to facilitate recovery-oriented conversations within the peer workforce. In older adults experiencing severe mental illness, a ten-session self-management and recovery peer support work smartphone application involving psychoeducation and peer videos was assessed in a small feasibility and acceptability trial (Fortuna et al., 2018). The preliminary results supported the use of digital technology within peer-to-peer sessions and provided a means for PSWs access to evidence-based resources (Fortuna et al., 2018). Significant improvements were noted for consumers self-management, however the study had insufficient power to adequately assess the efficacy of the program (Fortuna et al., 2018). These findings provide initial support for using self-management and digital recovery tools within peer support work in severe mental illness populations yet, whether similar findings may occur within the peer workforce supporting young people experiencing psychosis is to be investigated.

5.2 Lived Experience Video Material

Blended interventions involving face-to-face sessions with digital technology are at an early stage in the literature, with initial work by Thomas, Farhall, Foley, Leitan, et al. (2016) beginning to explore this model of working with adults experiencing severe mental

illness. They conducted a study trialling a Self-Management And Recovery Technology (SMART) program as part of mental health service delivery. SMART involved the use of lived experience videos of people with mental illness discussing their experiences and how they navigated various challenges in their own recovery. These videos were used in session with a mental health clinician to prompt discussion about recovery and operated as a therapeutic tool to address consumer concerns (Thomas, Farhall, Foley, Leitan, et al., 2016). The results of the pilot study showed that the integrated digital and face-to-face support was a feasible and acceptable method of working with consumers, with reported improvements in personal recovery and overall mental health (Thomas, Farhall, Foley, Leitan, et al., 2016).

A qualitative investigation into a larger trial of this model (Thomas, Farhall, Foley, Rossell, et al., 2016) examined the experience of using the lived experience peer videos in face-to-face sessions with (non-peer) mental health clinicians (i.e., Williams, Fossey, Farhall, Foley, & Thomas, 2018b). This revealed that participants felt a sense of hope, optimism and connection from hearing peers' experiences, particularly when the video was followed by meaningful discussions (Williams et al., 2018b). Participants described feeling they were not alone and believed recovery was possible through watching the peer videos and sharing their own experiences (Williams et al., 2018b). The videos prompted participants to share aspects of their own mental health, which aided in participants having a sense of ownership over the direction of conversations and resulted in more recovery-oriented discussions (Williams et al., 2018b). These findings draw similarities with the existing digital video literature (De Vecchi, Kenny, Dickson-Swift, & Kidd, 2016; Naslund, Grande, Aschbrenner, & Elwyn, 2014). For instance, the use of brief videos that meaningfully capture an individual sharing their own story of mental illness (i.e., digital story telling) have been reported to be helpful in supporting individuals to reflect and engage in conversations about mental health and

develop their understanding of mental illness, as well as supporting individuals to develop adaptive coping skills (De Vecchi et al., 2016).

Naturalistic explorations into peer support videos accessible on social media platforms, such as YouTube for people experiencing schizophrenia have been conducted (Naslund et al., 2014). Through watching the lived experience videos, investigations revealed four overarching themes including i) feeling less alone and creating a sense of hope, ii) gaining support from peer reciprocity, iii) sharing coping strategies and iv) mutual learning from each other's experiences (Naslund et al., 2014). Naslund and colleagues (2014) suggested listening to akin peer experiences may be easier for individuals to understand and then relate to their own situation (i.e., develop adaptive coping strategies). There are, however potential risks associated with watching freely accessible online lived experience videos including increased concerns about one's mental health, misleading information or unrealistic expectations (Naslund, Aschbrenner, Marsch, & Bartels, 2016; Naslund et al., 2014). One avenue of addressing some of these risks may be through creating a digital program similar to Thomas, Farhall, Foley, Leitan, et al. (2016) where lived experience videos can be viewed and meaningfully discussed with another employed by a mental health service to support the individual with any difficulties that may arise.

5.3 Digital Technology in Early Psychosis Populations

In considering the potential resources to facilitate the delivery of a peer support work program in young people with psychosis, there may be benefits in using digital resources in sessions that could help to provide structure to facilitate the peer work process. To date, this has been done with workbooks, such as those for Wellness Recovery Action Planning (WRAP; Cook et al., 2012). However, since the use of digital technology increases in younger populations, with 85% of individuals expressing interest in using technology to

access mental health-related information, there may be value in examining the use of online digital tools (Lal et al., 2015).

Young people's perspectives on the use of these types of programs in mental health services is a relatively new area of investigation. Bucci and colleagues (2018) explored young people with psychosis views on digital interventions. The interviews revealed some consistency in participants viewing technology as an acceptable resource for mental health difficulties, with 48% of participants reporting digital interventions being relevant to young people and providing an avenue to destigmatise access to treatment (Bucci, Morris, et al., 2018). Some participants advocated for the digital interventions to be used in conjunction with face-to-face contact with clinicians, whilst others were content with using digital interventions independently (Bucci, Morris, et al., 2018). These findings are preliminary, and research is needed to further understand consumers views on different digital interventions and delivery formats (Bucci, Morris, et al., 2018), however they offer promise for a potential avenue for using digital technology within early psychosis populations.

A key study into the use of online resources for early psychosis populations was by Alvarez-Jimenez et al. (2013), who developed HORYZONS – an online psychosocial intervention that included modules covering psychoeducation, early warning signs of relapse, depression, social anxiety, and stress management, as well as a peer social networking platform. This study was the first to examine the feasibility of an online intervention for individuals experiencing FEP and the results showed the online website was feasible with no dropouts (Alvarez-Jimenez et al., 2013). Participants reported feeling empowered using the online program and experienced reduced depressive symptoms at follow up (Alvarez-Jimenez et al., 2013). A systematic review on the usability, acceptability, feasibility and efficacy of digital interventions found online interventions to be efficient, positive and useful,

with improvements found on psychotic symptoms, socialisation, depression, medication, and hospital admissions (Alvarez-Jimenez et al., 2014).

Subsequent investigations into the feasibility and acceptability of digital interventions for young people experiencing psychosis have shown increasing support (i.e., Bucci, Barrowclough, et al., 2018; Lim et al., 2019; McEnery et al., 2019). Lim and colleagues (2019) explored the use of a smartphone application targeting loneliness in young people experincing psychosis. This program involved the independent use of a positive psychologybased program that included written content alongside expert by profession videos, actor videos to convey key concepts and lived experience peer videos. The program was found to be feasible and acceptable, and sixty-percent of participants described the lived experience videos as being useful, with 50% finding the videos enjoyable (Lim et al., 2019).

While the evidence is growing on the use of digital programs within mental health services, an area where this is yet to be explored and appears synergistic is within peer support work for young people experiencing psychosis. Given the use of the peers' own personal experiences as a therapeutic resource within peer support work relationships, the availability of broader peer lived-experience material through videos such as those used in Thomas, Farhall, Foley, Leitan, et al. (2016) blended model of face-to-face support may be of value in bringing in additional lived experience accounts and promoting conversations about mutual experiences of mental health and personal recovery.

5.4 Participatory Research

The limited existing literature on digital peer support work programs targeting personal recovery in young people experiencing psychosis highlights the role participatory research methods can have. Consumer expertise has been increasingly encouraged within mental health research by the National Health and Medical Research Council (NHMRC, 2016) in Australia, alongside International research councils such as the National Institute of

Health (NIH), National Institute for Health Research (NIHR) and INVOLVE (2012). The NHMRC (2016) emphasises the importance of researchers working alongside individuals, relative to conducting research 'for' the public. Consumer involvement in research can be viewed on a continuum of different levels of engagement. At the lower level of consumer involvement is consumer advisory, followed by consultation, collaboration or co-development, to consumer-led research at the highest level (Happell & Roper, 2007).

This notion of consumer involvement is underpinned by the view that consumers are an 'expert' in their own mental health experiences and can provide valuable knowledge to the research process and development of resources (Hancock, Bundy, Tamsett, & McMahon, 2012; Happell et al., 2018). Through listening to and understanding consumers lived experience, participatory research can promote mutual learning for researchers about consumer experiences and preferences relevant to the research process, as well as consumer learning and skill development in research (Happell et al., 2018). Further benefits have been reported in research designs including recruitment and data collection, as well as in consumers describing increased satisfaction and sense of empowerment (Ennis & Wykes, 2013; Happell & Roper, 2007; Tait & Lester, 2005). Indeed, participatory research can help identify important areas to target and bridge the gap between research evidence and clinical practice by creating resources that are grounded in lived experience (Ennis & Wykes, 2013).

An example of lived experience expertise involved in research has been in developing the concept of personal recovery via conceptual models of recovery (e.g., Andresen, Oades, & Caputi, 2003; Anthony, 1993; Leamy et al., 2011). These recovery models were developed from a synthesis of qualitative research and lived experience accounts of mental health experiences (i.e., CHIME model of personal recovery; Bird et al., 2014; Leamy et al., 2011). Additionally, in developing measures, Neil et al. (2009) engaged in the development of a Questionnaire for the Process of Recovery (QPR) with individuals who had an experience of

psychosis. Valuable contributions were obtained from the integration of consumer and researcher expertise. Neil and colleagues (2013) reported they were able to "develop a measure that is more meaningful and valid than it would have been, were it produced by non-service user researchers alone" (Neil et al., 2013, pg. 314). These studies highlight the value and benefits in creating resources with lived experience expertise.

Through involving lived experience into research, researchers can work towards understanding the individualised and idiosyncratic nature of personal recovery for early psychosis populations. Integrating the expertise from consumers, with that of the mental health service and PSWs, programs could be created that may be more likely to align with the preferences of the service and PSWs involved in delivering the program and address the needs of the target population (Bucci, Schwannauer, & Berry, 2019; Hancock et al., 2012; Happell et al., 2018; Wood & Alsawy, 2017). This approach may also have benefits in addressing some of the barriers associated with the implementation of peer support work programs (Chinman et al., 2017).

Detailing the participatory process involved with developing digital interventions is becoming increasingly common (Hetrick et al., 2018; Orlowski et al., 2015). Describing the ways in which research can meaningfully incorporate perspectives from academic researchers, people with a lived experience of mental health and mental health services showcases the different avenues of involving and valuing various perspectives to create interventions. This use of a participatory approach to developing a new and novel digitally assissted peer support intervention may help in creating a resource that is consistent with the needs of the target population and mental health service delivery (Happell et al., 2018; Wood & Alsawy, 2017).

5.5 Summary of the Literature

The current literature offers promise for peer support work and the potential benefits associated with individuals experiencing psychosis, particularly in promoting recovery (Bellamy et al., 2017; Gillard & Holley, 2014; Repper & Carter, 2011). PSWs employed in mental health services provide an opportunity to examine the role of personal recovery in early psychosis populations, as they have progressed through their own mental health experiences. This is a key factor that differentiates PSWs to non-peer workers, in that PSWs can not only act as positive role models to show personal recovery is possible, but also reflect on and incorporate their own experiences with consumers to help support them (Bradstreet, 2006; Crane et al., 2016; Repper & Watson, 2012). The IPS model is a flexible framework that emphasises individual recovery, however empirical programs could be developed for PSWs to incorporate into their sessions with young people. The rapid availability and increased use of digital technology by young people with psychosis highlights an avenue for establishing a novel model of recovery-oriented face-to-face peer support using multimedia resources (Lal et al., 2015; Rus-Calafell & Schneider, 2019).

Additionally, making recovery resources available on a digital platform provides a means of delivering tools without extensive training, which may be more suitable for dissemination by PSWs. Multimedia resources in the form of lived experience videos can provide an opportunity to incorporate peer material that is more engaging and offer an innovative avenue for young people and PSWs to engage in conversations about their shared experiences (Rus-Calafell & Schneider, 2019). However, such a program has yet to be employed within a peer work context, or an early psychosis population.

The aim of this thesis is to create a novel model of peer support work for an early intervention mental health service by integrating digital technology. The use of lived experience videos as a means of promoting and facilitating conversations about personal

recovery is a relatively new area that may have benefit in facilitating recovery-oriented discussions and promoting a sense of hope and personal reflection in consumers. The novelty of this type of program emphasises the importance of examining the feasibility and acceptability. For example, how practical it is to employ this type of blended digitally assisted peer support intervention within an early psychosis mental health service and determine whether consumers and PSWs believe the program is relevant to their needs and their role, respectively. This can help establish the feasibility of this model of working and whether digitally assisted peer support work programs are likely to work and be of value for all those involved and thus worth examining its effects in a larger trial.

PART II: Empirical Studies

Chapter Six: The Present Research

6.1 Chapter Guide

The objective of the thesis is to develop and examine an integrated model of face-toface peer support with digital technology in an early psychosis population. Peer support work in young people experiencing psychosis is an evolving area of the literature and recoveryoriented practice. For the purpose of this research, PSWs have "experienced mental ill health... and use these personal experiences, along with relevant training and supervision to facilitate, guide, and mentor another person's recovery journey by instilling hope, modeling recovery, and supporting people in their own efforts to reclaim meaningful and gratifying lives in the communities of their choice" (Stratford et al., 2017, p. 4).

Mental health organisations are increasingly employing PSWs, despite the limited and at times conflicting empirical evidence on the type of peer support programs that may be effective, and the potential benefits for consumers who engage in peer support work. Several criticisms have been raised such as poor consistency in the definition of peer support work, lack of reporting on the training provided, the service and PSWs details, and difficulty effectively implementing programs (i.e., Bellamy et al., 2017; Dixon et al., 2010; King & Simmons, 2018; Lloyd-Evans et al., 2014). There is a need for research to address these difficulties to help enhance the existing peer support work literature and assist mental health services in implementing peer support work programs that are based on empirical evidence.

The aim of the thesis is to fill the gaps in the scientific literature by developing a framework for a digitally assisted peer support work program. It is hoped a collaborative codevelopment with consumers and an early psychosis mental health service including PSWs and academic researchers will allow for the creation of a program that is more likely to align with the peer support work model of working with young people experiencing psychosis and tailored to consumers preferences.

6.2 Research Aims

To address the overall objective of the thesis, four research aims were established to examine a digitally assisted peer support program for young people experiencing psychosis.

6.2.1 Research aim 1. The first research aim was to present a process for developing a digitally assisted peer support program. This included the development of personal recovery themes and lived experience videos via participatory methods to incorporate lived experience into the development phase. This formed the central component of the peer-led digital program. Preliminary research has suggested young people experiencing psychosis view digital interventions as being relevant and acceptable methods of mental health service delivery (Bucci, Morris, et al., 2018; Lal et al., 2015). One study in adult populations with severe mental illness have described positive experiences from participation in a blended model of digital technology with mental health clinicians (Thomas, Farhall, Foley, Leitan, et al., 2016; Williams et al., 2018b). Particularly, participants reported increased feelings of hope and connectedness from watching peer videos and engaging in a meaningful discussion with their clinician (Williams et al., 2018b). Such an intervention is yet to be employed within an early psychosis population or within peer support work. Using lived experience videos in peer support work has the potential to broaden the lived experience available in face-to-face sessions with young people, whilst also creating a program that may be engaging.

The development of new digital resources in peer support work would benefit from a collaborative co-development approach with consumer, mental health service and PSW involvement from conceptualisation through to implementation (Hancock et al., 2012; Happell et al., 2018; Happell & Roper, 2007; NHMRC, 2016; Phillips, 2006). This could allow for researchers to create a program that meets the preferences of those involved in delivering and receiving the program (Batra et al., 2017). The digitally assisted peer support

program was developed from the outset in collaboration with consumers, mental health service professionals and PSWs, and academics. Study 1 was designed to address this research aim and is presented in Chapter 7.

6.2.2 Research aim 2. Following the development of the program, the second research aim was to evaluate the feasibility and acceptability of a four-week digitally assisted peer support work program, namely Peer Plus. Existing peer support work studies have explored paper workbooks (i.e., Cook et al., 2012), with some studies examining the use of peer support online forums or peer videos as part of broader mental health interventions (i.e., (Alvarez-Jimenez et al., 2013; Lim et al., 2019; Thomas, Farhall, Foley, Leitan, et al., 2016; Williams et al., 2018b). To the authors knowledge, no studies have been conducted exploring the use of digital technology in the form of lived experience videos in face-to-face peer support work sessions.

Since young people experiencing psychosis have expressed interest in the use of digital technology resources (Bucci, Morris, et al., 2018; Lal et al., 2015), and there is preliminary research reporting benefits for watching lived experience videos on recovery for people experiencing severe mental illness (Naslund et al., 2014; Thomas, Farhall, Foley, Leitan, et al., 2016; Williams et al., 2018b), the literature highlights an area of investigation. The infancy of this research requires a case series trial to ascertain the feasibility and acceptability of the digital program for young people experiencing psychosis. Study 2 was designed to address this aim and is presented in Chapter 9.

6.2.3 Research aim 3. Current findings on peer support work have commonly reported improvements in consumers recovery including an increased sense of hope and empowerment, self-efficacy and self-management (Bellamy et al., 2017). However, mixed results have been observed in relation to clinical outcomes such as symptom remission (Bellamy et al., 2017) and theoretical processes (i.e., social learning theory or social

comparison theory; King & Simmons, 2018). In considering the principles of peer support work, the third aim of the thesis is to conduct exploratory analyses to examine the preliminary outcomes of personal recovery. This may be more representative of the potential targets of change in peer support work (Bellamy et al., 2017). Secondary outcomes including hope, empowerment, quality of life and self-efficacy will also be assessed. Psychotic symptom severity will be obtained at the first assessment to characterise the sample, however this will not be assessed in the exploratory analyses, as it is not the intended target of the peer support work program and based on existing literature it is anticipated that symptom-related measures may not be as sensitive to change (Bellamy et al., 2017; Lloyd-Evans et al., 2014). Study 2 was designed to address this aim and will be presented in Chapter 9.

6.2.4 Research aim 4. The fourth research aim was to understand the perspectives of consumer and PSW participants on the use of digital technology as a tool to structure one-on-one peer support work with young people experiencing psychosis. Current research exploring consumers perspectives on digital health interventions in an early psychosis population have reported consumers were interested in the use of digital health interventions for managing their mental health (Bucci, Morris, et al., 2018). Initial findings in adult populations with psychosis have reported feeling less alone and more inspired about their mental health from participation in a blended intervention using lived experience videos to facilitate conversations about recovery with (non-peer) clinicians (Williams et al., 2018b). However, the use of peer videos within face-to-face peer support work is a new avenue, in which a qualitative exploration of both consumer and PSW participants perspectives of Peer Plus was employed. This was hoped to aid in understanding the use of digital technology, particularly lived experience videos in face-to-face peer support work sessions. Study 3 was designed to address this aim and will be presented in Chapter 10.

Chapter Seven: Development of a Lived Experience-based Digital Resource for a Digitally-Assisted Peer Support Program for Young People Experiencing Psychosis.

7.1 Chapter Guide

As discussed in Chapter 2, the involvement of non-academic researchers in studies is increasingly encouraged in the literature and by research councils (INVOLVE, 2012; NHMRC, 2016). The development of a digitally assisted peer support program for young people experiencing psychosis is an area of the literature yet to be explored. Given this, designing such a program with mental health services, PSWs and consumers is invaluable and sorely needed (Batra et al., 2017). This approach would allow for a deeper understanding of peer support work and consumer preferences, and help establish a program that is grounded in lived experience and perhaps, more likely to be feasible and acceptable in practice (Batra et al., 2017; Tindall et al., 2018). Through decribing this participatory development process, it may help break down some of the barriers associated with the implementation of peer support work programs into practice, and assist in promtoing the value of lived experience expertise as a part of future research (Chinman et al., 2017; Lawn, 2016).

This chapter presents the first paper of the thesis. It involved a detailed description of the development of a novel model of digital peer support work for young people experiencing psychosis. The paper will provide an overview of the creation of personal recovery themes and lived experience videos via participatory research methods to ultimately develop the Peer Plus program. The benefits and challenges experienced are also discussed.

This article is titled 'Development of a lived experience-based digital resource for a digitally-assisted peer support program for young people experiencing psychosis' and has been published by Frontiers in Psychiatry as part of a special edition focussing on "Transforming Youth Mental Health Treatment Through Digital Technology". Frontiers in

Psychiatry is ranked by Scimago in Quartile 1 of journals in the discipline of psychiatry and mental health, and has a 2018 Journal Citation Reports Impact Factor of 3.161. The nature and level of author and co-authors contributions to this paper are provided in the 'Author Indication Form' in Appendix III.

Peck, C. E., Lim, M. H., Purkiss, M., Foley, F., Hopkins, L., & Thomas, N. (2020).
Development of a Lived Experience-Based Digital Resource for a Digitally-Assisted
Peer Support Program for Young People Experiencing Psychosis. *Frontiers in Psychiatry*, 11, 635.

Chapter Eight: Methodology

8.1 Chapter Guide

The studies that form this thesis share the overall objective to develop and examine a digitally assisted peer support work program. Chapter 7 has explained the development of personal recovery themes and lived experience videos that form the basis of the Peer Plus program. This aim of this chapter is to provide an orientation to the Peer Plus program that will be examined in subsequent studies. Chapter 8 will provide a detailed description of the methodology related to the two remaining associated papers. This includes the experimental design, materials, recruitment procedures and participants. Study 2 involves a case series investigation into the use of Peer Plus and Study 3 involves a qualitative exploration into consumer and PSW participants perspectives of this novel model of peer support work, particularly focussing on the lived experience videos. Specific methodological considerations for each study will be presented in their respective Chapters 9 and 10. An overview of the entire thesis from initial service engagement through to the end of data collection is presented in Figure 8.1 below to help orient the reader with the timeline of the current research project.

8.2 Experimental Design

Once Peer Plus was created, a pre-post follow-up case series research design was employed to examine the feasibility, acceptability and exploratory outcomes of the program. Participants completed questionnaires at three time points: pre-program (0 weeks), postprogram (four to eight weeks) and follow up (three-months post program). Participants received the four-session Peer Plus program across an eight-week period to account for life circumstances and cancellations that may arise. Each session with a PSW was approximately 60-minutes in duration.

In the post-program assessment, a semi-structured qualitative interview was completed to explore participants' perspectives on Peer Plus. Qualitative interviews were held separately

with PSWs who consented to sharing their perspective on delivering Peer Plus. Interviews were audio recorded where consent was provided to allow for the researcher to review and summarise the participants' perspectives and select verbatim quotes to illustrate key themes identified in the analysis stage. If a participant did not wish for their interview to be recorded, the researcher took detailed notes during the interview.

Additional protocol was co-developed with the mental health service for the qualitative interview with the PSWs. This involved a separate participant information and consent form that outlined any involvement in the qualitative interview was voluntary and not expected as part of their current role at the mental health service. The consent of PSWs was managed by a Swinburne University of Technology researcher external to the mental health service. The mental health service investigators on the research project were not informed of the specific identities of the PSWs who decided to participate in the qualitative interview in order to protect their privacy and confidentiality. Due to the small number of PSW participants who chose to take part in the qualitative interviews, limited demographic data will be reported in order to uphold their privacy and confidentiality.



Figure 8.1. Overview of the current research project timeline

8.3 Mental Health Service Context

An overview of the mental health service that was involved in the collaborative development and testing of the Peer Plus program will be detailed below. This will help contextualise the service and the young people involved in the current research.

In Australia, the National Youth Mental Health Initiative also known as Headspace, was created in 2006 to support early intervention for young people aged 12 to 25 years old experiencing mental ill-health and substance related difficulties (McGorry et al., 2007). Headspace endeavoured to provide "a highly accessible, more specialised, multidisciplinary model of care to target the core health needs of young people" (McGorry et al., 2007, pg. 68). The organisation has worked towards creating awareness of youth mental health in communities to encourage young people and their families to access evidence-based support (McGorry et al., 2007). A key feature of this initiative was to address the limitations of existing mental health systems by providing services to all young people seeking help irrespective of their diagnosis or severity of concerns (McGorry et al., 2007). Investigations have found that young people engaged with Headspace services have positively described the welcoming, youth-friendly and non-clinical environment, and appreciated the opportunity to develop helpful therapeutic relationships with their workers and be involved in decisions around their care (Muir et al., 2009).

Within Headspace, there are specialised Youth Early Psychosis Programs (hYEPP) that aim to support young people aged 12 to 25 years old experiencing or at risk of experiencing psychosis (Headspace, 2019). hYEPP provides the opportunity for young people and their network (i.e., familial or non-familial supports) to receive a holistic approach towards treatment that includes addressing concerns related to psychosis, whilst also supporting young people in key developmental areas such as physical health, education, employment and relationships (Headspace, 2019).

8.4 Recruitment Procedures

8.4.1 Recruitment location. The headspace Youth Early Psychosis Program (hYEPP) was involved in the recruitment for the research project. There are five programs sites across south-east Melbourne, Australia including Elsternwick, Bentleigh, Dandenong, Narre Warren and Frankston. Each site employs psychiatrists, allied mental health professionals and PSWs to deliver a recovery-oriented approach to working with young people and their network.

At the time of recruitment, there was a total of 305 young people engaged with the service. Of the 305, 155 were classified as 'first-episode psychosis', 108 as 'ultra-high risk of psychosis' and 42 were unassigned. Recruitment was completed across the five sites.

8.4.2 Recruitment overview. At the outset of the study, participants were eligible to participate in the case series investigation into Peer Plus (i.e., Study 2) if they met the following inclusion criteria: i) aged 16 to 25 years old, ii) have a diagnosable experience of psychosis (as assessed by the Mini International Neuropsychiatric Interview [M.I.N.I] 7.0.2 for DSM-5; Sheehan, 1992-2016), iii) sufficient in English to engage with the program and iv) have an overall intellectual functioning within normal limits (an estimated IQ of >70 as measured by the Wechsler Test of Adult Reading [WTAR]; Wechsler, 2001). Participants were excluded if they met the following criteria: i) acute psychotic symptoms, ii) moderate to high risk issues (e.g., deliberate self-harm and suicide), and/or iii) psychiatric hospital admission all within the past month, and/or iv) diagnosis of substance-induced psychosis. Since participants below the age of 18 were being recruited, a mature minor protocol was developed (see Appendix IV) for ascertaining whether parental consent was required for those participants.

Following five months of active recruitment across the five mental health service sites, two participants from a total of 43 referred were eligible for the Peer Plus program.

Anecdotal evidence from discussions with the mental health service sites reported one of the main factors contributing to participant's ineligibility for study was the original exclusion criterion of substance-induced psychosis. In reviewing the recruitment progress and considering the presentation of young people engaged with the mental health service, a decision was made to remove substance-induced psychosis from the exclusion criteria for Study 2. The reasoning for this was two-fold; to allow for the eligibility criteria to be more representative of the young people engaged with the mental health service and to aid in recruiting participants within the time-constraints of the thesis.

A systematic review by King and Simmons (2018) on peer support work acknowledged a tendency for research in peer work to exclude participants with more complex needs such as substance use. They suggested that in these cases, the PSWs expertise may be underutilised and highlighted a need for future research to gain an understanding of the value of peer support work in these groups (King & Simmons, 2018). From a clinical perspective this seemed plausible, as the existing peer support work provided by the service involved the PSWs engaging with any young person from the service who is interested in peer work irrespective of their diagnosis, substance use or presence of any other complex behaviours.

Following modifications made to the eligibility criteria for Study 2, recruitment continued for a further five months and three additional participants from a total of 63 referred were eligible to the complete the Peer Plus program (see Figure 8.2 for overview). Of the 63 referred to the Peer Plus research project, 13 young people were screened via a phone call to determine their eligibility to meet face-to-face for the pre-program assessment. Of this, eight young people were invited to complete the pre-program assessment and for the remaining five young people; one was ineligible for the pre-program assessment, one was currently not suitable to participate (e.g., unwell), two declined their interest in participating after receiving additional information about the study during the phone call and one young
person reported insufficient time to participate in the research project. For the eight young people who attended the pre-program assessment, five participants were eligible for the Peer Plus program, two did not meet the eligibility criteria and one participant withdrew their participation from the study during the pre-program assessment due to insufficient time to participate. A total of four participants completed the entire Peer Plus research program, with one participant withdrawing their participation after the first session due to no longer being interested in the study.

A total of 50 young people who were initially referred to the Peer Plus research project did not participate due to ineligibility (n= 7), no interest (n= 11) or time to participate (n= 7), disengaged with the service (n= 9), planning for discharge (n= 6) or were not currently suitable for a research study as determined by their worker (e.g., unwell or in crisis, n= 10).



Figure 8.2. Overview of the Peer Plus recruitment process

In considering the timeline of the thesis and existing recruitment patterns (i.e., five participants from ten months of recruitment), the research team met with the mental health service to discuss the progress of the Peer Plus trial and consider the potential options moving forward. A decision was made to end the recruitment for the Peer Plus program (i.e., Study 2) in May 2019 because it was anticipated that the project would fall short of the required sample size to conduct analyses for a pilot trial as originally planned, and there were no new referrals to the project. Data for the Peer Plus program including follow-up assessments was collected from August 2018 to October 2019.

This decision led to two subsequent changes to the initial design of the thesis. First, due to the small sample (n = 4) recruited for the Peer Plus program, the design of Study 2 changed to a case series investigation to explore the participants experiences with the program at an individual case-level relative to examining data from a larger group of participants. Second, we decided to obtain additional information on the feasibility and hypothetical acceptability of the Peer Plus program via alternative approach. This involved exploring a broader group of young people's perspectives on the use of the lived experience videos as part of the Peer Plus program via a single one-hour individual qualitative interview. To participate in the single session qualitative interview, participants were required to be aged 16 to 25 years old and have an experience of psychosis (as reported by their worker for referral into the project). Broader eligibility criteria was employed for this aspect of the research project compared to the Peer Plus program to help increase the possibility of finding young people who would be eligible and willing to participate in the qualitative interview.

Peer and non-peer workers were also given the opportunity to share their perspectives on the recruitment and implementation of this digital model of peer support work in early psychosis populations through individual qualitative interviews. To participate in the qualitative interview, worker participants were required to be a peer or non-peer worker

employed by the mental health service who had some level of involvement in the implementation and/or recruitment of young people for the Peer Plus program.

In reviewing the feasibility of this approach, a total of 19 young people and three workers were initially referred to the study as potentially being eligible or interested in participating in the single session qualitative interview. Nine young people were screened via a phone call to confirm their eligibility for the project and provide additional information about the qualitative interview. Of this, seven consumer participants were eligible and completed the single session qualitative interview. For the remaining two young people; one was no longer interested in participating in the study and one did not attend the session as planned and no response was received by the participant after follow-up attempts were made to make contact. Three PSWs completed the qualitative interview. A total of ten young people who were initially referred by their worker did not participate due to no interest (n= 3), not currently being suitable for a research study as determined by their worker (e.g., in crisis, n= 1), or no response received by the worker after follow-up attempts made (n= 6). Data for the single session qualitative interview was collected from June 2019 to September 2019.

8.5 Materials

A mixed-methods approach was employed to examine the feasibility and acceptability of the digital program for one-on-one peer support work within early psychosis services. This type of research design can be helpful for novel programs or under-explored areas of the literature in assessing the appropriateness of these programs for the target population in a time-effective and affordable manner (Bowen et al., 2009; Kooistra, Dijkman, Einhorn, & Bhandari, 2009). This involves examining whether the program works as intended and if not, identifying problems associated with using this model of peer support work that can be resolved prior to conducting future trials on the efficacy (Orsmond & Cohn, 2015).

To examine this, a series of clinician-administered and self-report questionnaires were completed throughout the pre-, post-, and three-month follow up assessments. Exploratory analyses on recovery outcomes were conducted to assess whether there were any changes in participants scores on a series of recovery-oriented outcomes. These analyses were only exploratory due to the research design of this thesis and the primary focus on feasibility and acceptability of the digital program. A summary of the quantitative measures is provided in Table 8.1 below. Full details of these measures are provided in Chapter 9. Qualitative interviews were also conducted to further understand the use of the digital tool in peer support work.

Table 8.1

Time-point	Pre-	Post-	Follow-up
	Program	Program	
Enrolment			
Informed consent	Х		
Assessments			
QPR	Х	Х	Х
SHS-9	Х	Х	Х
ES	Х	Х	Х
AQoL-8D	Х	Х	Х
SEPRS	Х	Х	Х
M.I.N.I 7.0.2	Х		
PANSS	Х		
WTAR	Х		
DUP	Х		
Demographics	Х		
Medication and Treatment	Х	Х	Х
Peer Support Work Engagement	Х	Х	Х

Overview of the Measures Administered

Note. QPR, Process of Recovery Questionnaire (Neil et al., 2009); SHS-9, Schizophrenia Hope Scale (Choe, 2014); ES, Empowerment Scale (Rogers et al., 1997); AQoL-8D, Assessment of Quality of Life 8-Dimension scale (Richardson et al., 2009); SEPRS, Self-Efficacy for Personal Recovery Scale (Villagonzalo et al., 2018); M.I.N.I 7.0.2, Mini International Neuropsychiatric Interview (Sheehan, 1992-2016); PANSS, Positive and Negative Syndrome Scale (Kay et al., 1987); WTAR, Wechsler Test of Adult Reading (Wechsler, 2001); DUP, Duration of Untreated Psychosis.

8.6 Integration of Digital Tools in Peer Support Work

8.6.1 Overview of Peer Plus program. Peer Plus is a digitally assisted peer support program designed to be used by a PSW and participant together in individual face-to-face sessions at the mental health service. The program includes six self-management and

personal recovery module areas: My Journey, Self-care, My Identity, Connections, Life and Mental Health (see Chapter 7 for further details) that were identified as being important to recovery for young people. Each module contains one to three lived experience videos approximately 1 to 4 minutes in length featuring a total of ten young people aged 21-31 years old (4 females, 6 males) with an experience of psychosis. The lived experience videos involve peers reflecting on and sharing aspects of their own mental health experiences and navigation through difficulties from a first-person perspective. The use of lived experience videos in sessions with PSWs was designed to help facilitate conversations about the consumers own mental health and promote a sense of reflection and hope for their own recovery. Peer Plus including the lived experience videos were hosted on a private website accessed via a tablet computer (i.e., iPad) between a PSW and participant in their face-to-face sessions.

8.6.1.1 Peer Plus sessions. Peer Plus is a four-session peer support work program designed to be delivered over a total period of eight weeks at the participants respective mental health service site. In the first session, the PSW provided an overview of the service peer support work and introduced the Peer Plus program. Following this, the PSW and participant briefly explored the six personal recovery module areas using the in-session handout (see Figure 8.3). Participants were informed that it was possible they may not be able to explore all six modules during the Peer Plus program, in which participants were encouraged to identify the module(s) that were most important to them to explore. During the first session, the PSW and participant commenced exploring the first module area identified by the participant including watching at least one of the lived experience videos.



Figure 8.3. Peer Plus program in-session handout.

In sessions two to four, the PSW and participant confirmed the module area to be discussed at the beginning of each session and continued to watch the lived experiences videos as a means of creating dialogue about the participants own mental health experiences and recovery. Given the nature of peer support work, the PSWs had the opportunity to share their own lived experience, where they felt it was relevant to further support the participant through their mental health difficulties and promote positive intentions towards making changes in the participant's life. At the end of each session, the PSW and participant collaboratively discussed the details to include in the session case note (as per the existing mental health service protocol). If a participant identified any activities related to the module area discussed in the session to support the participant with their proposed behaviour changes. This was intended to help transfer reflections and discussions from the session into the participant's day-to-day life. However, the PSWs were not responsible for initiating a discussion about the participant engaging in an activity between the sessions, as this did not align with the model of peer support work employed by the service.

In the fourth and final session, the PSW and participant continued to watch the lived experience videos and towards the end of the session engaged in a reflective discussion about the Peer Plus program. The PSW informed the participant of the plan moving forward (see Table 8.2 below). A fidelity checklist was developed (see Appendix IV) to examine the PSWs adherence to the designed structure of the Peer Plus program.

Table 8.2

Open of session	Main Discussion	End of session
 General check in How are you going? How has your week been? How did you making the changes you spoke about at the last session? (<i>If discussed</i>) Confirm and introduce topic area to explore during today's session. 	 Watch 1-3 videos Discuss participant's experiences after each video watched. For example: What have your experiences What have your experiences been like? How did you feel hearing the peer's experience in the video? Do you relate to any of their experiences? Use video specific discussion prompts. PSW to introduce their own experiences, where relevant. Discuss overall area and problem-solve difficulties, if required. 	 Summary of topic area and discussions. <i>Ask</i>: Has this session lead to any changes you would like to make? <i>If yes, explore changes.</i> Collaborative case note discussion. Schedule the next session.

Overview of the Peer Plus Session Outline

8.6.2 Peer Support Workers (PSWs). The PSWs were employed by the mental health service on a part-time or casual basis. According to the service, the role of a PSW involved having their own lived experience of mental health and being able to use their knowledge and expertise to support others. As part of service protocol, each PSW was provided with a description of their role within the service and completed the in-house

'Introduction to peer work' training. This is a five-day course that covers the peer worker role, self-care, boundaries, sharing their story and group facilitation. The course is facilitated trained PSWs. The PSWs also received two hours of supervision per month with a consumer consultant and 60 minutes per week with a non-peer team leader.

In their role, the PSWs were reported to liaise with non-peer mental health clinicians to work collaboratively and provide the best support for the young person. They offer individual and group peer sessions, run welcome sessions for new young people in the service, and participate in team clinical reviews and clinician sessions with young people (e.g., open dialogue network sessions; Seikkula et al., 2006). Their role can also entail community awareness, volunteer co-ordination and opportunities to co-produce and co-facilitate discovery college courses within the service.

There were four PSWs involved in the Peer Plus program who had between five to eight months of experience in paid peer support work. The PSWs completed three-hours of training on how to use Peer Plus. This included a description of the program, research requirements and role-plays. PSWs were offered opportunities to review or complete roleplays throughout recruitment and implementation, where necessary.

8.6.3 Peer Plus program supervision. One-hour fortnightly supervision sessions with the PSWs and author were held during the data collection phase. These sessions were used to support the PSW in delivering Peer Plus and problem-solve any concerns that may arise during recruitment and implementation. On the opposite fortnights, the author spoke to PSWs who were engaging with participants in the Peer Plus program either on the phone or via email. The PSWs had the research team's contact details to help deal with issues promptly, if necessary.

8.7 Data Analyses

8.7.1 Quantitative analytic procedure. Descriptive statistics were used to assess feasibility and acceptability. Mean and standard deviations were calculated for each outcome variable of interest including total and subscale scores. Originally, a series of t-tests were planned to be conducted to explore changes in self-reported questionnaire measures between: i) baseline and end of treatment, ii) baseline and three-month follow up, and iii) baseline and end of treatment process measures as a predictor for baseline and follow up outcome measures. This was based on a power analysis from a similar pilot intervention (i.e., Thomas, Farhall, Foley, Leitan, et al., 2016) for the preliminary outcome variable of personal recovery, which revealed a minimum of 18 participants required (dz = .72, $\alpha = .05$, power = .80). Due to the aforementioned difficulties experienced during recruitment for the current research and the study being unable to recruit the minimum sample size of 18 participants for the intended analyses, we employed a case series design for Study 2 to explore the feasibility, acceptability and exploratory outcomes of the Peer Plus program using a small sample size of four participants.

Given the small sample size and the exploratory outcomes including variables that do not have a clear cut-off score to indicate improvement similar to clinical symptom-based measures, the Reliable Change Index (RCI) was used. RCI is often used in small sample sizes to determine if change in a participant's score on a measure was statistically significant based on the reliability of the measure (Jacobson & Truax, 1991). To assess significant reliable change in participant's scores, measure statistics including the standard deviation and reliability from the literature were used in an equation to provide the standard error of the measure (S_E). The S_E is then imputed into a second equation to calculate the standard error of difference (S_{diff}). Participant's post and follow up assessment scores were then subtracted by their pre-assessment score and divided by the S_{diff} to provide the reliable change estimate (see

Jacobson & Truax, 1991 for a review of the RCI analysis). This allows for researchers to determine if there was any statistically significant change observed. A change in scores is considered statistically significant if the RCI value is equal to or greater or less than +/- 1.96 (95% confidence interval; Jacobson & Truax, 1991). RCI values greater than + 1.96 suggest reliable improvement in participants scores, whereas RCI values less than - 1.96 suggest reliable deterioration in participants scores (Jacobson & Truax, 1991). RCI values that fall in-between +/- 1.96 indicate no reliable change (Jacobson & Truax, 1991).

Standardised effect size estimates for Cohen's *d* were also assessed to provide a preliminary indication on the treatment effects from engaging with the Peer Plus program. This was conducted on the recovery outcome variables. Cohen's *d* was calculated by obtaining the mean change score on the outcome variables from pre to post and pre to follow up assessment time-points and then this score was divided by the standard deviation of the pre-program recovery outcome due to variation in the participants scores across the variables (Lakens, 2013). The effect size estimates were interpreted using existing guidelines for small (Cohens d = 0.2), medium (Cohens d = 0.5) and large (Cohens d = 0.8) effects for the recovery outcome variables (Lakens, 2013). Due to the small sample size of four, a limitation of using the sample standard deviation is that it may be an inaccurate estimate, in which these findings should be interpreted with caution (Cumming, 2012).

8.7.1.1 Reliable change index literature selection. The change to the design of Study 2 led to a review of the most appropriate measures to include in the case series analyses for the RCI. This was particularly important for the preliminary outcome variable of personal recovery. In the initial research design both the QPR (Neil et al., 2009) and Recovery Assessment Scale measures (RAS; Giffort, Schmook, Woody, Vollendorf, & Gervain, 1995) were completed by participants. This was because the QPR has improved construct validity in terms of the measures consistency with theoretical models of personal recovery (i.e.,

CHIME, see Leamy et al., 2011; Shanks et al., 2013), but the QPR's sensitivity to change in young people experiencing psychosis was uncertain, in which the RAS was included as a more commonly utilised measure of recovery across the literature (Law, Morrison, Byrne, & Hodson, 2012).

To determine which measure to include the author first assessed the reliability of the recovery measures with the existing literature in an attempt to utilise a measure that has been shown to be reliable. To do this, the original development and psychometric studies were reviewed followed by the author conducting a literature search for studies that had conducted a psychometric evaluation of the measures of interest in early psychosis populations. In circumstances where a psychometric evaluation of the measure could not be found in an early psychosis population, the author reviewed studies that may have used the measure in an early psychosis sample to identify any reported psychometric properties. The author then reviewed the literature for psychometric evaluations of the measures of interest in general psychosis populations and examined sample mean ages to determine their suitability for the current sample. A factor considered throughout the review process was the sample size of the studies. The RCI requires a large representative sample to provide an accurate estimate (Maassen, 2004). From this review, the author summarised the findings and determined the most appropriate reference to use for the RCI analysis.

8.7.1.1.1 Personal recovery measure selection. The key exploratory primary outcome variable of this thesis was personal recovery. To date, there is no 'gold standard' measure of personal recovery and often a variety of measures are used across studies (Law et al., 2012). As mentioned earlier, to determine the most appropriate measure of personal recovery, the authors reviewed the literature on the RAS (Giffort et al., 1995) and a relatively new measure of personal recovery, the QPR (Neil et al., 2009).

The RAS was originally developed by Giffort and colleagues in 1995 and has demonstrated excellent internal consistency ($\alpha = 0.93$) and test reliability (r = 0.88) in a sample of 35 US participants with serious mental illness (M_{age} = 33.1 years; Corrigan, Giffort, Rashid, Leary, & Okeke, 1999). Since the original development, there has been several psychometric evaluation studies into different versions of the RAS within US (Corrigan, Salzer, Ralph, Sangster, & Keck, 2004), Australian (McNaught, Caputi, Oades, & Deane, 2007), Japanese (Chiba, Miyamoto, & Kawakami, 2010), French (Girard, Tinland, Boyer, Auquier, & French Housing First Study Group., 2015), Chinese (Young, Ng, Pan, Fung, & Cheng, 2017), Brazilian (Silva et al., 2017) and German (Cavelti, Wirtz, Corrigan, & Vauth, 2017) populations to name a few. In particular, Corrigan et al. (2004) conducted an exploratory and confirmation factor analysis in a sample of 1,824 participants with severe mental illness (M_{age} = 41.8 years) and found a five-factor solution consistent with that of Corrigan et al. (1999) and reported the reliability for the five factors ranged from $\alpha = 0.74$ to 0.87. In an Australian context, a 24-item version of the RAS was evaluated and found to yield the five-factor solution, with the internal consistency values ranging from $\alpha = 0.73$ to 0.91 and convergent validity demonstrated (McNaught et al., 2007). More broadly, Salzer and Brusilovskiy (2014) examined the psychometric properties of the RAS across the existing literature and reported a total of 77 studies using the RAS. Of the 77 studies, 19 reported the reliability internal consistency value ranging from $\alpha = 0.76$ to 0.97 and test-retest reliability ranging from r = 0.65 to 0.88 (Salzer & Brusilovskiy, 2014). Additionally, the RAS total score has been suggested to be sensitive to change across the treatment groups (Jones & Ludman, 2018).

In comparison, the QPR was developed in 2009 by Neil and colleagues who examined the QPR in a UK sample of 111 service users with an experience of psychosis $(M_{age}=40 \text{ years})$. In their study, the QPR demonstrated good internal consistency for the two

subscales (Interpersonal α = 0.77, Intrapersonal α = 0.94), and test-retest reliability (*r*= 0.76, *r*= 0.87 respectively). In subsequent psychometric evaluations of the QPR, Law et al. (2014) examined the QPR and found excellent internal consistency for the 22-item QPR (α = 0.93), although analyses revealed a potential 15-item measure of the QPR, which also demonstrated excellent internal consistency (α = 0.93) and test-retest reliability (*r*= 0.70). Williams et al. (2015) examined the 15-item and 22-item QPR in a sample of 399 participants (M_{age} = 43.8 years) and reported the 15-item QPR appeared to be "slightly more robust" (p. 551) when compared with the 22-item, however no further research has compared the 15-item to the 22item of the QPR. To date, the QPR has also been psychometrically validated in Chinese (Chien & Chan, 2013) and Sweden (Argentzell, Hultqvist, Neil, & Eklund, 2017) populations.

To the authors knowledge, neither the RAS or QPR appears to have been psychometrically investigated within an Australian young adult psychosis (i.e., 16-25-yearold) sample. One study by Gonzales and colleagues (2015) explored the factor structure of the RAS to measure recovery among people with substance abuse (M_{age} = 20.5), however items were adapted to be relevant to substance use (e.g., mental illness was replaced with alcohol/drug use). As mentioned earlier, the RAS has been psychometrically validated within an Australian sample (McNaught et al., 2007) for the 24-item, but not the 41-item version used in this thesis.

Given there was no psychometric evaluations found on the use of the RAS or QPR within a young adult (16-25-year-old) or early psychosis sample, the potential use of both measures within studies that had used the RAS or QPR as an outcome variable in a similar population were examined. This was done to identify the reliability of these measures within this sample, and also compare the means and standard deviations to see if they were representative of the current research. For the RAS, one study was found to have employed

the RAS 41-item in an early psychosis sample with a mean age of 25.0 years (SD= 3.8; n= 22; Herman, Shireen, Bromley, Yiu, & Granholm, 2016). The study reported a RAS total pretreatment score of 79.32 (SD= 12.77) and post-treatment sore of 83.73 (SD= 10.13). These estimates were lower than that of the current sample (pre; M= 180.25, SD= 11.87; post M= 189.00, SD= 20.54). Herman et al. (2016) did not report on any reliability estimates of the RAS.

For the QPR, Grealish et al. (2017) employed the QPR as an outcome variable in a young adult sample of 423 university students (M_{age} = 23.31). The study reported a QPR total score of 62.48 (SD= 15.71), however no reliability was reported. An additional study by Pietruch and Jobson (2012) used the QPR as an outcome variable in a sample of 34 participants with a first episode of psychosis (M_{age} = 25.67 years) and reported a mean QPR total score of 57.09 (SD= 16.92) and internal consistency value of α = 0.95. Lastly, Griffiths et al. (2018) conducted a RCT (n= 36) for therapy in a first-episode psychosis population (M_{age} = 32.2 years) and reported in the TAU condition a total mean score was 54.60 (SD= 13.00), however no reliability estimate was provided. In both studies, the scale descriptives were slightly lower than the current research (pre; M= 67.00, SD= 4.08).

The current samples scores are higher on both the RAS and QPR than that of previous literature, which may suggest this sample was at a better point in their recovery and thus scored higher on measures related to personal recovery than the samples reported previously. It is also possible the small sample size of four participant in the current research does not provide an accurate estimate of the descriptive statistics in comparison to larger samples reported in the literature. Nonetheless, when reviewing the RAS total scores of the current sample to that of the literature, the mean score was quite high at 180.25 with a range of 165 to 193 (potential score range 41-205). The authors questioned whether a ceiling effect could be occurring where all participants were scoring at the higher end of the RAS.

After considering the psychometric properties of the two scales, the author considered the measures ability to assess personal recovery in relation to current theoretical models in the literature (i.e., CHIME; Leamy et al., 2011). This was important as the Peer Plus program includes six personal recovery themes: My Journey, Connections, Self-care, My Identity, Mental Health and Life, which were derived from the content recovery framework developed in the participatory process with young people as part of Study 1. These emerging recovery themes appeared to draw similarities with the recovery processes in the CHIME model (see chapter 7 for detail). A strength of the QPR is that it maps closely onto the CHIME model with all 22-items closely mapping onto the model, however only 29 of the 41 items of the RAS map onto the CHIME model, with a different number of items mapping onto each aspect of CHIME (Shanks et al., 2013).

Thus, in considering the psychometric properties and relevant data available to conduct the RCI analysis (e.g., standard deviation or standard error and internal consistency estimate), along with the measures ability to assess constructs related to the CHIME model, a decision was made to use the QPR. The reasoning was four-fold; i) the QPR has demonstrated good internal consistency and validity, ii) the required estimates are accessible to be able to conduct the RCI analyses, iii) the QPR has been demonstrated to map closely onto the recovery processes within the CHIME model and iv) the RAS may be demonstrating ceiling effects, which may not provide an accurate representation of participants scores for the RCI analysis.

Following the decision made to use the QPR, the author then determined the most appropriate reference to obtain statistics for conducting the RCI analysis in the current research. The RCI requires the internal consistency and standard deviation values from the existing literature to assess reliable change in this sample. Upon review of the aforementioned literature, Pietruch and Jobson (2012) statistics were used given the

consistency of their sample population to the present research target population (i.e., young adults with an experience of psychosis), however a limitation of using this study is the sample size of 34 participants. The QPR standard error of difference for the RCI analysis was 5.35. For a review of the RCI calculated, see Table 8.3 below.

Table 8.3.

Summary of the Values used to Conduct the Reliable Change Index (RCI) Analyses

Measure	S _{diff}	S _X	r _{xx}	SE
QPR total	5.35	16.92	0.95	3.78

Note. QPR, Questionnaire for the Process of Recovery total score (Neil et al., 2009); S_{diff} = standard error of the difference of the measure; S_x = standard deviation of literature scores; r_{xx} = reliability (internal consistency) of measure; S_E = standard error of measurement of a measure.

8.7.2 Qualitative analytic procedure. Qualitative interviews were used to obtain an understanding of participants perspectives on the Peer Plus program including the use of the lived experience videos to facilitate conversations in peer work. Four semi-structured qualitative interviews were conducted as part of this thesis:

- i. Approximately 90-minute individual qualitative interview with participants who participated in the four-session Peer Plus program.
- Approximately 90-minute individual qualitative interview with PSWs who delivered the four-session Peer Plus program.
- iii. Approximately 60-minute single-session individual qualitative interview to hear participant's perspectives on the Peer Plus program including the lived experience videos and their imagined use within peer support work.

iv. Approximately 30-minute individual qualitative interview to hear peer and non-peer workers perspectives on the Peer Plus program including the lived experience videos and their imagined use within peer support work. Workers could also comment on the feasibility of recruitment and data collection processes.

The first two qualitative interviews formed part of the case series investigation into the feasibility, acceptability and exploratory outcomes of Peer Plus, with the latter two qualitative interviews being introduced as additional avenues for exploring participants perspectives on this model of peer support work, as a result of the insufficient sample size obtained for a full pilot trial for Study 2. While non-peer workers and PSWs were invited to participate in the qualitative interview, only PSWs expressed interest and consented to participating in the study. All of the qualitative interviews were conducted and transcribed by the author. The interviews were audio-recorded where consent was provided. If no consent was provided, detailed notes were taken to capture the participants experiences. Additional methodological details for the qualitative interviews are provided in Chapter 10 (Study 3).

In determining the most appropriate qualitative analysis to conduct Thematic Analysis (TA; Braun & Clarke, 2006), Interpretative Phenomenological Analysis (IPA; Smith, Flowers, & Larkin, 2009), Grounded Theory (GT; Charmaz, 1996) and Content Analysis (CA; Krippendorf, 2013) were considered (see Table 8.4 for review). A thorough review of each approach allowed for the author to determine which methodology would align more closely with the research question, and thus be the most relevant approach to employ (Braun & Clarke, 2013).

Table 8.4

Overview of Qualitative Methodology Decision-making.

Qualitative	Description	Critique	Rationale for discounting the method
Approach			
IPA (Smith	IPA aims to understand "how	Advantages:	While IPA utilises semi-structured
et al., 2009)	people make sense of their lived	- Beneficial when seeking understanding of a particular	interviews to understand participant's
	experiences" (Braun & Clarke,	object that is complex or previous unexplored (Smith &	lived experience and could be
	2013, pg. 175).	O'sborn, 2015).	advantageous in providing an in-depth
		- Provides in-depth analysis of individual's experiences	exploration of the newly developed Peer
		(Pietkiewicz & Smith, 2012).	Plus program, there was uncertainty in
		- Helpful with small sample sizes (Smith & Osborn,	whether sufficient depth would be
		2015).	obtained within the current research.
		- Utilises semi-structured interviews.	This was due to the small number of
			participants completing the four-session
		Disadvantages:	Peer Plus program, and the brief
		- As a result of the in-depth analysis, IPA requires a large	exposure to this model of working in
		amount of data and participant experience to be obtained	the single session qualitative interviews
		in order to produce a well-conducted analysis (Smith &	(e.g., one-hour exposure). This led to
		Osborn, 2015).	concerns about the participant
		- IPA does not reported on overall findings across the	qualitative interviews potentially not be
		data set, rather the analysis can focus on exploring	able to provide sufficient depth to
		similarity or differences between individual lived	conduct a thorough IPA.
		experience accounts (Smith & Osborn, 2015).	

Grounded Theory (GT; Charmaz, 1996).	GT is a "set of data collection and analytic procedures aimed to develop a theory" (Charmaz, 1996, pg. 27).	 Advantages: Focuses on inductive and emerging data from participants (Charmaz, 1996). Emphasises the importance of participant's meaning instead of assuming their meaning (Charmaz, 2015). Utilises semi-structured interviews. Disadvantages: Used for factual or descriptive research, or developing theoretical statements (Charmaz, 2015). Used to develop theories from the data analysed (Charmaz, 1996). Used to explore how participant and interpersonal processes occur (Charmaz, 2015). 	GT does not seem to be an appropriate methodology to employ for the current research, as it appears investigate individual and interpersonal processes or developing a specific theory from the data obtained. This does not align with the research question of the current research, which aims to explore participants experiences and perspectives on using lived experience videos within peer support work.
Content Analysis (CA; Krippendorf, 2013)	CA is "a process of description of qualitative data in order to represent clusters of responses" (Crowe, Inder, & Porter, 2015, pg. 2).	 Advantages: Can be used across qualitative interviews and written responses (Crowe et al., 2015). Can involve identifying categories and how frequently they arise in the data (Joffe & Yardley, 2004). Disadvantages: Can be viewed as a fairly superficial analysis, as it provides a representation of what was said by participants in response to a question (Crowe et al., 2015). Does not explore the individual meaning (Crowe et al, 2015). 	CA does not appear to be appropriate for this research project, as it doesn't allow for the author to explore and investigate the participants perspectives and meaning associated with the Peer Plus program and use of the lived experience videos beyond what was directly said by participants.

TA analysis was determined to be the most appropriate qualitative method, as it aligned closely with the research question and offered flexibility in the type of epistemological position used to interpret and analyse patterns across the data (Braun & Clarke, 2006; Braun & Clarke, 2013; Clarke, Braun, & Hayfield, 2013). Table 8.5 provides a summary on the decision-making rationale for using TA.

The overall objective of the qualitative interviews was to investigate and understand the participants perspectives on Peer Plus, in particular the use of the lived experience videos. Given the focus of the research question, an essentialist approach was undertaken (Clarke et al., 2013). This epistemological position assumes the participant's lived experience of a particular program (i.e., Peer Plus and the videos) will articulate the "essential nature or truth" (Rolfe, 2012, pg. 6), and in turn will help identify common patterns across participant's lived experience accounts in the data obtained (Braun & Clarke, 2006; Rolfe, 2012).

More specifically, an inductive, descriptive and semantic approach was employed to understand participants thoughts, feelings and perspectives associated with Peer Plus and the use of lived experience videos in peer support work. This approach focuses on identifying the participant's explicit meaning described in the qualitative interview, and ultimately summarising the repeated themes observed in the data, as relevant to the research question (Clarke & Braun, 2017; Clarke et al., 2013). This approach is particularly important given the use of digitally assisted peer support work is a relatively new and underexplored area of the literature, in which identifying and summarising the participant's perspectives could be helpful in developing understanding of this research area (Clarke & Braun, 2017).

Table 8.5

Description	Critique	Reasons for using the method
TA "is a method for	Advantages:	TA will allow for participant's perspectives on
identifying,	- Offers flexibility for the	the Peer Plus program including the lived
analysing and	researchers to determine the	experience videos to be investigated. This
interpreting patterns	epistemological position, data	analysis will allow for themes to be identified,
of meaning	collection methods and	analysed and interpreted across participants
('themes') within	research question (Clarke &	experiences and perspectives on using this
qualitative data	Braun, 2017).	digital model of peer support work. This
(Clarke & Braun,	- Focuses on participant's	approach will also align with the research
2017, pg. 297).	experiences including their	question and the intended level of depth that
	thoughts, feelings and views	will be obtained in the qualitative interviews
	on the program (Clarke &	(e.g., brief exposure to Peer Plus in a one-hour
	Braun, 2017).	qualitative interview is unlikely to elicit in-
	- Allows for themes or	depth experiences).
	patterns to be identified and	
	interpreted across the	The flexibility of TA will allow for the current
	participant's qualitative	research to employ an essentialist stance to
	interviews (Braun & Clarke,	understand the participant's perspectives from
	2006).	an inductive, descriptive and semantic approach
	- Can allow researchers to	focussing on their specific experiences
	identify similarities and	expressed.
	differences in the data (Braun	
	& Clarke, 2006).	There is familiarity with using TA across the
	- Provides a step-by-step	research team, which will be helpful in
	approach to analysing	ensuring a thorough TA is conducted.
	participant's data (Braun &	
	Clarke, 2006).	While qualitative analysis often involves
	- Utilises semi-structured	reaching theoretical saturation to determine
	interviews.	sample size, a recommended sample of 6-15
		participants has been reported for TA in order
	Disadvantages:	to provide a representative account of the
	- Not suitable for small	participants perspectives (Clarke et al., 2013).
	sample sizes (Clarke et al.,	In combining the qualitative data from
	2013).	participants who complete the four-session
	- Not useful for in-depth	program with participants who participate in
	analysis of participant's lived	the single qualitative interviews, the study will
	experience accounts, as TA	be more likely to reach the recommended
	focuses on the overall	sample size, and thus more likely to achieve
	patterns or meaning across	saturation.
	the whole data set (Clarke et	
	al, 2013).	

Overview and Rationale for Utilising Thematic Analysis

Braun and Clarke's (2006) TA was conducted in accordance to the prescribed methodology. CP reviewed and coded all transcripts and identified patterns and themes across the data set (for a detailed review of the TA analysis, see Chapter 10). To assist with the qualitative analysis, CP meet regularly with two academic researchers (one from occupational therapy and one from clinical psychology backgrounds) of whom had experience in conducting qualitative research to discuss the coding and theme development. The coding and theme development were also discussed with a reference group of young people engaged with the early psychosis service. This helped to facilitate an independent consumer perspective and shape the interpretations of the data. Only de-identified summaries of the data were shared with the reference group.

8.8 Data Cleaning

The data was assessed to determine its appropriateness for the planned analyses. All variables were initially checked for any errors. This included determining if any item scores were outside the expected range of possible values via a frequency (categorical variables) and descriptive (continuous variables) analyses. All variable scores across the pre, post and follow up assessment data were within the expected range.

To assess the normality of the variables, statistical (i.e., the 5% trimmed mean, skewness, kurtosis, shapiro-wilk statistics) and visual representation (histograms and boxplots) analyses were conducted. The Shapiro-Wilk statistic was used to assess normality because it is a more appropriate test of normality when sample sizes are less than 50 (Tabachnick & Fidell, 2013). For the pre-program data, there were no violations observed. In the post-program data, there was a violation on the SHS-9, shapiro-wilk = .73, p = .024. Upon reviewing other statistical methods, there was no noteworthy difference between the mean and 5% trimmed mean and the skewness z-score was zero indicating a normal distribution. However, the kurtosis z-score was -2.29 (> than -1.96), which indicated the

distribution of the data was 'too flat', which can underestimate the amount of variance (Tabachnick & Fidell, 2013). For the three-month follow up data, there was a violation on the SHS-9, shapiro-wilk = .80, p = .100 and QPR Interpersonal subscale, shapiro-wilk = .73, p =.240. When reviewing the mean scores and 5% trimmed mean, there was no substantial differences for both measures. The QPR Interpersonal subscale had no skewness as indicated by a z-score of zero, and SHS-9 had close to no skewness with a z-score of -0.08. However, the kurtosis statistic revealed a negative score of -2.29 and -2.11 for the QPR Interpersonal subscale and SHS-9 total score respectively. Similar to the post-program data, this suggests the distribution of the scores were 'too flat' (Tabachnick & Fidell, 2013). Given the small sample size of four participants, it was difficult to obtain an accurate representation of the distribution of the data due to the natural individual differences that can arise. A decision was made against transforming the data at both timepoints because the variables did not demonstrate any significant skewness that would require a transformation, and as described below there were no outliers found in the data set, in which the 'flat' distribution may highlight the four participant's variation in their feelings of hope and interpersonal recovery. Also, the SHS-9 and Interpersonal subscale of the QPR were not planned to be used in the RCI analysis. The RCI analysis was used to assess whether there were any reliable change in participants scores on a n = 1 basis compared to measurement error for the total QPR score from pre to post and follow up timepoints (Jacobson & Truax, 1991).

Outliers were assessed using boxplots and z-scores to determine the presence of any univariate outliers in the data. No potential extreme cases or outliers were identified in the boxplots and no z-scores on the variables were in excess of 3.29 (p <.001), suggesting no univariate outliers were present. A Missing Completely at Random (MCAR) test was used to identify if there were any missing values. The results revealed there were no missing values in the entire data set.

Following data cleaning, the internal consistency reliability analyses were conducted to assess the reliability of the measures, however it became apparent that the internal consistency estimate may be sensitive to sample size. Given the small sample size of the participants who completed the Peer Plus study (n= 4), a decision was made against reporting the measure reliability values, as it would not provide an accurate estimate of the data. The means, standard deviations and score ranges were calculated for each variable and a summary of these statistics is presented in Table 8.6.

Table 8.6

Summary	of t	he	Means,	Standard	Deviations	and	Score	Ranges	

	<i>M</i> (SD)			Range		
Variable	T1	Τ2	Т3	Actual ³	Theoretical	
QPR	67.00 (4.08)	71.25 (6.18)	74.25 (12.07)	61-88	0-88	
Interpersonal	15.75 (1.26)	16.25 (1.89)	18.50 (1.73)	14-20	0-20	
Intrapersonal	51.25 (3.59)	55.00 (4.55)	55.75 (10.47)	44-68	0-68	
SHS-9	14.25 (1.89)	16.00 (2.31)	15.25 (3.20)	12-18	0-18	
ES^{1}	2.96 (0.30)	2.87 (0.16)	2.90 (0.18)	2.64-3.39	0-4	
AQoL-8D total ²	0.61 (0.05)	0.65 (0.14)	0.61 (0.17)	0.13-0.41	0-1	
AQoL-8D MH-SD ²	0.25 (0.06)	0.26 (0.10)	0.27 (0.13)	0.44-0.84	0-1	
SEPRS	80.89 (13.20)	79.82 (12.94)	89.64 (2.22)	62.14-92.86	0-100	

Note. n = 4. QPR, Questionnaire for the Process of Recovery total score and interpersonal and intrapersonal subscales (Neil et al., 2009); SHS-9, Schizophrenia Hope Scale (Choe, 2014); ES, Empowerment Scale (Rogers et al., 1997); AQoL-8D, Assessment of Quality of Life 8-Dimension scale total score and mental health super dimension score (Richardson et al., 2009); SEPRS, Self-Efficacy for Personal Recovery Scale (Villagonzalo et al., 2018). ¹ Items were reversed prior to scoring.

² AQoL-8D weighted utility scores were calculated.

³ Actual range includes the minimum and maximum score across all three timepoints.

8.9 Ethical Considerations

This thesis was approved by the Alfred Ethics Committee (Ref. 526/16) and Swinburne University Human and Research Ethics Committee (Ref. 2018/164).

8.10 Participant Characteristics

Details on participants who completed the case series trial of the Peer Plus program and participants who completed the single session qualitative interview is provided below. Information on participants DUP, illness severity and cognitive functioning was only obtained for participants who completed the case series investigation of the Peer Plus program (Study 2). This information was not obtained for the single session qualitative interview participants and will thus not be reported.

8.10.1 Age. Five participants aged 18 to 24 years (M= 21.80, SD= 2.39) across five mental health service sites in Victoria, Australia were eligible to participate in the Peer Plus program. Four of the five participants completed all four-sessions and research assessments including the qualitative interview on their perspectives on the Peer Plus program and the lived experience videos. A total of four PSWs participated in Peer Plus with the participants. One of the PSWs who engaged in the Peer Plus program voluntarily provided written informed consent to participate in the qualitative interview exploring their perspectives on Peer Plus and videos.

For the single session feasibility qualitative interviews, seven participants aged 20 to 25 years (M= 21.57, SD= 1.81) and three PSWs were recruited. Details related to the age of the PSWs in the case series investigation and qualitative interviews was not reported to maintain their privacy and confidentiality as research participants.

8.10.2 Gender. The five participants who were eligible for the Peer Plus program all identified as male. For the single-session qualitative interview consumer sample, five of the

seven consumer participants were male. Similar to age, details on the gender of the PSWs is not reported to maintain their privacy and confidentiality as research participants.

8.10.3 Vocational (education and employment). In the case series investigation of Peer Plus, the participants were either employed part-time, studying part-time or full-time or unemployed. All participants had achieved an education level of Year 11/Year 12 or higher.

For the single session qualitative interview sample of seven consumers, three participants were currently casually employed. The remaining four participants were either unemployed, studying part-time, completing home duties or volunteering. Six of the seven participants had completed Year 11 / Year 12 pass, with one participant completing Year 10 or less.

For three PSWs who completed the single-session qualitative interview and the one PSW who completed the trial interview, they had been employed in mental health services from 8 months to 53 months (M=25.50, SD= 20.47).

8.10.4 Relationship status. All consumer participants including those who completed the Peer Plus program and those who completed the single session qualitative interview were single. No data was obtained on the PSW participants relationships status, as it was not deemed to be relevant to the study.

8.10.5 Psychiatric diagnosis. For the case series investigation into the Peer Plus program, two participants received a diagnosis of Mood disorder with psychotic features, two participants were diagnosed with Schizophrenia disorder and another participant was diagnosed with Substance-induced psychosis according to the M.I.N.I 7.0.2 (Sheehan, 1992-2016). Three of the five participants reported experiencing a psychotic episode in the past two years.

Consumer participants who completed the single session qualitative interview selfreported their psychiatric diagnosis. Four participants reported psychotic disorder not

otherwise specified, while the remaining three participants selected 'other' and reported their diagnoses to be i) anxiety and psychotic episode, ii) anxiety, depression, schizophrenia, and iii) psychotic episode. Of the seven participants, six reported experiencing a psychotic episode in the past two years.

8.10.6 Duration of Untreated Psychosis (DUP). For participants who completed the Peer Plus program, data was obtained on their duration of untreated psychosis. The DUP for four participants ranged from 7 to 730 days with the average DUP being 370.25 days (SD= 415.42). One participant was unable to answer the questions to assess their DUP.

8.10.7 Illness severity. The PANSS (Kay et al., 1987) was administered with participants who were eligible for the Peer Plus program to assess the presence of any psychotic symptoms prior to participating in the current research. For the five participants, all subscale scores on the PANSS were within the low-range. For the positive symptom scale, scores ranged from 7 to 10 with an average score of 8.20 (SD=1.64). For the negative symptom scale, participant's scores ranged from 9 to 16, with a mean score of 12.00 (SD= 2.74). These results indicated participants experienced nil to minimal positive and negative symptoms (potential scores can range from 7-49). Lastly, for the general psychopathology scale, participants experienced nil to 25 with a mean score of 22.20 (SD= 1.79), suggesting participants experienced nil to minimal general symptoms (potential scores can range from 21 to 25 with a mean score of 22.20 (SD= 1.79), suggesting participants experienced nil to minimal general symptoms (potential scores can range from 21 to 25 with a mean score of 22.20 (SD= 1.79), suggesting participants experienced nil to minimal general symptoms (potential scores can range from 21 to 25 with a mean score of 22.20 (SD= 1.79), suggesting participants experienced nil to minimal general symptoms (potential scores can range from 21 to 25 with a mean score of 22.20 (SD= 1.79), suggesting participants experienced nil to minimal general symptoms (potential scores can range from 21 to 25 with a mean score of 22.20 (SD= 1.79), suggesting participants experienced nil to minimal general symptoms (potential scores can range from 21 to 25 with a mean score of 22.20 (SD= 1.79), suggesting participants experienced nil to minimal general symptoms (potential scores can range from 16-112).

8.10.8 Cognitive functioning. Participants who were eligible for the Peer Plus program demonstrated a mean IQ score of 110.40 (*SD*= 9.63) based on the WTAR (Wechsler, 2001).

8.10.9 Current treatment (therapy and/or medications). Information was collected on participants current medications and engagement in psychological therapy. For consumers who were eligible for Peer Plus, two participants were not taking any medication or engaging

in psychological therapy during their involvement in the study. The remaining three participants were taking medication (i.e., anti-depressant and/or antipsychotic medication), and one of these participants was receiving Cognitive Behavioural Therapy throughout their participation in the Peer Plus research study.

For participants who took part in the single session qualitative interview, four participants were currently taking antipsychotic medication and two were taking both antipsychotic and antidepressant medication. One participant was not currently taking any prescribed medication. Of the seven participants, five were currently engaged with a psychologist on a weekly or fortnightly basis for individual one-hour sessions. Participants had been working with their psychologist from seven months to five years. One participant was engaged with a psychologist for individual sessions and had recently commenced a group program. One participant reported receiving daily support from a psychologist online. The remaining two participants were not engaged with a psychologist at the time of the assessment.

8.10.10 Engagement in peer support. Past and current engagement in peer support work was obtained for all consumer participants. At the pre-program assessment for the Peer Plus program, three participants had previously engaged in peer support work, either individual or group-based, however only one participant was currently engaged with peer support work at the commencement of the Peer Plus program. After the completion of the program, participants could continue to receive general peer support work offered by the service, if they chose. Three participants continued to receive general peer support work after the completion of the Peer Plus program.

For participants who completed the single session qualitative interview, four of the seven participants had a history of engaging in peer support work (i.e., either individual or group-based) for approximately two weeks to six months. Only one participant was currently

engaged in peer support work for the past five months. The remaining three participants reported no prior experience with peer support work.

Chapter Nine: Peer Plus: A Case-Series Trial of a Novel Model of Digital Peer Support Work for Young People Experiencing Psychosis.

9.1 Chapter Guide

This chapter presents the findings on the feasibility and acceptability, and preliminary outcomes on using Peer Plus in one-on-one peer support work with young people who have an experience of psychosis. Using lived experience videos in peer support work offers the opportunity for the videos to mirror and compliment the PSWs own lived experience within the peer relationship through incorporating broader lived experience material. Preliminary results into the use of lived experience peer videos in mental health contexts have provided initial support for the videos to facilitate discussions about recovery and promote personal reflection (De Vecchi et al., 2016; Thomas, Farhall, Foley, Leitan, et al., 2016; Williams et al., 2018b). Engaging with these videos has further been reported to promote feelings of hope in consumers for their recovery, improved understanding of their mental health and the development coping skills (Naslund et al., 2014; Williams et al., 2018b). By systematically examining the use of Peer Plus as a blended model of digitally assisted peer support, it helps to explore new ground and begin to address a few key gaps in the field by understanding the use of digital technology in the form of lived experience videos in peer support work and an early psychosis sample, as this is yet to be examined.

This chapter forms the second paper of this thesis. The article is titled '*Peer Plus: A* case-series trial of a novel model of digitally-assisted peer support work for young people experiencing psychosis' and has been submitted to the Journal of Mental Health. The Journal of Mental Health is ranked by Scimago in Quartile 2 for journals in psychiatry and mental health, and it has a 2018 Journal Citation Reports impact factor of 2.604. The nature and level

of author and co-authors contributions to this paper are provided in the 'Author Indication Form' in Appendix III.

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9.2 Abstract

The employment of peer support workers within mental health services is becoming common practice. Understanding the resources that could be used in peer work sessions is an area to be explored. Digital technology enables the development of resources beyond traditional methods. A digitally-assisted peer support program was developed called Peer Plus: a blended model of face-to-face peer support work with lived experience videos. The feasibility and acceptability of this model of peer work was examined in an early psychosis service. Data from five participants were collected at pre-program, post-program and three months following completion. In nearly all sessions, the lived experience videos were viewed and followed by related recovery-oriented conversations between participants and PSWs, and four of the five eligible participants completed the entire program. Feedback was positive, and no adverse effects were noted. The preliminary findings suggest it is feasible and acceptable to blend individual peer work with digital technology in this way. The lived experience videos were used as a tool to facilitate discussions and encourage PSWs and consumers to share their lived experiences. Future research is required to extend upon the current findings and explore the efficacy of this novel model.

Keywords: peer support work; first episode psychosis; personal recovery; digital mental health; early intervention mental health services

9.3 Introduction

Peer support work is becoming a key aspect of mental health service provision, with the employment of Peer Support Workers (PSWs) part of many government and organisation policies (Commonwealth of Australia, 2009; National Health Service, 2019; World Health Organization, 2013). Peer support workers can be referred to as having "experienced mental ill health... and use these personal experiences, along with relevant training and supervision to facilitate, guide, and mentor another person's recovery journey by instilling hope, modeling recovery, and supporting people in their own efforts to reclaim meaningful and gratifying lives in the communities of their choice" (Stratford et al., 2017, p. 4). In their role, PSWs strategically share personal, yet mutual experiences to support another individual who is experiencing mental illness (Repper & Carter, 2011). This shared lived experience can help build rapport, develop a sense of trust and hope, and support consumers in their own recovery (Cleary, Raeburn, Escott, West, & Lopez, 2018; Repper & Watson, 2012; Walsh, McMillan, Stewart, & Wheeler, 2018).

To date, there is limited research examining one-on-one peer support work within early psychosis services. Existing research has investigated the role of face-to-face peer work to non-peer case management (Sells, Davidson, Jewell, Falzer, & Rowe, 2006; Solomon & Draine, 1995), as health-care assistants (Craig, Doherty, Jamieson-Craig, Boocock, & Attafua, 2004), as part of discharge programs (Johnson et al., 2018; Lawn, Smith, & Hunter, 2009), or within community settings for adults experiencing severe mental illness (Mahlke et al., 2017). Qualitative explorations into consumers and PSWs experiences of engaging in peer work have more commonly been conducted, although mainly in adult mental health services (Crane, Lepicki, & Knudsen, 2016; Ehrlich, Slattery, Vilic, Chester, & Crompton, 2019; Repper & Watson, 2012; Walker & Bryant, 2013; Walsh et al., 2018; White, Price, & Barker, 2017).

While there is preliminary support for peer support work, researchers have critiqued this evidence, noting insufficient research and inconsistency in defining the role, training and selection of PSWs (Dixon et al., 2010; Lloyd-Evans et al., 2014). More recently, there is evidence for improvements in recovery-oriented outcomes (e.g., recovery, hope, self-efficacy etc.; Bellamy, Schmutte, & Davidson, 2017) relative to objective clinical measures (e.g.,

symptom remission), in which it has been recommended that research into peer work should focus on these recovery outcomes, as they may be more sensitive to change given their relatedness with peer support work (King & Simmons, 2018).

In reviewing the possible resources to facilitate peer work in early psychosis populations, digital tools may be of benefit. Thomas and colleagues (2016) developed a tablet-computer supported intervention model in which consumers and mental health workers discussed videos of peers reflecting on how they navigated issues in their own recovery. This blended model was a feasible and acceptable method for non-peer workers working with adults experiencing severe mental illness (Thomas, Farhall, Foley, Leitan, et al., 2016). Participants described feeling a sense of hope for their recovery from watching the videos and having meaningful conversations with their worker (Williams, Fossey, Farhall, Foley, & Thomas, 2018). This is consistent with findings that videos capturing people sharing their lived experience of mental illness can be beneficial in facilitating conversation and understanding, as well as promoting a sense of hope, belonging and the development of coping skills (De Vecchi, Kenny, Dickson-Swift, & Kidd, 2016; Naslund, Grande, Aschbrenner, & Elwyn, 2014). Use of these digital interventions within consumer and worker interactions has been proposed to promote recovery-oriented practice (Williams, Farhall, Fossey, & Thomas, 2019).

While there have been some initial investigations into the use of these kind of digital programs within mental health services, this is yet to be examined in the context of peer work, or within an early psychosis population. Using peer videos in a blended model of support similar to Thomas, Farhall, Foley, Leitan, et al. (2016) has synergies with peer support work in bringing broader lived experience material into sessions. These videos could promote the discussion of shared experiences and recovery. Young people experiencing psychosis have expressed a preference for using online videos to obtain mental health

information (Lal et al., 2015), and for the use of digital resources as part of mental health services (Bucci, Morris, et al., 2018). Existing studies in early psychosis populations have also shown support for the feasibility and acceptability of digital programs (Alvarez-Jimenez et al., 2013; Bucci, Barrowclough, et al., 2018; Lim et al., 2019; McEnery et al., 2019).

In considering the use of a digital resource to facilitate individual peer support work with young people, we employed a collaborative development process to create a blended model of face-to-face peer work with digital technology called Peer Plus. The process of developing the videos is reported elsewhere (authors, in submission). The aim of this study was to conduct a case series approach to examine the feasibility for this model of peer work using lived experience videos accessed via a tablet computer to promote conversations in sessions with young people experiencing psychosis.

9.4 Method

9.4.1 Study design. This study involved a case series with the primary aim of examining feasibility and acceptability of the Peer Plus program. In addition to collection of data relating to the conduct and experiences of sessions, participants completed three assessments of recovery-related dimensions: pre-program, post-program and a three-month follow-up. The study was approved by the Human Research Ethics Committee at The Alfred and Swinburne University of Technology.

9.4.2 Participants. Five male participants aged 18 to 24 years old (M= 21.80, SD= 2.39) were recruited from an early psychosis service in Melbourne, Australia. The inclusion criteria involved: i) being aged 16 to 25 years, ii) having a diagnosis of psychosis (as determined by the Mini International Neuropsychiatric Interview [M.I.N.I] 7.0.2 for DSM-5; Sheehan, 1992-2016), iii) sufficient English to use the program and iv) overall intellectual functioning within normal limits (an estimated IQ of >70 as assessed by the Wechsler Test of Adult Reading [WTAR]; Wechsler, 2001). The exclusion criteria were the presence within
the last 4 weeks of: i) acute psychotic symptoms, ii) moderate to high risk issues and/or iii) psychiatric hospital admission.

All participants were single and either working or studying part-time, or unemployed. Four participants were Australian, and one identified as 'other'. Based on the M.I.N.I 7.0.2 (Sheehan, 1992-2016), participants met criteria for Schizophrenia (n= 2), Mood disorder with psychotic features (n= 2) and Substance-induced psychosis (n= 1). All participants were engaged with a specialised early intervention service, and one participant was also receiving Cognitive Behavioural Therapy (CBT). Participants scores on the Positive and Negative Syndrome Scale ([PANSS]; Kay, Fiszbein, & Opler, 1987) at the pre-program assessment were within the low range across all three subscales. Scores ranged from 7 to 10 (M= 8.20, SD= 1.64) on the positive subscale, 9 to 16 (M= 12.00, SD= 2.74) on the negative subscale and from 21 to 25 (M= 22.20, SD= 1.79) on the general subscale.

9.4.3 Peer Plus program. Peer Plus was designed to be used by a PSW and consumer within individual face-to-face sessions. During sessions, a tablet computer (i.e., iPad) was used to view videos featuring young people with a lived experience of psychosis reflecting on their mental health experiences and how they navigated difficulties from a first-person perspective. Interviews were conducted with ten young people (M_{age} = 23.10, SD= 3.84) and edited to create a total of fourteen videos. Each video featured between three to seven of the speakers, edited together on topics that aligned with a content framework that was co-designed with young people for the program (detailed elsewhere, authors, in submission). A website was used to present the videos across six themes identified as being important in recovery from psychosis. This included: i) My journey, which explored peers mental health experiences and their view of recovery, ii) Self-care, which explored the impact of stress and strategies to manage stress, iii) My identity, which explored the peers sense of self and how it may have been affected by mental illness, iv) Connections, which explored the impact of

mental illness on relationships with family, friends and on social media, v) Life, which explored general life challenges experienced by peers and their experiences with selfdisclosure, and lastly vi) Mental health, which explored peers experiences with mental health services. Each theme contained one to three videos ranging from 1 to 4 minutes (M= 2.70minutes) in duration. The videos were designed to facilitate conversation and promote a sense of hope and personal reflection.

Peer Plus sessions followed the young person's preferences for the videos they wished to watch during the sessions. The conversations after the videos were led by the participant and PSW and what the participant felt was relevant to discuss. Discussion prompts were provided beneath each video to help aid conversation, if needed.

9.4.3.1 *Peer Support Workers (PSWs)*. Four PSWs employed by the service were involved in engaging in Peer Plus with participants. The PSWs had approximately five to eight months of experience in a paid peer support work role. Within the service, each PSW completed the in-house peer-facilitated five-day peer work training. The PSWs received two-hours of supervision per month with a consumer consultant and 60 minutes per week with a non-peer team leader. All PSWs completed three-hours of training on Peer Plus.

9.4.3.2 Peer Plus supervision. The PSWs received weekly supervision for the study from the first author alternating face-to-face group supervision every other week with phone and/or email supervision on intervening weeks. This was in addition to the supervision they received within their workplace.

9.4.4 Measures

9.4.4.1 Feasibility. The main feasibility measure was a checklist completed by the PSW after each session to indicate whether videos were watched, and whether or not this led to a related discussion between the PSW and participant. A second feasibility measure was the rate of completion of the overall Peer Plus program with an a priori hypothesis of 75% of

participants attending at least two out of the four sessions. Information on recruitment and retention was obtained.

9.4.4.2 Acceptability. This was primarily assessed by a self-report open-question about participants satisfaction (i.e., would you recommend the program to other people?).Data from qualitative interviews were also assessed.

9.4.4.3 Adverse effects. These were assessed by (a) the occurrence of any serious adverse events considered under the monitoring process for ethics approval (e.g., hospital admission), and (b) a self-report question asking participants, "did the sessions make you feel better, or worse or no different?".

9.4.4.4 Recovery outcomes. A subjective treatment evaluation was assessed by asking participants "do you feel the sessions you received made problem(s) related to psychosis better, or worse, or no different?", plus an open response question "what, if anything, have you gained from the sessions you received?" (based on Shawyer, et al., 2012; Thomas, et al., 2016). The primary outcome variable was personal recovery assessed by the Questionnaire for the Process of Recovery (QPR; Neil, et al., 2009). A description of this and the secondary recovery-oriented outcome variables is provided in Table 9.1.

9.4.4.5 Qualitative interview. Participants completed a qualitative interview at the post-program assessment as part of a broader study to be reported elsewhere. The interviews were audio-recorded with consent and transcribed by CP, and relevant data on acceptability, adverse effects and recovery outcomes were extracted.

9.4.5 Procedure. Participants were recruited via referral from their clinician, PSW, or expressing interest in the study from an advertisement displayed at the service. Potential participants completed an initial phone screen to determine their eligibility. Eligible participants from the phone screen were then invited to attend the pre-program assessment at their service. At the pre-program assessment, participants provided written informed consent

and completed the baseline clinician-administered questionnaires (WTAR, Wechsler, 2001; M.I.N.I 7.0.2, Sheehan, 1992-2016; PANSS, Kay et al., 1987) followed by self-report questionnaires. Participant's responses for the clinician-administered questionnaires were audio-recorded with consent for quality assurance purposes. Eligible participants received an introduction to Peer Plus and were asked if they preferred working with a male or female PSW. The eligible participant was then allocated to a PSW with whom they did not have a pre-existing relationship. This was done to reduce the influence of any pre-existing relationship on the results. Participants were made aware of this protocol prior to giving consent. To commence Peer Plus, the PSW contacted the participant to introduce themselves and organise the first session. The four one-hour Peer Plus sessions were organised between the PSW and the participant within an eight-week time period. Once the participant completed Peer Plus, the researcher was notified and organised the end of program and threemonth follow up assessments. Ineligible participants were offered peer work as usual within the service.

9.4.6 Data analytic procedure. Descriptive statistics were used for feasibility and acceptability, plus means and standard deviations for each outcome measure. Participant's pre-program scores were compared with their post and follow-up program scores for personal recovery. Standardised effect sizes were calculated for the mean change score on the recovery-oriented variables from pre to post and pre to follow up time-points. The mean change score was divided by the standard deviation of the pre-program variable due to the variation in participants scores (Lakens, 2013). For the primary outcome measure, Reliable Change Index (RCI) was also calculated to determine whether changes in each participant's scores were significant on an n = 1 basis relative to measurement error (Jacobson & Truax, 1991). The RCI was calculated using previously reported internal consistency and standard deviation statistics from the literature for the primary outcome variable, personal recovery

(QPR, S_{diff} = 3.78; Pietruch & Jobson, 2012). A change in scores is considered statistically significant if the RCI is less than, equal to or greater than 1.96 (Jacobson & Truax, 1991).

Table 9.1

Overview of the Recovery-orien	ited Variables.
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Outcome	Measure	Description
Personal	The Questionnaire for the	The QPR is a 22-item measure developed with service users who had an experience of psychosis. Items are
Recovery	Process of Recovery	rated on a 5-point Likert scale, with higher scores indicating greater personal recovery from mental health.
	(QPR; Neil et al., 2009).	The QPR has construct validity in aligning with models of personal recovery (i.e., CHIME; Leamy et al.,
		2011) and has demonstrated good to excellent reliability ($\alpha = 0.77 - 0.94$; Law, Neil, Dunn, & Morrison,
		2014; Neil et al., 2009).
Норе	The Schizophrenia Hope	The SHS-9 is a 9-item questionnaire measuring optimism and hope for the future on a 3-point Likert scale.
	Scale (SHS-9; Choe,	Item scores were averaged and summed to provide a total score, with higher scores indicate greater levels of
	2014).	hope. Choe (2014) reported excellent internal consistency (α = 0.96) and good convergent and divergent
		validity for the SHS-9.
Empowerment	Empowerment Rating	The Empowerment Rating Scale was developed from consumers perspectives and examines feelings of
	Scale (Rogers,	empowerment. The 28-items are rated on a 4-point Likert scale with relevant items reversed, so a high score
	Chamberlin, Ellison, &	represents greater sense of personal empowerment. The scale has shown good to excellent internal
	Crean, 1997).	consistency (α = 0.85 – 0.90) and good validity (Corrigan, Faber, Rashid, & Leary, 1999; Rogers, et al.,
		1997; Wowra and McCarter, 1999).
Quality of life	The Assessment of	The AQoL-8D is a 35-item questionnaire assessing physical (e.g., independent living) and psychosocial
	Quality of Life 8-	(e.g., mental health, happiness) health (Richardson et al., 2009). The AQoL-8D has demonstrated excellent
	Dimension scale (AQoL-	internal consistency and good test-retest reliability and validity in an Australian sample (Richardson, Lezzi,
	8D; Richardson et al.,	Khan, & Maxwell, 2014). The weighted AQoL-8D total score and mental health super dimension score
	2009).	were used.
Self-efficacy	Self-Efficacy for	The SEPRS is a 14-item questionnaire developed to assess an individual's confidence in their ability to
	Personal Recovery Scale	perform behaviours related to recovery from mental illness (Villagonzalo et al., 2018). Items are rated on a
	(SEPRS; Villagonzalo et	scale from 0 to 100, with items averaged and summed to provide an overall score. Higher scores indicate
	al., 2018).	greater self-efficacy beliefs for recovery from mental illness. The SEPRS has demonstrated excellent
		internal consistency (α = 0.96), test-retest reliability and convergent validity (Villagonzalo et al., 2018).

9.5 Results

9.5.1 Feasibility

9.5.1.1 *Program feasibility.* According to the fidelity checklists, the Peer Plus sessions went for an average of 61.42 minutes (SD= 2.25), with the session duration ranging from 30 to 80 minutes. One participant watched all fourteen videos and the remaining three participants watched 13, 11 and 8 videos. Three participants chose to watch at least one video twice across the sessions. Two participants watched videos across all six personal recovery themes, whilst the two remaining participants covered five and four of the themes. Participants watched approximately 3.75 videos (SD= 0.96) in session one, 3.75 videos (SD= 2.06) in session two, 3.25 videos (SD= 1.26) in session three and 2.00 videos (SD= 1.83) in session four.

The fidelity checklist showed of the 51 videos watched across all participants Peer Plus sessions, 84% of the videos were followed by a conversation and led to the participant and PSW sharing their own experience in relation to the video watched (see Table 9.2). In the final Peer Plus session, one participant reported they did not watch the videos, as they wanted to have a general conversation with their PSW.

9.5.1.2 Program completion. Four of the five eligible participants completed Peer Plus, with the fifth reporting that they were no longer interested after the first session. This met the a priori hypothesis of at least 75% of participants completing at least two of the four sessions. Three of the four participants completed Peer Plus within the expected duration of eight weeks. One participant completed Peer Plus over 15 weeks due to a significant negative life event occurring during the course of the program.

9.5.1.3 Recruitment. Thirteen participants from a total of 63 referred across five service sites completed the phone screen. Of these, one participant was ineligible due to not meeting diagnostic criteria, two participants declined interest in participating, one participant

reported insufficient time to participate and one participant was currently not suitable (e.g., currently unwell). Eight participants were eligible for the pre-program assessment and five of these participants were eligible to participate in Peer Plus. Two of the remaining participants did not meet the diagnostic criteria and one participant withdrew their participation due to insufficient time to participate.

9.5.1.4 Retention. The participant who discontinued the sessions withdrew from the study. The four remaining participants in the program completed all assessments.

9.5.2 Acceptability. Three out of the four participants who completed Peer Plus reported they would recommend the program to others and expressed a preference to continue receiving peer work following the completion of Peer Plus. One participant did not provide a response.

9.5.3 Adverse effects. During the Peer Plus program, no serious adverse events were reported. All participants reporting feeling "better" after their participation in the program.

Table 9.2

	Videos	Participants	Participant	PSW shared	
	watched by	watched by and PSWs		experiences	
	participants	who discussed	experiences		
		videos			
My Journey	3	2	2	2	
Self-care					
What makes us stressed	4	3	3	3	
Impact of stress	3	3	3	3	
Managing stress	4	3	3	3	
Connections					
Relationships	3	2	2	2	
Family	4	3	3	3	
Social media	2	2	2	2	
My Identity					
Who am I?	3	3	3	3	
How my sense of self	3	3	3	3	
changed					
Navigating stigma and	3	2	2	2	
discrimination					
Life					
Life challenges	3	2	2	2	
Self-disclosure	3	2	2	2	
Mental Health					
Experiences with	4	4	4	4	
mental health services					
Navigating difficulties	4	4	4	4	
with mental health					
services					

Summary of Fidelity Checklist Data on the Use of the Lived Experience Videos in Peer Plus.

Note. n = 4. This table summarises the number of participants who watched the videos across all four of the Peer Plus sessions. It also highlights whether the videos were followed by a discussion and/or whether the participant or PSW shared their personal experiences. Fidelity checklists for two sessions had missing data on whether the videos were followed by a discussion and whether the participant and/or PSW shared their experiences, so these have been conservatively assumed not to have taken place in relation to the videos watched.

9.5.4 Outcomes

9.5.4.1 Subjective report of outcome. Three participants reported that the program

made problems related to their psychosis experiences better and one participant reported no

difference. In response to the open question on what participants had gained from sessions, one participant reported they developed a "better understanding of my stance on mental health and what I know about it". Another participant stated they "gained a better perspective into myself and how I relate my mental health difficulties with others" and reported they were "better able to relax and be comfortable with the unknown" and "able to think about the areas mentioned in the sessions". Another participant reported "I have gained knowledge of how other people who have had lived experience have adapted and changed over time".

9.5.4.2 *Participant feedback.* Relevant comments extracted from the qualitative interviews were that the program was "beneficial", "enjoyable", "interesting", and "very worthwhile". One participant described the program as "a learning experience but yeah fun" and spoke about developing an understanding of their own experiences through hearing the people in the videos share similar experiences. Another participant compared their experience of general peer support with Peer Plus and reported they "would've preferred having this months ago" before engaging with a PSW, as "[Peer Plus] probably did more benefit to me". This participant reported engaging with Peer Plus first and then general peer work would allow for a "good baseline" to develop in the peer-relationship.

The videos were reported by the participants to be "easy to understand" and prompted conversations in a safe and comfortable environment where the PSWs could also share their experience. One participant described the discussion after the video as "the best part" of Peer Plus. Interestingly, another participant reported the videos weren't necessarily needed in every session. A summary of the qualitative feedback is provided in Table 9.3 below.

9.5.4.3 *Preliminary outcomes.* The descriptives statistics for the recovery-oriented variables are presented in Table 9.4 for the pre, post, and follow up time-points. Higher scores across all variables represent an improvement.

Table 9.3

Summary of the Qualitative Feedback on Participants Experiences of Peer Plus

Participants self-reported benefits from engaging in the program¹

- I'm not conscious aware of all the changes that have been made but when I go and do anything I've felt more calm, and not, not generally anxious... I guess more easy going, probably more approachable. For some reason I think I've been more approached recently... yeah, I think I must be I do feel like I'm feeling better and I do think this has made by progress a bit quicker.
- Better understandings I suppose of stress and stigma and managing yourself um yeah it's pretty broad but I guess that's what I got out of it really. I guess social skills improved would've improved incrementally maybe. I guess just better at talking like the flow of talking sort of thing.
- It's made me like challenge my thoughts...like for example like medication like it might not the only way. It might be other ways. That's just an example.
- I was able to find the words to express my experiences and feelings.

Participants suggested improvements to the program¹

- I probably like it [if] there were more examples of like different people... like if there was maybe a few more people. I reckon it would be cool if there was like clinicians speaking as well... I would say even if there was a sheet afterwards and the peer support worker was suppose to say, this sheet is from Dr blah blah or whoever, there's some things that that were covered in the video and may be you could relate with this, even if it wasn't on the sheet, or if it was an interactive thing that would be helpful.
- To be honest, the program was pretty good, I can't think of anything. Yeah it was good time-length, um it's a productive thing and its only good things. Yeah, I enjoyed it.
- I just thought that the videos were very well done and that they were very good for conversation starters. So, I see like a very they are very useful. I just I don't know if I would watch a video every single session.

¹Each dot-point represents a different participant's response.

Table 9.4

Descriptive Statistics and Effect Size Estimates for Preliminary Outcome Variables

-				Pre-Post		Pre-Follow Up			
	Mean (SD)		Change Score		Effect Size ³	ffect Size ³ Change Score Effect		Effect size ³	
	Pre	Post	Follow Up	Mean	95% CI	d	Mean	95% CI	d
QPR	67.00 (4.08)	71.25 (6.18)	74.25 (12.07)	4.25	[-2.56, 11.06]	1.04	7.25	[-5.81, 20.31]	1.78
SHS	14.25 (1.89)	16.00 (2.31)	15.25 (3.20)	1.75	[-1.77, 5.27]	0.93	1.00	[-3.46, 5.46]	0.53
\mathbf{ES}^{1}	2.96 (0.30)	2.87 (0.16)	2.90 (0.18)	-0.09	[-0.35, 0.17]	-0.30	-0.06	[-0.43, 0.31]	-0.10
AQoL-8D ²	0.61 (0.05)	0.65 (0.14)	0.61 (0.17)	0.04	[-0.10, 0.18]	0.80	0	[-0.18, 0.18]	0
MH-SD ²	0.25 (0.06)	0.26 (0.10)	0.27 (0.13)	0.01	[-0.09, 0.11]	0.17	0.02	[-0.11, 0.15]	0.33
SEPRS	80.89 (13.20)	79.82 (12.94)	89.64 (2.22)	-1.07	[-21.88, 19.74]	0.08	8.75	[-3.98, 21.48]	0.66

Note. n= 4. QPR, Questionnaire for the Process of Recovery total score (Neil et al., 2009); SHS-9, Schizophrenia Hope Scale (Choe, 2014); ES, Empowerment rating scale (Rogers et al., 1997); AQoL-8D, Assessment of Quality of Life 8-Dimension scale total weighted score (Richardson et al., 2009); AQoL-8D MH-SD, AQoL-8D Mental Health Super Dimension weighted score; SEPRS, Self-Efficacy for Personal Recovery Scale (Villagonzalo et al., 2018).

¹ Items were reversed scored prior to scoring.

² AQoL-8D weighted utility scoring method was used.

³ Positive effect size estimates represent improvements in scores.



Figure 9.1. Participant QPR total scores across assessment time-points.

The results showed one participant experienced reliable improvement on the QPR from the beginning of the program to post-program, with this significant change continuing for the pre to three-month follow up analysis. A second participant experienced reliable improvement from pre to follow up. For the remaining two participants, no reliable change was observed on their personal recovery scores.

9.6 Discussion

The use of blended models of face-to-face peer support work with digital technology is a relatively new area of investigation, particularly within in the context of PSWs in early psychosis services. The aim of this study was to examine how a blended model of peer work in the form of accessing lived experience videos via a website can facilitate conversations in sessions. The initial findings indicate that this model was a feasible and acceptable way of using digital technology to support peer work.

Four of the five eligible participants maintained their engagement in the entire Peer Plus program. Of those who completed Peer Plus, the PSWs and consumers engaged with the

videos in almost all sessions. Eight-four percent of the videos watched were followed by a discussion, with both the PSW and consumer sharing their experiences. These results verify that lived experience videos can be used in peer work to structure and facilitate conversations. This is consistent with the small amount of previous literature on peer videos (Naslund et al., 2014; Thomas, Farhall, Foley, Leitan et al., 2016; Williams et al., 2018b). In particular, the findings draw similarities with those of Williams et al. (2018b) who provided support for peer videos in consumer-clinician interactions, where the videos led to consumers reflecting on and sharing their experiences with their (non-peer) worker. These findings are with the exception of one participant who did not watch the videos in their final Peer Plus session, as they described wanting to have a general conversation with the PSW. Whilst this may reflect individual preferences in the frequency and use of peer videos (Williams et al., 2018b), research has found consumers prefer digital programs to include both mental health and non-mental health information, which appeared to align with this participant's view (Berry, Lobban, & Bucci, 2019). This may also reflect the diverse role of PSWs from having recovery-oriented conversations to supporting consumers in other areas of their life outside the mutual experiences of mental health (Crane et al., 2016; Delman & Klodnick, 2017).

The findings further provided support for the acceptability of Peer Plus as a program to use in peer work, with three participants reporting they would recommend it to others. All four participants felt the program led to them feeling better, with three participants reporting problems related to their psychosis improved after participating in Peer Plus. The exploratory analyses revealed two participants demonstrated significant reliable improvement in personal recovery, although only one evidenced this change during the program period. These results suggest this type of brief program could contribute to changes in personal recovery in some people. Peer work often involves supporting consumers to make sense of and understand their own experiences, and promote feelings of hope (Repper & Watson, 2012; Walsh et al.,

2018), which may lead to changes in personal recovery. Preliminary research in adults experiencing severe mental illness have reported improvements in recovery from engaging with peer videos (Thomas, Farhall, Foley, Leitan et al., 2016; Williams et al., 2018b). However, it is unclear whether the participants improvements were from Peer Plus, the usual treatment received by the service or a combination of factors. The use of the QPR in early psychosis populations is also relatively new, in which its sensitivity to detect changes in this group is uncertain. Therefore, these results should be interpreted with caution.

Of particular relevance to future research is the scalability of blended models of oneto-one peer work. Uptake for Peer Plus was low and similar difficulties have been observed in studies examining digital programs for early psychosis populations (i.e., Lim et al., 2019; McEnery et al., 2019). It was questioned whether uptake could have been affected by broader patterns of engagement with services (Kim et al., 2019), participant's interests in blended models or peer support work, or the amount of treatment options available to participants within the service, which appeared to impact on their time-commitments. Relying on nonpeer workers as the main referral pathway may also be a contributing factor. This cause remains uncertain, in which limitations to the scalability of this model of peer work for early psychosis populations may be present. This type of program may have better applicability in other populations, such as adult community mental health consumers, which would require future research to establish.

A key limitation of the present research is the study design. While case series designs can be beneficial in exploring newly developed programs, the small sample size meant there was insufficient statistical power to conduct analyses beyond the RCI in order to more systematically investigate Peer Plus (Kooistra, Dijkman, Einhorn, & Bhandari, 2009; Leon, Davis, & Kraemer, 2011). One participant was also receiving psychological therapy during their engagement with Peer Plus, which was a limitation. However, the trajectory of their

scores was not remarkable relative to the other participants. The all-male sample also restricts the generalisability of the findings. Research has suggested young adult males are at a greater risk of experiencing psychosis compared to females (Amminger et al., 2006), while females with psychosis appear to experience improved recovery (Thorup et al., 2014), which may account for the limited gender variation observed.

Given the infancy of the literature on blended models of peer support work with digital technology, this study offers a feasibility investigation into the use of lived experience videos within one-to-one peer support work and builds on the current evidence exploring peer videos in naturalistic environments (Naslund et al., 2014) and with mental health workers (Thomas, Farhall, Foley, Leitan et al., 2016; Williams et al., 2018b). The findings may suggest this model of peer support work could be a feasible and acceptable avenue for facilitating conversations in peer work sessions, however this avenue of research needs to be extended upon and refined by further research due to the limitations discussed.

9.7 Author Contributions.

CP and NT conceptualised the study, CP, NT, FF and MHL developed the intervention and methodology, CP conducted the data collection, analysed the data, and wrote the first draft of the manuscript. All authors contributed to the manuscript.

9.8 Acknowledgements.

We would like to gratefully acknowledge the contributions from the young people who participated in the videos and content development workshops. We would like to also acknowledge the Rybazoid (professional filming) and Media Insights (website development) for involvement in developing the program, and the Alfred headspace Youth Early Psychosis Program (hYEPP) and peer support workers for their involvement assisting with recruitment and implementation.

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9.10 Disclosure of Interest.

The authors report no conflict of interests.

9.11 Data Availability Statement.

The data that support the findings of this study are available on request from the corresponding author [NT]. The data are not publicly available due to ethical and privacy restrictions.

Chapter Ten: Using Lived Experience Videos in Peer Support Work: A Qualitative Investigation.

10.1 Chapter Guide

This chapter presents the third paper of this thesis and involved a qualitative investigation into understanding consumers and PSWs perspectives on using a digitally assisted peer support program, particularly lived experience videos as part of their engagement with an early intervention mental health service. Qualitative investigations into the use of digital programs in early psychosis services was an under-explored area of the literature until recently when Bucci, Morris, et al. (2018) investigated early psychosis populations views on a digital intervention. Participants described digital technology as an acceptable avenue for supporting mental health and having the potential to destigmatise mental health support (Bucci, Morris, et al., 2018). Interestingly, some participants expressed a preference for using the digital resource independently, whilst other participants preferred for the digital resources to be used with mental health workers (Bucci, Morris, et al., 2018). Further research has explored consumers and (non-peer) mental health workers views on using a blended model of digital technology within mental health service delivery for people experiencing severe mental illness (Bucci, Berry, et al., 2019; Williams et al., 2018a; Williams et al., 2018b). These findings have noted predominantly positive experiences from consumers watching peer videos and engaging in a conversation with their mental health worker (Williams et al., 2018b). This research has also helped to understand workers willingness to use digital tools as part of service delivery (Bucci, Berry, et al., 2019; Williams et al., 2018a). In the present research, qualitative research can help understand the perspectives of both consumers and PSWs on using lived experience videos as a tool to facilitate conversations in peer-to-peer interactions, and extend upon the findings of the case series investigation.

This article is titled 'Using lived experience videos in peer support work: A qualitative investigation' and is under review by the journal Psychosis. Psychosis is ranked in Scimago Quartile 2 of journals in psychiatry and mental health, and has a 2018 Journal Citation Reports impact factor of 1.213. The nature and level of author and co-authors contributions to this paper are provided in the 'Author Indication Form' in Appendix III.

Peck C. E., Williams, A., Lim, M. H., Hopkins, L. & Thomas, N. (2020). Using lived experience videos in peer support work: A qualitative investigation. Manuscript is under review for publication.

10.2 Abstract

In considering potential tools to support peer support work practice in mental health services, web-based videos of other peers discussing how they have navigated their own recovery have potential as a complementary tool. The aim of this study was to explore consumers' and peer support workers perspectives on the use of lived experience videos as a tool in peer work in an early psychosis population. Fifteen participants from an early psychosis service participated in individual qualitative interviews that were analysed using thematic analysis. Participants included consumers and peer support workers who had either used the recovery-oriented videos during peer work sessions, or viewed them during an interview and reflected on their potential use in peer work. Participants viewed the lived experience videos as complementary to peer work in creating space for conversations about mental health, and in promoting a hopeful life. In considering using the videos, the peer relationship was seen as fundamental, and timing and flexibility were highlighted as important. The findings provided support for the use of lived experience videos in early psychosis populations, but also raised questions about how to employ the videos in a manner consistent with peer work practice.

Keywords: peer support work; first episode psychosis; personal recovery; digital mental health; early intervention mental health services; qualitative research.

10.3 Introduction

Using digital technology to enhance mental health service delivery has been a key area of interest in mental health research, however understanding its integration within peer support work has been less commonly explored (O'Leary, Bhattacharya, Munson, Wobbrock, & Pratt, 2017). Peer Support Workers (PSWs), often referred to as peer specialists or peer

providers can be described as having experienced mental health problems and using "these personal experiences, along with relevant training and supervision to facilitate, guide, and mentor another person's recovery journey by instilling hope, modeling recovery, and supporting people in their own efforts to reclaim meaningful and gratifying lives in the communities of their choice" (Stratford et al., 2017, p. 4). The opportunity to hear how peers have navigated similar difficulties appears to be of benefit for consumers. Piat and colleagues (2019) reported individuals who listened to peers sharing their recovery narratives could identify with the difficulties experienced and feel a sense of hope for their future. Indeed, within mental health services, peers sharing their lived experiences has been found to promote recovery (Rennick-Egglestone et al., 2019).

Traditionally, a peer's lived experience is conveyed through face-to-face interactions, but an alternative means of communicating lived experience can be through peer videos (De Vecchi, Kenny, Dickson-Swift, & Kidd, 2016; Lim et al., 2019; Naslund, Grande, Aschbrenner, & Elwyn, 2014; Thomas, Farhall, Foley, Leitan et al., 2016; Williams, Fossey, Farhall, Foley, & Thomas, 2018b). In naturalistic studies into peer videos on social media websites, researchers have reported the videos led to a greater sense of hope, facilitated peer reciprocity, connectedness and shared-learning in those watching the videos (Naslund, et al., 2014). The sharing of experiences has further been reported to help promote conversation and understanding of each other's mental health and wellbeing (De Vecchi, et al., 2016). Specifically examining the video format, Williams, et al. (2018b) reported participants described feeling a sense of hope, optimism and connection from engaging with a blended model of support that involved watching peer videos with a (non-peer) clinician as part of service delivery. These videos appeared to promote belief for the possibility of recovery from mental illness, and participants reported feeling less alone in their experiences (Williams, et al., 2018b).

Peer videos have, however, yet to be examined as a tool to be used within the context of face-to-face peer support work. This blended model of peer work is potentially synergistic in supporting discussion of common lived experience within a peer relationship, as well as providing additional narratives that may facilitate processes thought to be helpful in peer support work such as hope and role-modelling. This aim of the study is to explore consumers and PSWs experiences and perspectives on using lived experience videos as a tool in peer support work in an early psychosis population.

10.4 Method

10.4.1 Study context. The project took place within an early intervention mental health service for young people with, or at risk of, psychosis in Melbourne, Australia. The project formed part of a research program examining a model of peer work using tablet computers to facilitate peer-to-peer interactions called Peer Plus. Through a participatory process (authors, in submission) a series of videos were developed, which were hosted on a website for viewing on a tablet computer. This was piloted in a small case series with young people who were recovering from psychosis (to be published elsewhere). The current study involved qualitatively interviewing participants from this case series, together with a broader group of participants who also viewed the videos and considered their use in a peer work context.

10.4.2 Video material. Fourteen videos were created from interviews with ten young people (M_{age} = 23.10, SD= 3.84) about how they had navigated challenges in their recovery from a first-person perspective. These interviews were based on a personal recovery framework developed via a participatory process with young people. The videos have between three to seven young people sharing their experiences and are approximately 1-4 minutes in length (M= 2.70 minutes). The videos are grouped into six personal recovery themes (i.e., My Journey, Self-care, My Identity, Connections, Life and Mental Health) that

were identified in the participatory process as being important in recovery from psychosis. The lived experience videos were designed to help promote conversations about the young person's mental health experiences and create a sense of hope and personal reflection.

10.4.3 Participants. A total of 15 participants completed individual qualitative interviews. Four consumers (M= 21.25, SD= 2.36) and one PSW used the lived experience videos to facilitate conversations across four peer work sessions as part of the broader Peer Plus research program. These sessions went for an average of 61.42 minutes (SD= 2.25) and participants viewed approximately 3.19 (SD= 1.83) videos during the course of the sessions. Seven further consumers (M= 21.57, SD= 1.81) and three further PSWs completed a qualitative interview and shared their perspectives on the videos and the use of them in peer work. Consumers watched at least one of the broader program. Of the 15 participants, ten identified as being male, four female and one non-gender binary. All consumer participants (n= 11) had an experience of psychosis and eight had previously engaged with peer work.

Consumer participants were initially informed about the study by their clinicians, and PSWs were recruited via their work email. Following informed consent, the qualitative interviews were conducted face-to-face at the mental health service, with the exception of one interview (a PSW participant) which was completed by telephone. Consumer participants were reimbursed for their time, and PSW participants completed the interview during their paid work hours. The interviews were conducted from January to September 2019.

10.4.4 Data-collection. Individual semi-structured interviews were conducted by the first author using an interview guide containing open-ended questions (available upon request). All participants consented for the interviews to be audio recorded. At the end of each interview, reflective notes were taken to describe the context and environmental factors and any initial thoughts arising from the interview that were relevant to the research question.

Interviews ranged from 22-80 minutes (M= 40.90, SD= 17.30). Participants reviewed their transcripts and were able to notify the researchers of further content or if there was any content they wished to be excluded from the analysis. Saturation was used to determine the sample size and occurred when there were no new patterns identified.

10.4.5 Qualitative methods. This study was guided by Thematic Analysis (TA; Braun & Clarke, 2006), with a focus on participants' perspectives of the lived experience videos central to Peer Plus. To align with the research question, an inductive essentialist position was employed. This epistemological position assumes the participant's lived experience of the object under investigation will articulate the "essential nature or truth" (Rolfe, 2012, pg. 6), which would help explore participants perspectives on the videos and identify common patterns across participant's lived experience accounts (Braun & Clarke, 2006; Rolfe, 2012).

10.4.6 Data Analysis. The analysis followed Braun and Clarke's (2006) six-phase process for TA. Participant interviews were transcribed, and all transcripts were reviewed twice to help understand participant's perspectives. Transcripts were then coded using NVivo 12 data analysis software version 12.2.0 (QSR International Pty Ltd., 2018). The first round of coding involved identifying key perspectives relevant to the research question and the second round of coding facilitated the identification of more latent codes (Clarke & Braun, 2017). Extracts from transcripts were coded inclusively to keep the surrounding context (Braun & Clarke, 2006). Next, themes were identified by organising codes into overall patterns, in which visual representations including mind maps and hard-copy re-organisation techniques were used (Braun & Clarke, 2006; Clarke & Braun, 2017). A list of themes and sub-themes were created and then reviewed and refined. This involved re-reading the data to determine whether the themes fit in the data set and code any additional data into themes that may have been missed (Braun & Clarke, 2006). In this phase, codes were also merged if there

was overlap or removed if they were not relevant to the analysis. Once a clear understanding of the final themes was obtained, the themes were defined and given a name (Braun & Clarke, 2006). Notes were taken to capture thoughts about potential patterns identified throughout the analysis process (Clarke, Braun, & Hayfield, 2013). The 15-item TA checklist (Braun & Clarke, 2006) and American Psychological Association (APA) qualitative reporting standards (Levitt et al., 2018) were used to ensure a thorough analysis and explanation of the findings.

10.4.7 Methodological integrity. Interviews, transcription and analysis were conducted by a doctoral student in clinical psychology, with two experienced qualitative researchers (with occupational therapy and clinical psychology backgrounds) involved in discussing and reviewing the analysis and arriving at a consensus on the final themes. A reference group of young people and PSWs from the mental health service were also consulted to facilitate an independent lived experience perspective in shaping the interpretation of the analysis and obtaining consensus with the final themes identified. The study was approved by the Alfred and Swinburne University Human and Research Ethics Committees.

10.5 Results

Three main themes were identified: (1) creating space for conversations, (2) promoting a hopeful life, and (3) using lived experience videos (Figure 1). Participants quotes were used to illustrate each of the themes and key variations. Except where stated, themes were common to both consumer and PSW participants, and to those that had experience using the videos during peer work sessions and those that viewed the videos and reflected on imagined use in future peer work.



Figure 10.1. Summary of the themes identified.

10.5.1 Creating space for conversations. Participants described the lived experience videos providing a space to have meaningful conversations with one another. Two sub-themes were identified: facilitating conversations and having open conversations.

10.5.1.1 Facilitating conversations. Participants commented on the videos being good prompts for facilitating discussions, particularly in starting to share ones lived experience, when uncertain about what one would like to share or how to converse with a PSW. They related that the videos could help 'break the ice' to overcome vulnerability and facilitate conversation. Jane (PSW) explained:

Sometimes when you meet with the young person um they are nervous, you're nervous, conversation can be hard to get started and the videos could be a good ice-breaker.

The peers featured in the videos sharing their experiences across a range of topics was seen as providing a starting point for conversations and opportunity to choose a topic that consumers felt comfortable exploring. For example, Matthew (consumer) explained:

They were really good prompts for discussion. I mean they just brought up lots of stuff, so it was easy to start talking about something just because there was lots of talking points. [...] If someone brought up like an example of something they had been through or go through or similar to that and then [PSW] or me would be like oh I went through something similar to that or what did you think about that you know and um so then we would just talk about it.

10.5.1.2 Having open conversations. In addition to functioning as "conversation starters" using the videos in peer support work created a space for consumers to feel a sense of safety and comfort in talking about concerns that were less commonly spoken about. This safety and comfort interacted with the PSW having their own lived experience of mental health that the consumer could relate to.

It might be like an issue or something that is not really talked about and the people in the video talk about it and then [...] I'm in a safe space and I can talk about it and then the peer worker has also got an opinion on it and we can kind of talk about it [...] There's disclaimers at the start that said like anything you say won't be shared with anyone that kind of thing. Um also the fact that the peer worker has lived experience, so it is easier to relate (Pablo, consumer).

Participants stated watching the videos with a PSW would allow for more open conversations to occur. Three of the participants (two consumers, one PSW) reported using the videos "sheds light" on the experience of psychosis and medication, and subsequently offers a space for consumers to share their experiences. Georgia (consumer) described: It's a little bit like it's sort of taboo to talk about because people are very embarrassed in regard to like what they do and think when they are in that state [psychosis]. I know so many people that don't even know what psychosis is, like they have no idea what it is. So, I guess it will bring some light to it and some understanding and knowledge.

The discussion following the videos was described by one consumer who completed the Peer Plus program as "probably like the best part", as it allowed for the consumer and PSW to share their experiences and develop a "better understanding". However, two participants (one consumer and one PSW) who also participated in Peer Plus reported whilst the videos offered a space for conversations, they believed it wasn't necessary to watch a video in every session. This consumer had previously engaged with peer work and was familiar with sharing their experiences and reported there were general areas of conversation they wanted to discuss that were not specific to the videos.

10.5.2 Promoting a hopeful life. The videos were described as promoting a sense of hope through the process of hearing how others navigated their mental health difficulties and reflecting on their own experiences. Three sub-themes were identified: inspiring hope, feeling less alone and understanding your experiences.

10.5.2.1 Inspiring hope. Consumers hearing the peers' lived experiences in the videos, particularly their navigation of difficulties created a sense of hope for their own situation to improve. The videos showed participants that other young people who had similar difficulties were able to work through their difficulties and get to a point where they could live a meaningful life. One participant compared their mental health and well-being to that of the peers in the videos and didn't think they were "much worse", which elicited hope for their own situation.

I got the most benefit from like people [in the videos] saying the negative that I also felt [...] I didn't actually think I was much worse than these example [peers in the videos] so I kind felt like well if they are talking like this now and they have a pretty good understanding of their situation [...], it kind of brought a bit of hope back. (Samuel, consumer).

Another consumer spoke about the videos illustrating that people who have experienced psychosis can be a part of society, which appeared to be important in creating a sense of hope for their recovery.

Yeah I think it's like being someone that has had an episode and has heard voices and things like that I um I still have these and I know it's a wrong view, but I still can't imagine people that have psychosis that are like a functioning part of society um so I think that that's really important for that, that you can have psychosis and function quite well and be a positive part of society" (Hazel, consumer).

10.5.2.2 Feeling less alone. Participants said that they could relate to the peers in the videos and reported feeling less alone in their experiences from watching the videos. This happened even though they did not relate to all of the peers in the videos: consumers spoke about being able to relate to at least one of the peers in the videos. Participants who completed the Peer Plus program also spoke about relating with the PSWs in the face-to-face sessions. This sense of relating led to participants feeling less alone in their experience of psychosis, and less alone in the difficulties they experienced related to their mental health or other challenges in their life.

Just knowing that there is someone out there with the same kind of mindset and has the same ideas yeah [...] like it makes you feel like you are not the only one yeah. It's a good feeling (Pablo, consumer).

One consumer participant did not view the videos to be as positive and inspiring as other participants. He described feeling "sad because the whole time that I've had this condition, I've been really sad [...] I don't want to be like this" (Louis, consumer). It appeared the videos reminded the participant of their mental health difficulties, which contributed to their feelings of sadness rather than prompting a positive experience. Nonetheless Louis also noted "personally, I feel like [people with psychosis] really need to see the videos. Just to see that they are not the only one going through this and that the treatment is there."

10.5.2.3 Understanding your experiences. Participants said that the videos further provided an opportunity for consumers to develop a greater understanding of their mental health through hearing the peers' past experiences and reflecting on their personal experiences.

I think it can be useful in that context with a peer worker [...] If you are having trouble with one of these areas you could watch a video and hear some different perspectives on it and it will help you find your own answer (James, consumer).

Three consumers described the videos helping them find the words to help explain their own mental health experiences to PSWs:

There's been times where I have forgotten what I wanted to say and it [the videos] would help me like show [the PSW] this is really what I want to explain because sometimes it hard to describe what you are feeling (Anthony, consumer).

Additionally, consumers reported finding their own way to manage stress or develop an understanding of their sense of self through hearing others describing their lived experience. One consumer participant, reflecting on imagined use in peer work, discussed the

possibility of the videos being "triggering" if going through a difficult time that is similar to the peers in the videos. However, this participant reported hearing how the peer in the video managed their experiences would allow for a consumer to "take something away" that they could relate to and use to help manage their challenges.

10.5.3 Using lived experience videos. This theme reflects both consumer and PSW participants' perspectives on how these types of videos could be used as a tool in peer work. Three key sub-themes were identified: importance of timing, peer relationship is fundamental and flexible use.

10.5.3.1 Importance of timing. Participants expressed different views on the time at which the videos would be beneficial. Some participants reported the videos would be helpful when a consumer is starting to engage with peer support work because it could offer a space to get to know the PSW through watching the videos and having conversations about each other's experiences. This was suggested to be an opportunity for a consumer and PSW to form a "good baseline" to their relationship, as described by Samuel (consumer):

When I was with my peer worker out in the outside [service], we would usually go for walks, get a coffee, talk [...] I probably would've preferred having this months ago before I did any walks or anything. Umm yeah. This probably did more benefit to me [...] I think maybe going for the walks and things now after this, I'd feel, I would feel good. As well, I feel this was kind of a good baseline for the like peer relationship I have with peer worker now, yeah.

The value of using the videos early in one-on-one peer support work sessions was also reported by the PSWs. They described the videos being helpful in situations where the PSW may be working with a consumer who may be new to peer work and uncertain about how it functions or where to start. Engaging with the videos early in mental health service support was a second key element of this sub-theme. Consumers mentioned using the videos when they first start to engage with a mental health service can help to validate and normalise their experiences and support them in beginning to make sense of their mental health experiences.

I think it [the videos] would have been perhaps useful um early on. [...] I really struggled to identify what was going on, what was happening to me. So, for that just watching those videos and talking to someone would have given me an understanding of what was happening to me (Hazel, consumer).

While engaging with the videos was helpful early in support for some people, others suggested that it was also important to consider the individual and when the videos would be most useful. Thomas (consumer) mentioned "it can be a little bit ah, frustrating as well watching those videos if you are really sick [...] If I was to watch those when I was still in the hospital like I would be like can you go away". This is consistent with the perspectives of the PSWs who posited:

You might come into contact with a young person where they're resistant to talking about their experience even though that's like the bedrock of the relationship your forming, but that's not the conversation they are ready to have yet and so if you immediately put them in a position so let's talk about self-care or your family or whatever and all these things are like epic topics of conversations for someone who doesn't have the vocabulary yet. Maybe it's when is it the right time to use [the videos] (Amy).

10.5.3.2 Peer relationship is fundamental. Engaging with the lived experience videos with a PSW was important for consumers. Knowing a PSW has their own experience that

could be shared created a sense of comfort for some consumers and increased their willingness to share their own experiences. Two consumers reported using the videos with a non-peer clinician would be different to that of a PSW due to the context of the peer relationship and the shared lived experience between a PSW and consumer that is typically not present in non-peer relationships.

It would be too clinical if it was with clinical person [...] I'd feel like I would have to be "right": I'd have to know my answer straight away [...] I think having someone with a shared experience does make that a bit easier yeah [...] Sometimes it's hard for me to bring things to the surface, so to get the message out of my mouth and yeah it's good to hear what I've got to say does ring true to what the peer worker has said in his own way (Samuel, consumer).

Two of the PSWs agreed with the value of using the videos in a peer work context, as the themes covered by the videos included common conversations they often have in peer work sessions. Although, two other PSWs mentioned that the videos were not necessarily needed within individual peer work sessions, as their own lived experience is central to the peer relationship. Interestingly, these PSWs suggested the videos could be used with nonpeer workers to bring lived experience material into sessions where it is often not accessible. Despite this, the PSWs saw the videos having a role in certain situations within peer work. For example, Jane stated "I do think it could be handy in individual sessions when you are struggling to make conversation though".

10.5.3.3 Flexible use. This final sub-theme on the use of the lived experience videos reflected participants' perspectives on how they would choose to engage with the videos in peer work. In considering the use of the videos as part of the broader Peer Plus program, four participants preferred the structured format of watching the videos with a PSW across four

one-on-one sessions, although five participants reported the videos would be best used flexibly as the consumer felt it was of benefit. For example, James (consumer) mentioned "if something relevant comes up then you could whip out the iPad and watch a video". This was consistent with the PSWs views on the use of the videos.

I think if we are being truly person-centred and being flexible with where the young person is at and what they are looking for and where they are at, it would be easier as a flexible tool that you have in your bag ready to pull out if that would relate to the moment (Jane, PSW).

Tailoring the use of the videos to consumers preferences was an important consideration made by the PSWs in reflecting on video use. The PSWs questioned the use of the videos in a structured format within a peer work environment, as engaging with a consumer for a specified number of sessions to cover a series of videos was reported to feel "clinical". Amy (PSW) stated the videos being "pulled on as a resource in the right space is a very different thing to like subscribe to this program and you'll have 4 sessions". PSWs perceived that using the videos flexibly would allow consumers and PSWs to engage in conversations related to the recovery themes of the videos when the consumer is ready and willing to have those discussions. For PSWs, this appeared to align more closely with the flexible, person-centered model of peer work employed by the service.

10.6 Discussion

The use of digital technology in the form of lived experience videos within mental health contexts is an underexplored area of the literature, with limited studies to date investigating the use of these videos in peer work for young people experiencing psychosis. This study explored consumers and PSWs views on the use of lived experience videos as part of a broader digitally-assisted peer support work program, with three emergent themes:

'creating space for conversations', 'promoting a hopeful life' and 'using lived experience videos'.

These findings reinforce the value of lived experience videos as a conversation facilitator and as a way to promote hope in mental health practice. They are the first to show that watching lived experience videos can have benefits in peer support work. Through watching the videos and having an opportunity to converse with a PSW, the videos can lead to participants developing a sense of hope for their circumstances to improve. Participants also felt less alone in their experiences by relating to the peers in the videos. Loneliness in those with psychosis is an important issue (Lim, Gleeson, Alvarez-Jimenez, & Penn, 2018) and any content in programs that can make participants feel less alone is particularly important for recovery (Lim et al., 2019). Participants further developed a greater understanding of their mental health including finding the words to describe their experiences or learn ways to manage difficulties. Similar findings were reported by Williams et al.'s (2018b) qualitative analysis on the blended use of peer videos with non-peer workers in adults experiencing severe mental illness, and there are also similarities with Naslund et al.'s (2014) findings on peer videos watched in naturally occurring environments. These impacts on consumers appeared to occur when similarities were present between the peer in the video and the consumer. Being able to identify and relate to peers may be important for consumers to form a connection and experience benefits from watching the videos (Gillard, Gibson, Holley, & Lucock, 2015). This may also support consumers to model adaptive behaviours (Bandura, 2001; Gillard, et al., 2015). These are similar themes to those that often occur within peer support work (Bellamy, Schmutte, & Davidson, 2017; Cabral, Strother, Muhr, Sefton, & Savageau, 2014; Faulkner & Basset, 2012; Gidugu et al., 2015; Repper & Carter, 2011; Walsh, McMillan, Stewart, & Wheeler, 2018), and suggest that peer connection and the ensuing benefits could be captured by a video in addition to a peer relationship.

The use of lived experience videos to facilitate discussions in consumer-peer interactions draws further similarities with Williams et al.'s (2018b) findings that videos used with non-peer workers can facilitate conversations with consumers about recovery-related topics. The present findings extend this by suggesting that lived experience videos within a peer work context may be particularly facilitative in providing a space for consumers to engage in open conversations. This sense of openness appeared to stem from the videos prompting discussions about key recovery areas relevant to the consumer, but also from the sense of safety and comfort that could be experienced in a peer environment where there is an underlying premise of both individuals having a lived experience of mental illness. This shared experience of mental illness has been reported to be a central element of peer work that is typically not present in non-peer work (Cabral, et al., 2014; Walsh, et al., 2018), and appeared important in promoting consumer's willingness to openly discuss their experiences (Gidugu, et al., 2015).

Whilst these findings provide initial support for using peer videos as a tool to facilitate conversations in one-on-one peer work with young people experiencing psychosis, the findings also identify issues that will impact future implementation and research on peer videos in peer support work. The videos appeared to have synergies with peer work amongst participants, however, they were not viewed as automatically complementary. The importance of having flexibility in how to use the videos within peer work sessions, being able to choose different points in peer work to use them, and ensuring that they were used within the context of a peer relationship were identified. There also appeared to be reluctance by some PSWs relating to incorporating the videos into their practice, with concerns that structured use of the videos (such as prescribing four sessions) might conflict with their existing model of working. They also questioned whether adding in other voices of lived experience would be needed within their own work. This tension between structure and
flexibility potentially reflects the strong basis of peer work to offer a person-centred approach (Murphy & Higgins, 2018; Rebeiro Gruhl, LaCarte, & Calixte, 2016). This tension could potentially be navigated by PSWs using peer videos as a flexible tool on an as needed basis, as opposed to within a formalised program. Any future research into using digital technologies that incorporate peer videos in peer work will need to consider the tensions identified here.

A key limitation of this study is the sample characteristics. Whilst saturation was achieved, there was an imbalance in participant gender and the degree of experience with the peer videos. The number of PSWs was also relatively small. In particular, only one PSW had direct experience of using the videos in practice, so opportunities to reflect on its use in practice were more limited among this group. Further research with PSW participants is warranted.

In conclusion, this research demonstrates that lived experience videos in one-on-one peer support work for young people experiencing psychosis has potential to facilitate open conversations with PSWs, and in doing so, promote a sense of hope for the future, relatedness with others and greater understanding of one's mental health experiences for consumers. This study provides preliminary evidence to support the development and use of this type of digital tool, but questions remain on how peer videos can be best incorporated into peer work, particularly in the context of early psychosis services. Future research is required on different ways of integrating video-based tools with practice in this growing workforce.

10.7 Author Contributions

The study was conceptualised and designed by CP and NT. CP conducted data collection and led the analyses. AW and NT were involved in the qualitative analysis. CP prepared the first draft of the manuscript, which was contributed to and approved by all authors (CP, AW, MHL, LH, NT).

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10.10 Disclosure of Interest

The authors report no conflict of interests.

10.11 Data Availability Statement

The data that support the findings of this study are available on request from the corresponding author [NT]. The data are not publicly available due to ethical and privacy restrictions.

10.12 Supplementary data

Additional data was obtained from the PSWs during the qualitative analysis that was outside the scope of the research question for Study 3 and thus was not included in the paper. It is, however, of relevance to the overall thesis project and will be discussed here.

During the qualitative interviews with the PSWs, additional questions were asked about their perspectives on the recruitment and implementation of the Peer Plus program. The PSWs interviewed were involved with the project from implementation through to the end of the data collection period, in which understanding from their point of view what may have facilitated or impacted on data collection could assist in further understanding the scalability of the program in peer support work and mental health services. As described in Chapter 8, non-peer workers also had the opportunity to participate in the qualitative interviews and share their perspectives, however no non-peer workers participated in the research project. In reviewing the interview transcripts and collating the PSWs perspectives, several barriers and facilitators to both the recruitment of young people with an experience of psychosis, and the implementation of the program were identified.

For the recruitment of young people, the PSWs reported specific barriers associated with the research project including strict eligibility criteria (i.e., originally excluding people with an experience of substance-induced psychosis) and the clinical language used to advertise the study. For example, advertising for people to have a diagnosis of psychosis may be problematic in that some young people may meet the diagnostic criteria according to the DSM-5 (APA, 2013), but do not necessarily agree or identify with the diagnosis or symptoms. The PSWs also mentioned as part of their role in the service, they conduct outreach visits to some of the young people, in which only delivering Peer Plus on-site at the mental health service could have restricted the recruitment sample. Additional barriers were reported that relate more broadly to the overall service. This included young people tending to have multiple appointments with various allied health professionals (e.g., mental health worker, psychiatrist, vocational worker, exercise physiologist etc), in which adding another session with a PSW can be difficult for some young people, particularly if it involves assessments with a researcher and commitment to a certain amount of sessions. One PSW reported the small sample size recruited may also be affected by the cultural stigma related to accessing and receiving mental health support, in which the service can experience difficulty engaging these young people into the service, let alone a research project. Developing a sense of trust with the young person and their network (i.e., family) in some cases also appeared to be important, in which the format of the program involving a brief four-session structure,

where the researcher meets with the young person on three occasions throughout the entire project may not allow sufficient time for trust to develop and thus increase the young person's willingness to participate.

With reference to the implementation of Peer Plus, there was a range of factors discussed across the PSWs. Barriers associated with the research project involved the difficulty implementing Peer Plus within an existing peer support team where the PSWs have developed their own style of working with young people, which was described to be more flexible and person-centred than Peer Plus. For example, the PSWs often meet with young people as they needed, where they needed, and can involve a range of conversations as opposed to a four-session program focussing on certain recovery-oriented areas. One PSW described the individual peer support work sessions often involving conversations beyond mental health or 'recovery' to talking about other aspects of the young person such as their hobbies or interests.

In discussing considerations for future research into the implementation of a lived experience video resource within one-on-one peer support work, there were differing perspectives. The PSWs suggestions involved using the program with novice peer workers who do not have a previous style of peer work, in which they would be specifically trained to use Peer Plus with young people, or in peer support group programs, with young people who are new to peer support work and uncertain about how it works, or in clinical spaces. A central recommendation of implementing Peer Plus in peer support work was flexibility. Flexibility in how and when it is used could help align the resource with the model of peer support work employed by the mental health service and improve the scalability. Navigating how to enhance flexibility within a research environment where the effectiveness of the program can also be adequately examined requires consideration.

PART III: Overall Discussion

Chapter Eleven: Discussion

11.1 Overview of Thesis Objectives

The overall objective of this thesis was to develop, and assess the feasibility of a digitally assisted model of peer support work for young people with an experience of psychosis. In planning the development of a program for one-on-one peer support work, the integration of lived experience peer videos with face-to-face peer support Workers (PSWs) in one-on-one sessions to engage with additional lived experience-based material in an intentional way to promote conversations about recovery. The video material could build on the PSWs own lived experience, whilst peer support work could create a space where this material could be meaningfully discussed in a safe and supportive environment. These types of programs are referred to as blended models, whereby digital tools are integrated with face-to-face supports (Erbe et al., 2017). To date, few studies have explored the use of lived experience videos and to the authors knowledge, no studies have been conducted exploring the blended use of digital technology in the form of lived experience videos in face-to-face individual peer support work. Exploration into the use of this model of peer support work warrants investigation.

Given the infancy of the literature, participatory developmental methods were used to create the digitally assisted peer support work program. The feasibility, acceptability and qualitative experiences of the blended digital program, particularly the use of the lived experience videos were examined. This chapter will summarise the findings of the three associated papers that formed the thesis, discuss the strengths and limitations of the current research and end with the implications for peer support work practice and avenues for future research.

11.2 Synthesis of the Thesis Findings

11.2.1 Adopting a participatory approach. To achieve the objective of the thesis, the current research first collaborated with an EIS including PSWs and young people via a participatory process to develop a recovery-oriented lived experience-based digital resource for peer support work. These types of publications are being more commonly reported due to the benefits in sharing knowledge about the collaborative development process (Hoddinott, 2015). Detailing this process demonstrated the ways in which expertise from academic researchers, services, PSWs and young people can be integrated to create digital resources from a "bottom up" process. This was important due to the lack of personal recovery models for young people experiencing psychosis when developing the program, and the emerging peer workforce. For example, the participatory content development workshops helped identify a series of recovery themes relevant to young people that were later used to develop a semi-structured interview guide for the lived experience filming and led to the creation of fourteen lived experience videos grouped across six recovery-related themes. The themes which emerged were noted to bear strong resemblance to the theoretical CHIME model, which has been developed as a synthesis of recovery processes in adult consumers with severe mental illness (Leamy et al., 2011). For example, a connections recovery theme emerged, similar to social connectedness in CHIME (Learny et al., 2011). The mental health recovery theme capturing the peer speakers experiences with mental health services was similar to the empowerment aspect of CHIME, and further parallels were drawn between the peer speakers talking about their sense of self and how it might have been affected by their mental illness in the my identity theme to that of the identity process in CHIME (Leamy et al., 2011). While the primary purpose of the co-development process was to inform the development of a specific tool, this usefully informed broader thinking about personal recovery in early psychosis populations.

Of note, while social media was one of the few domains identified in the content framework that did not correspond to the CHIME model, in the peer work case series, this ended up being the least watched video in practice. This could mean that the participants involved in the case series did not view lived experiences on social media as being as important as those in the workshops, suggesting this to be a less agreed upon component of the model. Of course, the derivation of recovery themes was not the primary aim of this study and were based on a small group of young people, so exploring young people's accounts of personal recovery in greater depth (e.g., through individual one-on-one interviews with a larger sample) would be needed to provide a thorough investigation into the recovery processes of this population.

In further reflecting on the participatory processes employed, it is noted that consumer lived experience was difficult to sustain through all stages of the research in practice. Whilst there was strong involvement in the development phases, consumer engagement in later aspects of the research was more on the basis of periodic consultation. The involvement of consumers, the service, and PSWs expertise in all phases of the research process from conceptualisation through to dissemination is seen as an ideal, with consumer partnership proposed to improve the relevancy of the research, offer diverse perspectives, improve data collection and strengthen analyses (Happell et al., 2018). Similarly, improved implementation into practice has been proposed through collaboration with workers (Bucci, Schwannauer, et al., 2019). Frequent employee turnover within the service and time constraints (e.g., doctoral thesis timeline) impacted on the capacity to do this. For instance, there were six team leaders and nine PSWs involved at various stages of the project. Although we established a project steering group combining academics, lived experience, peer work and representatives from the service, turnover of roles within the service meant that continued engagement of this group was difficult to maintain throughout the research project. This may reflect funding

structures for the service, in which time-limited service funding meant that employees involved in the project were not contracted to work with the service for the entire duration of the project at its outset. Other research projects with independent funding have been more successful. For example, Bucci, Barrowclough, et al. (2018) were able to maintain a panel of representatives throughout their randomised controlled trial of a digital intervention in early psychosis populations (Bucci, Lewis, et al., 2018). Disadvantages arising from not being able to sustain full engagement included that researchers may not have fully capitalised on lived experience expertise, understood the perspectives of those engaged in delivering and receiving the program and drawing out conclusions for the peer workforce.

11.2.2 Development of lived experience videos. In developing the lived experience videos on the basis of the recovery content framework identified by young people in the participatory workshops, this approach extended upon that of Thomas, Farhall, Foley, Leitan, et al. (2016). The current research created the videos primarily from a participatory "bottom-up" process, as opposed to employing a "top-down" process characterised by pre-existing theoretical (e.g., CHIME model; Leamy et al., 2011) and psychological models (e.g., cognitive behavioural therapy) that informed the development of the recovery content for Thomas, Farhall, Foley, Leitan, et al. (2016) blended digital intervention.

In support of the "bottom up" process, a viable series of lived experience videos were developed that aligned with the recovery framework. The videos aimed to capture a range of young people sharing aspects of their mental health experiences through a compilation of clips to form an overall video related to a personal recovery theme. This style of video differs from the existing lived experience material in the literature, which typically captures a single person recovery narrative (De Vecchi et al., 2016). While the current research strived to maintain a participatory development process, lived experience involvement from consumers was not feasible in every stage of the video development. The video editing process was

extensive and time-consuming and involved the continual checking of different combinations of video clips until a complied set of videos were created. Because of this, the researchers own biases may have influenced the selection of clips to include in the lived experience videos. The selection of clips was also determined by other factors including the number of clips available for the recovery theme, the length of the clips, and balancing the peer speakers featured in each of the videos.

Through combining a series of clips capturing young people's experiences, it allowed for the lived experience videos to contrast a range of experiences and difficulties associated with mental illness and recovery. This approach to the video development meant the videos could capture both negative and positive experiences within the personal recovery themes, relative to a single unifying narrative of hope or positivity. The development of these videos as a tool for discussion further supported the representation of divergent experiences. Nonetheless, in addition to the final videos being selected by non-peers, it was noted that the selection of video clips was influenced by striving to create an overall positive feel to the videos, which may have contributed to an underrepresentation of less positive aspects of young people's experiences with psychosis across the videos.

While the uplifting feel of the overall videos may align with recovery-oriented practices, it has been recently criticised for only capturing a sub-set of peer's experiences. Woods, Hart, and Spandler (2019) stated while this method of sharing recovery narratives may be of benefit for some individuals, it could be viewed as a constrained "genre" capturing one avenue of lived experiences that fails to recognise and value other experiences that do not align with the sense of optimism and hope, such as capturing the struggles of mental illness. It was questioned whether there may be value in providing consumers with lived experience beyond those who inspire hope by showing recovery is possible (Woods et al., 2019). Taking this view on recovery narratives into consideration and the potential for one to share their

lived experiences of mental illness via face-to-face, written or digital means, future research could begin to specify the nature of the recovery narrative material examined and explore the ways in which different types of recovery narratives may function and be of value for those sharing and hearing the lived experiences (Llewellyn-Beardsley et al., 2019; Woods et al., 2019).

11.2.3 Examining the videos as a resource. In the current research, the second step of the thesis was to examine the feasibility of the blended peer support work model using lived experience videos to promote conversations with young people experiencing psychosis. Feasibility was primarily considered in terms of the feasibility of using a digital tool to guide one-on-one peer support work sessions. From this perspective, the results suggested that the approach was feasible and acceptable. In almost all sessions, the PSWs and consumers watched at least one of the lived experience videos and engaged in a discussion following the video where both the PSW and consumer shared aspects of their mental health experiences related to the video watched. These findings provide support for the use of lived experience videos to facilitate conversations in peer work sessions. This extends upon (Williams et al., 2018b) investigation into the use of a similar blended intervention with non-peer workers supporting adults experiencing severe mental illness and suggests these types of videos could also have a role within peer-to-peer interactions in early psychosis populations for facilitating conversations.

Of note, one participant felt it wasn't necessary to watch the lived experience videos in every peer support work session as part of the program. This participant expressed a preference to talk about non-mental health topics such as general, every-day conversations. It is possible this participant's prior involvement with peer support work at the mental health service influenced their view of how to engage with the PSW in sessions, and their decision to talk about other areas of their life. Indeed, the PSW role often focusses on recovery-

oriented conversations, role-modelling adaptive behaviours, and creating a sense of hope for consumers situations to improve, but it can also involve discussions outside the shared experiences of mental illness (Crane et al., 2016; Delman & Klodnick, 2017). This participant's view, however, was consistent with existing literature exploring consumers perspectives on digital programs, where people reported a preference for programs to cover information on both mental health and non-mental health related topics (Berry, Lobban, & Bucci, 2019). Additional differences amongst participants engaging with this type of material have been observed, with some participants advocating for the use of these digital resources and others expressing reservations in regard to the relatability or emotional impact of the content (Piat, Spagnolo, Thibodeau-Gervais, Deschamps, & Gosselin, 2019; Williams et al., 2018b). Thus, this finding may highlight the natural variation in participants preferences for engaging with lived experience-based materials and emphasise the importance of tailoring these programs to the consumer's needs.

In assessing the acceptability of this blended model of peer support work, a number of indices indicated that participants found this peer support work model to be acceptable. This included responses to whether one would recommend the program to others, self-report feedback on the program, and discussions from the qualitative interviews. Three participants stated they would recommend the program to others, while the remaining participant who completed the program did not provide a response. All participants reported engagement with the program led to them feeling better, and three of the participants reported problems related to their psychosis experiences were better after participants primarily spoke positively about participant in this model of peer support work. Of the five eligible participants, only one participant withdrew from the program due to no longer being interested. In comparison to other early psychosis digital intervention studies, this appeared comparable (Lim et al., 2019;

McEnery et al., 2019). These findings lend support for the acceptability of this novel model of working with young people in early psychosis services. This draw similarities to other digital programs designed for young people experiencing psychosis (i.e., Alvarez-Jimenez et al., 2013; Bucci, Barrowclough, et al., 2018; Lim et al., 2019; McEnery et al., 2019), and provides preliminary support towards the use of digital technology with this population and in peer work practice.

11.2.4 Scalability of the resource. However, questions were raised in considering the uptake and scalability of this blended program. From a total of 63 referrals, only 13 young people were screened, with five participants being eligible to take part following 10-months of recruitment. Similar difficulties have been observed in an alternative study examining a digital smartphone application program for early psychosis populations (i.e., +Connect; Lim et al., 2019). Over their 18-month data collection period across three mental health service sites in Australia, 25 participants were identified and of this, 50% were eligible to partake in the trial (Lim et al., 2019). Similarly, McEnery et al.'s (2019) moderated online intervention targeting social anxiety in FEP recruited 13 participants from a total of 45 referred. International feasibility studies in FEP populations have observed better program uptake, with 64% of referrals being eligible after seven months of data collection (Bucci, Barrowclough, et al., 2018). Further, international research on one-on-one peer work for adults experiencing severe mental illness have also observed greater program uptake (216 of 233 participants), although over a 23-month time period (Mahlke et al., 2017). In considering these recruitment rates, there may be something specific to the current research that could have influenced uptake. As described in chapter nine, there were various reasons for nonparticipation (e.g., lack of interest, insufficient time, ineligibility etc.), some consistent with other research studies (e.g., Lim et al., 2019; Woodall, Morgan, Sloan, & Howard, 2010), however this raised questions about how broadly applicable such a program would be in peer

support work practice. The limited number of research trials examining peer work within early psychosis services adds to the difficulty in understanding the low participant uptake.

In considering the design of the current research, the eligibility criteria draws similarities to existing digital intervention trials in early psychosis populations (i.e., Alvarez-Jimenez et al., 2013; Bucci, Barrowclough, et al., 2018; Lim et al., 2019; McEnery et al., 2019), although these studies were able to recruit between 10 to 38 young people to participate in the interventions. This may suggest other factors could have influenced the scalability of this program. In the current research, the most common reason for nonparticipation was a lack of interest (n = 14), followed by the young person being 'not currently suitable' as determined by their worker (e.g., being unwell etc.; n=11). It is unclear from the recruitment procedures whether the lack of interest reflected low interest in participating in research projects, peer support work, and/or digital interventions. Existing studies have found support for young people experiencing FEP to be interested in using digital technology to access mental health and recovery-oriented information (Lal et al., 2015), and for using of digital resources in services (Bucci, Morris, et al., 2018). Although, this research has tended to focus on the use of digital tools either independently or with nonpeer workers in mental health services. Whether similar preferences occur when considering digital technology in face-to-face peer support work is to be examined. Furthermore, competing priorities for consumers and/or workers may have also impacted on the recruitment. For example, during the qualitative interviews with the PSWs, it became apparent that EIS tend to offer a variety of treatments to young people including clinical (i.e., individual and/or family sessions), vocational, exercise physiologist and peer work supports, in which engaging in a research project that would involve three assessments and four peer sessions on top of their existing commitments could have influenced consumers decisionmaking to take part. Indeed, nine young people declined participation in the research due to

time-commitments. Lastly, it is also possible there could be something specific about the model of peer support work employed that may have impacted on the uptake and scalability. The qualitative interviews emphasised a preference for the videos to be used flexibly, as needed by the young person, in which the four-session structured approach could have deterred potential participants. PSWs also reported only offering the program on-site at the EIS restricted access for young people who were unable to attend the service and often received outreach visits by the PSWs. The reasons contributing to the low uptake and broader scalability of this model of working however, are speculative, in which understanding the factors contributing to this in peer support work are crucial in being able to address such barriers and improve implementation.

11.2.5 Outcomes of the resource. While the primary focus of the thesis was to explore the feasibility of the lived experience videos to function as a tool to facilitate conversations in peer support work sessions, exploratory analyses were conducted on personal recovery. Peer support workers incorporate their lived experience into sessions with young people, where relevant, to support another through their own mental health experiences and recovery (Stratford et al., 2017). Personal recovery provides a means of examining the potential outcomes of peer support work through exploring changes in consumers view on their own recovery process and capacity to lead a meaningful life. Although any estimate of effect is very limited given the small number of participants, a large average effect size was noted on personal recovery, whilst the Reliable Change Index (RCI) analyses revealed two of the four participants had significant reliable improvement in personal recovery across the pre-post and pre-follow up analyses, with only one participant demonstrating reliable improvement during the program. Thomas, Farhall, Foley, Leitan, et al. (2016) pilot trial investigation into the use of peer videos within face-to-face sessions with non-peer workers in adults experiencing severe mental illness, found, on average,

improvement in personal recovery at the end of the intervention. However, when examining the broader recovery narrative literature, Piat et al. (2019) examined the use of lived experience-based recovery material in a two-hour session with peers and found no significant difference in personal recovery. Qualitatively, however participants described experiencing several improvements in their mental health that could be conceptualised as elements of personal recovery according to the CHIME model (Leamy et al., 2011; Piat et al., 2019). This included developing a sense of connectedness and hope for their future and greater understanding of their own mental health experiences (Piat et al., 2019). It is possible Piat et al.'s (2019) use of the Recovery Assessment Scale (RAS; Giffort et al., 1995) may not have detected the recovery processes identified in the CHIME model for personal recovery, relative to the use of the QPR (Neil et al., 2009) in Thomas, Farhall, Foley, Leitan, et al. (2016) and the present research. The lack of consensus on a definition of recovery from mental illness, and a gold-standard measure to assess recovery is a key criticism of this literature impacting on the current evidence-base, with studies tending to use a range of recovery measures (Law et al., 2012). There are also broader challenges in potentially capturing the very individual process of recovery with a standardised measure. Of course, due to the current research findings reflecting individual participant changes associated with a small number of cases, these results should be interpreted with caution.

The final phase of the thesis involved a qualitative investigation of consumers and PSWs perspectives on the use of the lived experience videos in one-on-one peer support work. This included consumers and PSWs who were involved in the case series trial of Peer Plus, and a broader group of consumers and PSWs who viewed the videos and reflected on the imagined use of the digital tool within peer work. Findings from the qualitative interviews were consistent with the small existing literature on videos of people sharing their lived experiences of severe mental illness (i.e., Naslund et al., 2014; Williams et al., 2018b). Using

lived experience videos in individual peer support work sessions could provide an opportunity for consumers to engage in open and meaningful conversations with a PSW. Qualitative extracts from consumer participants identified the peer support work environment created a sense of safety and comfort for consumers stemming from the mutual lived experience of mental illness and knowing if the consumer was to share an aspect of their experience following the video, the PSW could understand and share their own experience. This has been proposed to help validate the consumers experiences and increase their willingness to share and have open conversations about topics related to their mental health with PSWs (Gidugu et al., 2015; Gillard et al., 2015).

Through watching the lived experience videos and hearing other peers' experiences related to mental health, consumer participants further described the videos promoting a sense of hope for their situation to improve. Participants also felt less alone in their experiences through identifying with the peers in the videos, and were able to develop a greater understanding of their own mental health experiences. The findings drew similarities with Williams et al. (2018b) qualitative analysis of blended models of digital tools within consumer-clinician interactions that found consumers developed a sense of hope and optimism for the possibility of recovery from severe mental illness and reported feeling less alone in their experiences after watching videos of other peers sharing their experiences of mental illness and having a conversation with their (non-peer) worker. These impacts reported by consumers are comparable to those that tend to be described within peer support work. Most notably, studies have found peer support work promotes feelings of hope, supports consumers to make sense of their own mental illness, learn adaptive skills and inspire and empower consumers in their own recovery through sharing their experiences and being role-models (Bellamy et al., 2017; Bradstreet & Pratt, 2010; Cabral et al., 2014;

Faulkner & Basset, 2012; Repper & Carter, 2011; Repper & Watson, 2012; Walsh et al., 2018).

The opportunity for consumers to hear a range of peer's lived experiences conveyed via the videos allowed for consumers to be able to identify and relate to at least one of the peers who shared similar experiences. Relating with a peer in the lived experience videos may help consumers develop a sense of connection (Mead, Hilton, & Curtis, 2001), and may have played a role in assisting consumers to understand their own experiences and may motivate them to model adaptive behaviours. In considering the psychological frameworks relevant to peer support work and recovery, this seems plausible. Social learning theory suggests when people view another as being akin to themselves, observational learning can occur, and people can be motivated to model the adaptive behaviour (Bandura, 2001). This is consistent with elements of Gillard et al.'s (2015) model for peer support work, whereby the mutual lived experiences of mental illness can help develop a trusting peer relationship, in which a peers lived experience of mental illness can role-model to consumers how to live a meaningful life, and by doing so, promote a sense of hope and empowerment for consumers in regard to their own mental health and wellbeing. This suggests that the lived experience videos could potentially capture and mirror these elements of peer support work in addition to a peer relationship. These findings also provide some support for the use this type of recovery narrative genre (Woods et al., 2019), whereby peers sharing their experiences of mental illness including how they managed difficult situations across a variety of personal recovery-related themes in a hopeful manner appeared to be beneficial for young people experiencing psychosis.

Despite the lived experience videos appearing to have synergies with peer support work, the qualitative analysis highlighted key factors to consider in thinking about how the videos could be used as a tool within peer support work practice. Using the videos early on

when consumers first start to engage with mental health services or peer support work was described to be beneficial in validating and normalising the consumers experience of mental illness and helping consumers to understand and make sense of their own experiences. Specifically, in peer work practice, the videos could provide exemplars of other peers sharing their experiences, which may help ease young people into peer work and showcase the ways in which people could start to share their own experiences and begin to develop the peer relationship. In this sense, the videos seemed to be particularly important for young people who were still navigating through their mental illness, as opposed to later on in their engagement with services where they may have developed an understanding of their experiences. This may be important to consider within EIS that aim to support young people in the early phases of their psychosis and reduce the long-term impact of mental health (Malla & McGorry, 2019). Indeed, qualitative research in early psychosis services has suggested PSWs could improve consumer engagement through developing trusting peer-topeer relationships (White et al., 2017). Integrating this model of peer support work at an earlier stage in EIS delivery may help convey a sense of normalcy and understanding of consumers experiences through delivering digital peer support work resources (i.e., lived experience videos) in an engaging and accessible manner (Rus-Calafell & Schneider, 2019).

However, differing perspectives arose when considering the flexibility of the program and how best to implement the tool in practice. Some of the PSWs appeared to be reluctant towards using the lived experience videos in one-on-one peer work sessions with young people. The four-session structure of Peer Plus contrasted with the flexible ad hoc model of peer support work employed by the service, and some PSWs questioned whether the inclusion of additional peers via the videos was required within individual peer work where the PSW's own lived experience could be shared instead. Conversely, some consumer participants viewed the peer-to-peer relationship as being central to engaging with the lived

experience videos. Consumers reported the mutual experiences of mental illness and the sense of safety and comfort elicited in the peer support work environment supported the use of these videos in peer sessions. This raised a key point to consider in the context of the overall findings.

These contrasting views shared by some of the PSWs was in contrast to discussions during the participatory developmental process employed to create and design Peer Plus. However, the PSWs who participated in the qualitative interviews were not the same PSWs who were involved in the early developmental phases, in which one of the drawbacks of employee turn-over was PSWs being employed by the service following the creation of Peer Plus with different views on the use of such a program within peer support work. This highlights the complexity of implementing new programs into practice settings. Additionally, it was notable that there was only one PSW who used the digital program in sessions with a consumer as part of the case series trial who participated in the qualitative interview. The remaining PSWs shared their perspectives on the imagined use of the program within practice. It is possible that these differences reflect individual differences in perspective; that values held by PSWs as a group evolved during the course of the research program, or that to PSWs learning of the project later on experienced the program as a model being imposed on a peer work role as opposed to having been developed in collaboration. This highlights a need for further investigation of the potential intersection between standardised lived experience-based resources and the emerging discipline of peer work, and urges caution in assuming such materials to be complementary to peer work practice.

In considering the overall findings, the tension with the structure of the program may reflect a tendency for peer support work to employ a person-centred and flexible approach to working with young people (Murphy & Higgins, 2018). This is consistent with studies exploring the nature of peer support work across adult mental health settings (i.e., Mahlke et

al., 2017; Ogundipe et al., 2019; Rebeiro Gruhl et al., 2016), where individualised and flexible approaches were seen as key to authentically engaging in peer work (Rebeiro Gruhl et al., 2016). Using the videos as a flexible tool when relevant to the young person may help address this tension. While it is important to align newly developed peer work programs with the model of peer work employed by the service (e.g., flexible, person-centered etc.), studies have highlighted the value of ensuring these programs also capture the consumers perspectives for effective integration into practice (Cabral et al., 2014). Balancing both the PSWs and consumers perspectives can sometimes be difficult, but this could be achieved by meeting regularly with a panel of consumers, PSWs and academic researchers throughout the project, where differing perspectives could be identified and resolved in a collaborative manner, and ultimately assist in improving the implementation of these programs into practice.

Taken together, the participatory development process was beneficial in increasing researchers understanding and knowledge of the peer workforce and the recovery processes relevant to young people experiencing psychosis. This supported the creation of a novel digitally-assisted peer support work program. The case series investigation and qualitative lived experience accounts of this novel model of peer support work provided preliminary support for the use of lived experience videos as a tool to facilitate recovery-oriented conversations within peer-to-peer interactions in early psychosis services. These findings extend upon the existing research on the use of peer videos (i.e., Naslund et al., 2014; Thomas, Farhall, Foley, Leitan, et al., 2016; Williams et al., 2018b), and qualitative accounts on consumers and workers perspectives on digital tools as part of mental health service delivery (i.e., Berry et al., 2019; Bucci, Berry, et al., 2019; Bucci, Morris, et al., 2018; Williams et al., 2018a). What remains to be certain is how mental health services for young

people experiencing psychosis could best implement the lived experience videos into peer work practice to meet the needs of both young people and PSWs.

11.3 Strengths of the Thesis

11.3.1 Introducing lived experience videos into peer support work. The novelty and innovation of this lived experience-based program for peer support work was a key strength of the thesis. The use of digital technology in the form of lived experience videos was a central element of the digital program and is an underexplored area of the research, with more recent studies beginning to explore its suitability across different mental health populations and contexts (Lim et al., 2019; Naslund et al., 2014; Thomas, Farhall, Foley, Leitan, et al., 2016; Thomas, Farhall, Foley, Rossell, et al., 2016; Williams et al., 2018b). Through collaboratively developing and examining the feasibility, acceptability and qualitative lived experience accounts of both consumers and PSWs on the use of lived experience videos as a means of facilitating conversations in peer-to-peer interactions, the current research explored new ground. This involved expanding on research into the use of digital tools in early psychosis populations, and also in considering their use in peer support work, and whether these videos could be meaningfully integrated and used in individual peer work sessions to structure conversations about personal recovery. By doing so, the current research begins to address these gaps in the literature and provides findings that can be refined and extended upon by future research.

11.3.2 Participatory development. The participatory development method utilised in the creation of the digitally-assisted peer support work program and the lived experience videos was a second key strength of this thesis. Participatory methods are being more readily employed within research projects given the potential benefits in creating resources that are grounded in lived experience and have the potential to be more applicable to the population of interest (Happell et al., 2018). This was particularly important in the present research, as

there was limited existing literature on digital resources targeting personal recovery in peer support work, or early psychosis populations. By meaningfully incorporating the PSWs, services, consumers and academic researcher's expertise, a content framework was developed highlighting the recovery process relevant to young people, which later formed the basis of the digital program. Collaborative discussions with the PSWs and service also helped obtain consensus of the length of the program. This supported the current research to create a digital tool that could be relevant to those involved in delivering, receiving and examining this model of peer work.

11.3.3 Identifying feasibility and scalability issues. Given the novelty of using digital tools within peer support work and the limited research available at the commencement of this thesis, a case series investigation was a useful research design to employ (Bowen et al., 2009; Kooistra et al., 2009). This allowed for the current research to examine the feasibility and acceptability of the newly developed Peer Plus program and gain an understanding of the problems experienced in trialing this model of peer support work within the time-constraints of the thesis and through a cost-effective method (Bowen et al., 2009; Kooistra et al., 2009). This investigation into the use of the lived experience videos was beneficial in providing an in-depth exploration into the program and uncovering the difficulties experienced with the uptake and scalability of Peer Plus. Addressing these concerns prior to implementing a full-scale RCT, particularly for under researched areas of the literature where the findings may be less certain, is crucial in effectively examining the efficacy of digitally-assisted peer support work programs in future research (Leon et al., 2011).

11.3.4 Mixed quantitative-qualitative approach to data collection. The current research employed quantitative measures of feasibility, acceptability and the exploratory participant outcomes, alongside a qualitative analysis of the program and lived experience

videos. This was in line with current recommendations for research into peer support work (King & Simmons, 2018). By utilising both methods of data collection, the qualitative findings extended upon the quantitative results and allowed for a greater understanding of both consumers and PSWs perspectives on the novel digital program. For example, the qualitative findings enhanced researcher's knowledge on the potential factors hindering the scalability of the program in the case series trial through the qualitative interviews highlighting concerns with the timing, flexibility and how to best use the program in practice. Without the qualitative analysis, this would be unclear based on the feasibility and acceptability results alone.

11.4 Limitations of the Thesis

Acknowledging and understanding the limitations that occurred throughout each of the associated papers and the overall thesis is important in supporting future research into the use of lived experience videos within one-on-one peer support work. Chapters 7, 9 and 10 have made reference to specific limitations relevant to each of the papers, some of which will be covered further in this section and additional limitations for the overall thesis will be discussed.

11.4.1 Sample size and characteristics. Despite modifications made to the study design (e.g., broadening the eligibility criteria) and extension of the data collection timeperiod, the current research was only able to recruit four male participants. The small sample of four and being all male participants places several limitations on the results. The data collected on only four male participants restricts the statistical analyses that can be conducted and provides a descriptive and individualised representation of participant outcomes that cannot be generalised more broadly to an early psychosis population (Leon et al., 2011). Whilst the current research was not intending to recruit all male participants, it could be due to males reportedly being at an increased risk of developing psychosis relative to females

(Amminger et al., 2006). Other studies in early psychosis populations have observed an overrepresentation of males, although this is usually with more variability than the current sample (i.e., Anderson et al., 2019; Best, Grossman, Milanovic, Renaud, & Bowie, 2018; Lal et al., 2015; Lim et al., 2019; Penn et al., 2011). Upon review of the participants referred to the program, 38 of the 63 participants were male suggesting there could be slightly more males than females engaged with the service. However, this is speculative, as these numbers could also reflect a greater expression of interest from males to engage with digital peer programs. Furthermore, while three of the four PSWs who engaged in the program were male, participants were given the option to engage with a male or female PSW at the service, which may exclude this as a potential bias contributing to the all-male sample obtained.

In an attempt to improve the recruitment of young people with an experience of psychosis for the qualitative interviews as part of the third study associated with this thesis, broader eligibility criteria was employed with consumer participants only needing to be aged 16 to 25 years old and have an experience of psychosis (as determined by their worker for referral) to participate in a single session qualitative interview. While this appeared to slightly improve data collection, with seven consumer participants being recruited over a shorter data collection period, similar difficulties with the limited variation in gender and sample size continued to occur (e.g., a total of five male and two female consumers were recruited).

To help address the concerns about the sample size, the qualitative data obtained across the second and third study of this thesis were combined to increase the sample size and be able to conduct a detailed Thematic Analysis (TA; Braun & Clarke, 2006). A sample of 15 participants has been reported to be appropriate for TA (Clarke et al., 2013) and data saturation was achieved further supporting the sample size. However, the limited variation in gender and the different levels of exposure with the digital program impacted on the quality of the findings. Four consumers engaged with the program as part of the case series trial and

eleven consumers engaged in the single interview on the imagined use of the lived experience videos within one-on-one peer support work, which resulted in the two groups of consumer participants having different levels of exposure and experience with the program. The extended use of the program in the case series trial may yield a different experience to that of a brief one-hour interview. Additionally, only one of the PSWs who participated in the case series trial shared their perspectives in the qualitative interview, with the remaining three PSWs imagining its use in practice. This limits the amount of information that could be obtained on the actual use of the program in peer work practice. To address this limitation, equal groups of young people and PSWs who have a similar degree of exposure with this model of peer support work will improve the quality of the analysis and understanding on the use of lived experience videos in peer support work.

11.4.2 Study design. The use of a case series design can have benefits in exploring new programs, be financially feasible, and time-effective (Kooistra et al., 2009), however, key limitations of this design involve the small sample size and the lack of a comparison or control group (Kooistra et al., 2009; Leon et al., 2011). This contributes to uncertainty in whether the findings observed are unique to the digital program, or whether it is from participant engagement with the PSW in the one-on-one peer work sessions, or from the usual treatment received from the service, or a mixture of factors. The current research is also unable to draw causative statements regarding participants outcomes, as a case series design does not provide sufficient data to conduct significance testing on preliminary outcomes related to the efficacy of programs (Kooistra et al., 2009; Leon et al., 2009; Leon et al., 2011).

Given this, future research could address these limitations by employing a larger mixedmethods pilot trial to further examine the preliminary efficacy of this novel digital program after taking into consideration the limitations and determine whether there is sufficient evidence to conduct a full-scale RCT with a waitlist or control group of the standard peer

support work delivered by the service. Due to the recruitment issues, employing a pilot trial rather than a full-scale RCT as the next step in examining this model could help improve researchers current understanding on the feasibility and acceptability of digitally-assisted peer support work programs prior to allocating significant funds to a full-scale RCT. This is particularly important to ensure the program is scalable and examined in a manner than enhances implementation and future use in practice. The rapid advancements in digital technology can also influence the examination of large trials, as revisions to digital programs may be required to refine the resource, in which waiting until the end of a full-scale RCT, for example, to make those changes may result in the digital programs being out of date (Bucci, Lewis, et al., 2018; Bucci, Schwannauer, et al., 2019).

11.4.3 Outcome measures. Whilst the primary purpose of the thesis was to examine the feasibility and acceptability of the digital program, exploratory analyses were conducted to explore changes in personal recovery outcomes. A key consideration of the thesis was determining the most appropriate measure to assess personal recovery. As discussed in Chapter 8, some of the recovery-oriented measures had limited research into the psychometric properties to assess changes in early psychosis populations, which could influence the findings. For instance, whether the QPR (Neil et al., 2009) is a valid and reliable assessment of personal recovery in FEP populations needs to be investigated. Psychometric evaluations of the QPR for peer support work research in young people aged 16 to 25 years old will help address this limitation, and improve the evidence-base for this field of research.

11.4.4 Follow up assessments. The inclusion of long-term follow up assessments in research can help understand whether participant outcomes continue beyond the initial participation in a program. This thesis attempted to capture preliminary follow-up data by including a three-month follow up assessment as part of the case series trial. Whether the

outcomes observed continue after the three-month period is unknown. While this thesis adds to the existing peer literature in assessing follow-up outcomes, longitudinal studies with larger sample sizes will further help to build on the current evidence for peer support work and help to better understand the long-term outcomes of personal recovery (Chinman et al., 2017; King & Simmons, 2018).

11.4.5 Assessment of session content. In considering session content, a checklist was used to examine the extent to which the digital program was implemented as planned, as the PSWs were reluctant for the sessions to be recorded. The assessment of sessions could have been enhanced by additionally assessing alignment of sessions with the values of the peer support work model employed by the service (Chinman et al., 2017; King & Simmons, 2018). Recent systematic reviews on peer support work have noted a tendency for existing research to not assess the fidelity of programs to the values of peer support work (e.g., authenticity, reciprocity etc.; King & Simmons, 2018). Examining these dimensions is important in considering the extent to which a program represented good practice in peer support work (Chinman et al., 2017). In the context of this current research, considering the extent to which peer work could be implemented would have helped to clarify how complementary to peer work the digital program was, and identify whether it interfered with the process. Being able to develop an understanding of this is important not only in clarifying what took place in sessions, but also in improving the overall peer support work literature and ensuring programs developed for the peer workforce uphold the relevant values and do not steer away from the origins of peer support when integrated into services (Gillard, 2019; Gillard et al., 2017). Chinman et al. (2016) have developed a self-report fidelity assessment for PSWs, but further testing is required to determine the effectiveness of the tool in early psychosis populations due to the broad role of PSWs across different settings.

11.4.6 Incorporating lived experience in all phases of the thesis. Upon reflection of the participatory development process, it became apparent that lived experience expertise could have been involved in the implementation phase, and in interpreting the analyses and dissemination of the research. PSWs were readily involved in the decision-making surrounding the implementation of the digital program with several meetings held to arrive at a consensus on the implementation process between the EIS, PSWs and academic researchers, however consumers had less involvement at this stage of the research project. Involving young people into these implementation discussions could have given rise to other barriers (e.g., no outreach visits) and facilitators related to their willingness to engage with such a program. These factors could have been addressed prior to implementation and data collection. Doing this, may have helped eliminate some of the problems related to the recruitment and uptake of the program. Research has reported involving consumers in these processes can help to develop effective methods of data collection, reduce implementation barriers and strengthened the analyses (Bucci, Schwannauer, et al., 2019; Happell et al., 2018).

Involving both consumer and PSWs expertise into the interpretation and dissemination of the results could have strengthened findings, particularly given the findings relevance to the peer support workforce. The inclusion of lived experience expertise has reported benefits in understanding and translating the research findings into practice (Happell et al., 2018). The current research considered the inclusion of lived experience into further interpreting the results (beyond the reference group held for the qualitative data) and disseminating research, but due to the restricted timeline of the doctoral thesis and difficulty identifying an appropriate lived experience expert who was not involved in the research project as a participant, it was not feasible to authentically incorporate feedback. In reflection, strategical planning of who could be involved in the analysis and dissemination

phases of research and when this would occur early on in the participatory process could help resolve this issue in future research.

11.5 Peer Support Work Implications

11.5.1 Peer Plus as a digital program. In this thesis, digital technology in the form of lived experience videos was used as a resource within face-to-face peer support work sessions to facilitate recovery-oriented conversations and promote a sense of hope, and personal reflection about the young person's own mental health experiences. This model of digitally-assisted peer support work has not previously been investigated within an early psychosis sample, or within a peer support work setting, in which this thesis has started to address this gap in the literature. This research has important implications for one-on-one paid peer support work, specifically in providing research on the use of digital tools as a resource to facilitate peer-to-peer interactions. Systematically examining the types of resources that could be used to complement one-on-one peer work sessions and be of benefit to young people can be useful in supporting peer support work teams as part of EIS to employ evidence-based programs. The findings of this current research provided support for the feasibility and acceptability of lived experience videos to facilitate recovery-oriented conversations within face-to-face individual peer support work sessions as part of mental health practice.

Using lived experience-based video material within peer work sessions appeared to be beneficial for young people in being able to create a space for open and meaningful conversations with a PSW, and in promoting a hopeful life through consumers having the opportunity to hear other peers' mental health experiences conveyed in the videos. This contributed to consumers developing an improved understanding of their own mental health and feeling less alone in their experiences. The shared experience of mental illness within the peer work relationship appeared to be crucial for consumers to feel safe and comfortable in

being vulnerable and sharing their own experiences with the PSW (Gidugu et al., 2015). Indeed, in most of the peer work sessions, the consumers and PSWs shared relevant aspects of their own experiences after watching the videos. While the findings may reflect the value of these videos to facilitate targeted dialogue on mental health and recovery within peer work practice and promote hope for young people engaged with early psychosis services, caution is warranted in considering the scalability of this model of peer work for mental health service delivery. The precise reason for the low uptake of young people for the digital program remains uncertain, yet, this raises questions about whether such a program has the potential to be integrated within the growing peer workforce.

11.5.2 Scalability and implementation of digitally tools for peer support. Understanding how these types of digital programs could be effectively implemented into peer support work practice within mental health services warrants consideration. Despite the current research utilising a collaborative approach to creating Peer Plus, program uptake was low, and issues were raised in regard to the flexibility and how to best utilise the digital program. As previously discussed, lived experience involvement from young people could have been improved in the implementation phase of the current research, which may have assisted in aligning the program more closely with consumers preferences and translating it more effectively into the service (Happell et al., 2018).

Nonetheless, in reviewing this model of peer work as a digital resource in practice, the findings suggest the use of the lived experience videos in a flexible, ad hoc manner, as relevant to the young person and their discussions with a PSW in individual sessions appeared to be important for future integration of this program into peer work practice. Research on peer support work have advocated for investigations into tools for this growing workforce to uphold the values of peer support work, one of which centres around a personcentred method of supporting a young person through their mental health difficulties

(Ogundipe et al., 2019; Rebeiro Gruhl et al., 2016). Furthermore, findings from a scoping review on the use of blended models of support for digital interventions delivered by clinicians (i.e., non-peer workers) have suggested clinicians and consumers need to clarify their expectations about how and when digital interventions could be used to aid integration (Williams et al., 2019). This may hold relevance for using digital programs in peer support work. For example, by PSWs being able to converse with young people about how often the lived experience videos may be accessed and in what context, it could allow for the program to support the flexible and person-centred nature of peer support work as part of mental health service delivery (Murphy & Higgins, 2018; Williams et al., 2019). Thus, it seems likely that this approach to using digitally-assisted peer support work programs may be more synergistic to peer work practice in early psychosis services, relative to prescribing to a structured four-session format. However, future research is required to extend upon the preliminary findings and investigate the potential of using this digital model of peer work in a flexible, person-centered approach for young people experiencing psychosis.

The qualitative findings on the use of the lived experience videos highlighted additional avenues for potential exploration in regard to the implementation of this type of program within early psychosis services. In particular, PSWs spoke about the videos having the potential to be useful in a couple of settings, one of which was with non-peer workers. The PSWs reasoning for this was two-fold; to bring peer lived experience into sessions where it is often not available and to help the young person vocalise their experiences and feel less alone in their experience of psychosis. This could be plausible, given Thomas, Farhall, Foley, Leitan, et al. (2016) study on the use of peer videos in face-to-face sessions with non-peer mental health clinicians was reported to be a feasible and acceptable way of working with adults experiencing severe mental illness. Indeed, participants described feeling a sense of hope, optimism and less alone in their experiences from engaging in the program with non-

peer workers (Williams et al., 2018b). It is possible the lived experience videos may be of benefit for early psychosis populations in non-peer settings, however these considerations are speculative at present and are subject to future research.

11.6 Future Research Directions

Taking into consideration the findings of this thesis with the aforementioned limitations and implications for peer work practice, several directions for future research have been proposed, some of which have been previously discussed in other aspects of this thesis. An overview of the key future research directions discussed throughout this thesis have been provided in Table 11.1 below.

Table 11.1

Overview of the Future Research Directions for Digitally-Assisted Peer Support Work

Future Research Directions

- 1. Specify the type of peer support under investigation.
- 2. Establish reliable and valid measures to assess one-on-one peer support work.
- 3. Establish reliable and valid measures to assess personal recovery in young people experiencing psychosis.
- 4. Conduct research to examine early psychosis populations preferences for peer support work, and the use of digital resources within peer work sessions.
- 5. Conduct research to understand the efficacy of peer support work programs in early psychosis services, such as digitally-assisted programs.
- 6. Establish the reliability of using Chinman et al. (2016) fidelity assessment in peer support work in early psychosis populations.
- 7. Continue to use participatory methods in developing and re-defining digital peer support work programs.
- 8. Continue to explore the use and efficacy of different types of lived experience recovery narratives.

While consensus is forming on the specific variables that should be considered and used in studies investigating peer work (King & Simmons, 2018), there is less evidence surrounding what measures may reliably assess the recommended recovery-oriented outcomes in peer support work as part of mental health services. Research has begun to highlight differences in the nature of the peer relationship between the origins of peer support and paid peer support work, whereby paid PSWs are employed to support another through their mental health experiences relative to the PSWs own personal benefit, which changes the nature of the peer relationship (Murphy & Higgins, 2018; Stratford et al., 2017). Murphy and

Higgins (2018) expressed concern for the different types of peer support being explored within the literature, often ranging from naturally arising peer support to PSWs employed by services. Specifically, they posited that assuming PSWs could be paid to offer something similar to genuine peer support is "risky terrain, which jeopardizes the integrity of peer support..." (Murphy & Higgins, 2018, p. 445), because the potential difference in the relationship and form of the peer support provided by paid PSWs may lead to different experiences (Murphy & Higgins, 2018). To address this and accurately explore peer support, future research should clearly specify their investigation into paid peer support work to reduce any ambiguity across the literature (Murphy & Higgins, 2018). In doing so, further research could be conducted to identify valid and reliable recovery-oriented outcomes and measures to assess paid peer support work.

This criticism also extends to the broader personal recovery literature, where existing research has tended to use a variety of measures to assess personal recovery (Law et al., 2012). To date, there is no gold-standard measure of personal recovery (Law et al., 2012), and there is limited evidence on the psychometric properties of certain recovery-oriented measures for early psychosis populations. To help improve the current evidence on programs targeting personal recovery, future research is required to establish psychometric properties on personal recovery outcomes for young people experiencing psychosis.

The infancy of the research on blended models of digital programs with face-to-face peer support work in early psychosis populations further highlights the need for future research to continue investigating the use of lived experience videos and blended models of peer support work to help understand their use and efficacy within services (Williams et al., 2018b). For example, a large mixed-methods research trial could be conducted that takes into consideration the limitations discussed, refines the program and focusses on understanding the efficacy of such a resource in paid peer work. Of note, however, there has been criticism

that interventions presented as promoting recovery in mental health services have co-opted the grassroots 'consumer/survivor recovery movements' for organisational needs (Recovery in the Bin. et al., 2019). This criticism can also extend to peer support work and highlight the importance of researchers and services alike being cautious when considering the transformation of peer support work into discrete programs, and the use of digital tools that may formalise the peer work process in a manner that may not be consistent with its core values (Murphy & Higgins, 2018). Employing a fidelity assessment such as Chinman and colleagues (2016) to examine the programs capacity to uphold and align with the values of peer support work is recommended to help mitigate this. This could have important implications for EIS in understanding the effectiveness of these types of programs for the peer workforce.

A key focus of any future research into peer support work should involve collaboration with not only the young people involved in receiving the program, but also those who are involved in delivering it (Bucci, Schwannauer, et al., 2019; Happell et al., 2018). As discussed throughout this thesis, collaborating and co-designing peer support work programs with lived experience accounts can help strengthen all aspects of the research process and work towards ensuring the programs that are developed align with peer work practice (Chinman et al., 2017; Happell et al., 2018).

11.7 Conclusion

In conclusion, this thesis examined a novel digitally-assisted model of peer support work and was the first to use an intervention of this type within an EIS for young people experiencing psychosis. This involved a blended model of one-on-one peer support work with lived experience videos called Peer Plus. This program was collaboratively developed with consumers, PSWs, the mental health service and academic researchers, which aided in creating a program that was grounded in lived experience. The results of the case series trial
provided preliminary support for the feasibility and acceptability of using of digital technology in the form of lived experience videos to facilitate conversations within peer support work sessions with young people who have an experience of psychosis. These findings were further supported by the qualitative lived experience accounts and perspectives on the blended model of one-on-one peer work with digital technology, however the integration of these digital programs within peer support work practice requires further investigation.

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Appendix

Appendix I: Human Research Ethics Approval Letters



ETHICS COMMITTEE CERTIFICATE OF APPROVAL

This is to certify that

Project No: 526/16

Project Title: Digitally Assisted Peer Support (DAPS): Trial of novel model of technology-enhanced peer work for young people who have experienced mental health problems

Principal Researcher: Dr Neil Thomas

Project Proposal version 3 dated: 7-Dec-2016

Participant Information and Consent Form version 2 dated: 16-Nov-2016

was considered by the Ethics Committee on 24-Nov-2016, meets the requirements of the National Statement on Ethical Conduct in Human Research (2007) and was APPROVED on 15-Dec-2016

It is the Principal Researcher's responsibility to ensure that all researchers associated with this project are aware of the conditions of approval and which documents have been approved.

The Principal Researcher is required to notify the Secretary of the Ethics Committee, via amendment or progress report. of

- Any significant change to the project and the reason for that change, including an indication of ethical implications (if any);
- Serious adverse effects on participants and the action taken to address those effects; Any other unforeseen events or unexpected developments that merit notification;
- The inability of the Principal Researcher to continue in that role, or any other change in research personnel involved in the project;
- Any expiry of the insurance coverage provided with respect to sponsored clinical trials and proof of re-insurance; A delay of more than 12 months in the commencement of the project; and,
- Termination or closure of the project.

Additionally, the Principal Researcher is required to submit

A Progress Report on the anniversary of approval and on completion of the project (forms to be provided); .

The Ethics Committee may conduct an audit at any time.

All research subject to the Alfred Hospital Ethics Committee review must be conducted in accordance with the National Statement on Ethical Conduct in Human Research (2007).

The Alfred Hospital Ethics Committee is a properly constituted Human Research Ethics Committee in accordance with the National Statement on Ethical Conduct in Human Research (2007).

SPECIAL CONDITIONS

None

SIGNED:

Mhr

Professor John J. McNeil Chair, Ethics Committee

Please quote project number and title in all correspondence

To: A/Prof. Neil Thomas, FHAD/CMH

Dear Neil,

SHR Project 2018/164 – Digitally Assisted Peer Support (DAPS): Trial of novel model of technologyenhanced peer work for young people who have experienced mental health problems. A/Prof. Neil Thomas, Ms Claire Peck (Student), Dr Michelle Lim, Ms Fiona Foley – FHAD/CMH; Dr Liza Hopkins, Ms Tania Martinow, Ms Ashleigh Thornton, Ms Prunella Howel-Jay – Alfred Health Approved Duration: 03-05-2018 to 31-12-2019 (Alfred Health HREC Ref. 526/16)

I refer to the application submitted on your behalf by Claire Peck for Swinburne ethics clearance for the above project.

Relevant documentation pertaining to the application, as emailed on 02 May 2018 with attachment, was given expedited ethical review on behalf of Swinburne's Human Research Ethics Committee (SUHREC) by a delegate significantly on the basis of the ethical review conducted by the Alfred Health Human Research Ethics Committee (HREC Ref 526/16).

I am pleased to advise that, as submitted to date and as regards Swinburne, ethics clearance has been given for the above project to proceed in line with standard on-going ethics clearance conditions outlined below and as follows. The Alfred Health HREC may need to be apprised of the Swinburne ethics clearance.

- The approved duration is **03 May 2018** to **31 December 2019** unless an extension request is subsequently approved.

- All human research activity undertaken under Swinburne auspices must conform to Swinburne and external regulatory standards, including the *National Statement on Ethical Conduct in Human Research* and with respect to secure data use, retention and disposal.

- The named Swinburne Chief Investigator/Supervisor remains responsible for any personnel appointed to or associated with the project being made aware of ethics clearance conditions, including research and consent procedures or instruments approved. Any change in chief investigator/supervisor, and addition or removal of other personnel/students from the project, requires timely notification and SUHREC endorsement.
- The above project has been approved as submitted for ethical review by or on behalf of SUHREC. Amendments to approved procedures or instruments ordinarily require prior ethical appraisal/clearance from the Alfred Health HREC before being submitted to SUHREC for approval. SUHREC must be notified immediately or as soon as possible thereafter of (a) any serious or unexpected adverse effects on participants and any redress measures; (b) proposed changes in protocols; and (c) unforeseen events which might affect continued ethical acceptability of the project.
- At a minimum, an annual report on the progress of the project is required as well as at the conclusion (or abandonment) of the project. Information on project monitoring, self-audits and progress reports can be found on the Research Intranet <u>pages</u>. (However, formats required by or submissions to the Alfred Health HREC in this regard may be acceptable all things being equal.)
- A duly authorised external or internal audit of the project may be undertaken at any time.

Please contact the Research Ethics Office if you have any queries about on-going ethics clearance as regards Swinburne, citing the Swinburne project number. Please retain a copy of this email as part of project record-keeping.

Yours sincerely, Astrid Nordmann



Dr Astrid Nordmann | Research Ethics Coordinator Swinburne Research | Swinburne University of Technology Ph +61 3 9214 3845[anordmann@swin.edu.au Level 1, Swinburne Place South 24 Wakefield St, Hawthorn VIC 3122, Australia www.swinburne.edu.au

Appendix II: Human Research Ethics Proof of Progress Report

From: Sally Fried sfried@swin.edu.au Subject: FW: Acknowledgement of Report for SUHREC Project - 2018/164 Date: 3 May 2019 at 4:27 PM To: Claire Peck cpeck@swin.edu.au Cc: RES Ethics resethics@swin.edu.au



FYI Claire...Sally

-----Original Message-----From: resethics@swin.edu.au <resethics@swin.edu.au> Sent: Friday, 3 May 2019 4:27 PM To: Neil Thomas <neilthomas@swin.edu.au> Cc: RES Ethics <resethics@swin.edu.au> Subject: Acknowledgement of Report for SUHREC Project - 2018/164

Dear Neil,

Re: Progress Report for the project 2018/164

'Digitally Assisted Peer Support (DAPS): Trial of novel model of technology-enhanced peer work for young people who have experienced mental health problems.' (Report Date: 03-05-2019)

The Progress report for the above project has been processed and satisfies the reporting requirements set under the terms of ethics clearance.

Thank you for your attention to this matter.

Regards Research Ethics Team

Swinburne Research (H68) Swinburne University of Technology PO Box 218 HAWTHORN VIC 3122 Tel: 03 9214 3845 Fax: 03 9214 5267 Email: resethics@swin.edu.au

Appendix III: Author Indication Forms



Swinburne Research

Authorship Indication Form

For HDR students

NOTE

This Authorship Indication form is a statement detailing the percentage of the contribution of each author in each published 'paper'. This form must be signed by each co-author and the Principal Supervisor. This form must be added to the publication of your final thesis as an appendix. Please fill out a separate form for each published paper to be included in your thesis.

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We hereby declare our contribution to the publication of the 'paper' entitled: Development of a lived experience-based digital resource for a Digitally-Assisted Peer Support Program for young people experiencing psychosis

First Author

Name	Olaina	Deel	
Name	Claire	Реск	_

Signature: <u>Clairefeck</u>

Percentage of contribution: 80 %

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Date: 10 / 02 / 2020
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Brief description of contribution to the 'paper' and your central responsibilities/role on project:

I wrote the first draft of the manuscript and finalised the manuscript for submission. I was also involved in conceptualising, planning and developing the peer support intervention model and digital tool.

Second Author		michallalin.
Name: Michelle Lim	Signature:	micraitin
Percentage of contribution: 3_%		Date: 10 / 02/ / 2020
Brief description of your contribution to the 'paper':		

Michelle was involved conceptualising, planning and developing the peer support intervention model and digital tool. Michelle reviewed and provided feedback on the paper.

Third Author

Name: Melanie Purkiss	Signature:	On maternity	leave	

Percentage of contribution: 3__%

Date: __/__/___

Brief description of your contribution to the 'paper':

Mel was involved conceptualising, planning and developing the peer support intervention model and digital tool. Mel reviewed and provided feedback on the paper. Fourth Author

Name: Fiona Foley

Signature: Date: 10 / 02 / 2020

Percentage of contribution: 3___%

Brief description of your contribution to the 'paper':

Fiona was involved in the development of the content (framework and videos) of the digital tool and project methodology and reviewed and provided feedback on the paper.

Principal Supervisor:	
Name: Neil Thomas	Signature:
Date: <u>1</u> 0/02/2020	Ÿ
In the case of more than four authors pleas contribution of the authors.	se attach another sheet with the names, signatures and

Authorship Indication Form

Fifth Author

_Signature:_____ Name : Liza Hopkins Date: 11 1 2 1 2020 Percentage of contribution: 3_% Brief description of your contribution to the 'paper': I was involved in conceptualising, developing and supporting the study. I reviewed and provided feedback on the manuscript drafts. Sixth Author Signatur Name : Neil Thomas Percentage of contribution: 8 % Date: 10/02/2020

Brief description of your contribution to the 'paper':

Neil was involved conceptualising, planning and developing the peer support intervention model and digital tool. Neil reviewed and provided feedback on the paper.



Swinburne Research

Authorship Indication Form

For HDR students

NOTE

This Authorship Indication form is a statement detailing the percentage of the contribution of each author in each published 'paper'. This form must be signed by each co-author and the Principal Supervisor. This form must be added to the publication of your final thesis as an appendix. Please fill out a separate form for each published paper to be included in your thesis.

DECLARATION

We hereby declare our contribution to the publication of the 'paper' entitled: Peer Plus: A case series investigation of a novel model of digital peer support work for young people experiencing psychosis.

First Author

Name Claire Peck

Signature: Clairefeck:

Percentage of contribution: 80 %

Date: 10 / 02 / 2020

Brief description of contribution to the 'paper' and your central responsibilities/role on project:

Neil and I conceptualised the study. Neil, Michelle and I developed the methodology. I conducted the data collection, analysed the data, and wrote the first draft of the manuscript.

Second Author

Name: Michelle Lim

Signature:____

Date: 10 / 02 / 2020

Percentage of contribution: 6 %

Brief description of your contribution to the 'paper':

Michelle was involved in developing the methodology and reviewed and provided feedback on the paper

Third Author

Name: Fiona Foley

0	$\cap \cap$
Signature:	YY
\frown	\sim
Date:	10 / 02 / 2020

Percentage of contribution: 3__%

Brief description of your contribution to the 'paper':

Fiona was involved in the development of the content (framework and videos) of the digital tool and project methodology and reviewed and provided feedback on the paper.

Fourth Author	
Name: Liza Hopkins	Signature:
Percentage of contribution: 3%	Date: <u>11/02/2020</u>

Brief description of your contribution to the 'paper': I was involved in conceptualising, developing and supporting the study. I reviewed and provided feedback on the nonuscript drafts.

Principal Supervisor:	1
_{Name:} Neil Thomas	Signature:
Date: <u>10/02/2020</u>	υų
In the case of more than four authors please a	attach another sheet with the names, signatures and

Authorship Indication Form

contribution of the authors.

Fifth Author

Name: Neil Thomas

Signature

Percentage of contribution: 8 %

Date: 10/02/2020

Brief description of your contribution to the 'paper':

Neil was involved in conceptualising the study and developing the methodology. Neil reviewed and provided feedback on the paper.



Swinburne Research

Authorship Indication Form

For HDR students

NOTE

This Authorship Indication form is a statement detailing the percentage of the contribution of each author in each published 'paper'. This form must be signed by each co-author and the Principal Supervisor. This form must be added to the publication of your final thesis as an appendix. Please fill out a separate form for each published paper to be included in your thesis.

DECLARATION

We hereby declare our contribution to the publication of the 'paper' entitled:

Using lived experience videos in peer support work: A qualitative investigation.

First Author

Name Claire Peck

Signature: Clairefeck

Percentage of contribution: 80 %

Date: 10 / 02 / 2020

Date: _10/ 02 / 2020 _

Brief description of contribution to the 'paper' and your central responsibilities/role on project:

Neil and I conceptualised and designed the study. I conducted data collection and led the analyses. I prepared the first draft of the manuscript.

Second Author	
Name: <u>Anne Williams</u>	Signature: Anne williams
Percentage of contribution: 6%	Date: _10/ 02_/2020

Brief description of your contribution to the 'paper':

I reviewed and discussed analytical actions and decisions with Claire at key points and discussed the qualitative findings with Clarie and Neil. I provided comments and feedback on the manuscript draft.

Third Author

Third Author	michellelim
Name: Michelle Lim	Signature:

Percentage of contribution: 3___%

Brief description of your contribution to the 'paper':

Michelle reviewed and provided feedback on the paper.

Fourth Author

	h
Name: Liza Hopkins	Signature:
and the second s	

Signature

Date: 11/02/2020

Percentage of contribution: 3 %

Brief description of your contribution to the 'paper': I was involved in conceptualising, developing and supporting the study. I reviewed and provided feedback on the manuscript drafts.

Principal Supervisor:

Name: Neil Thomas

Date: 10/02/2020

In the case of more than four authors please attach another sheet with the names, signatures and contribution of the authors.

Authorship Indication Form

Fifth Author

Name: Neil Thomas

Signatur Date: 10/02/2020

Percentage of contribution: 8 %

Brief description of your contribution to the 'paper':

Neil was involved in conceptualising and designing the study. Neil was involved in the qualitative analysis and reviewed and provided feedback on the paper.

Appendix IV: Additional Methodology Tools

Fidelity Checklist. To meet the preferences of the service and assess fidelity, a fidelity checklist was developed and completed by each PSW following the completion of the Peer Plus sessions. Whilst electronic recording (i.e., video or audio) is often the recommended assessment of fidelity for research studies, due to the nature of peer support work involving the PSWs and young people disclosing their own lived experience of mental health in sessions with participants, the mental health service and PSWs declined the use of electronic audio-recordings. The checklist was used to report on the PSWs adherence to the designed structure of the program, the duration of the session, what videos were watched during the sessions and whether or not the videos led to conversation between the PSW and participant about the video. The fidelity checklist also asked whether the PSW and/or participant shared their lived experiences as part of the post-video discussion. Four openended questions were provided at the end of the checklist for PSWs to provide any additional comments about the sessions in regard to the participants level of engagement and responses to the videos, whether the participant expressed a desire to initiate any changes in their dayto-day life, and any general feedback given by the participant in the session about the program. Below is the Peer Plus session fidelity checklist.

Peer Plus Session Fidelity Checklist

This is the Peer Plus session fidelity checklist. This should be completed after each Peer Plus session with a participant. Please make sure the correct participant and session details are recorded.

If you have any questions, please contact Claire Peck at [*email*] or [*phone number*]

Participant Initials:	
Date of Session:	
Session Number:	
Duration of Session:	
PSW Initials:	

Beginning of session content:	Yes	No	N/A
Check in with client			
If Session 1 – oriented participant to hYEPP, Peer Support and Peer Plus research program			
If Session 1 – Introduction to Peer Plus using script completed			
If Session 1 - Provided an overview of the six module areas using in- session handout			
Discussion of any activity undertaken by the participant between the PSW sessions			
Participant choose module area to explore in session.			
Introduction to session module area			

Main session content: Please tick the box to indicate the video(s) watched during the session:

Му	Self-Care	Connections	Life	My Identity	Mental
Journey					Health
Video: Mental health experiences	Video: What makes us stressed? Impact of stress Managing stress	Video: Relationships Family Social media	Video: Challenges Disclosure	Video: Who am I? How my sense of self changed Navigating stigma and discrimination	Video: Experiences with mental health services Navigating difficulties with mental health services
Used videos t self-managem	o facilitate discussio nent or recovery	n about mental healtl	h experience,		
Participant shared their own experience in relation to the video(s)					
PSW shared t	heir lived experience	e in relation to the vio	deo(s)		

End of session content	Yes	No	N/A
Summarised module area(s) discussed			
Discussion about any changes the participant expressed interest			
working on during the week			
Scheduled the next session			
Collaborative case notes discussion			
Treatment rating scale (ORS) completed by participant (hard-copy)			
If Session 4 – Discussion about final session			
If Session 4 – End of session script completed			

Additional Comments:

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Provide a brief description of the client's level of engagement and participation in the session (For example; was the participant reflective or superficially engaged? Was the participant able to share their experiences? Did the participant appear to benefit from the session? etc)

How did the participant respond to the video(s)? Did it lead to any new perspectives, thoughts, behaviours or goals?

What were the plans expressed by the participant that he/she would like to make or work in prior to the next session? (If no plans identified or discussed, please write N/A and briefly comment on reason – e.g., session focused on validating and normalising the participant's experience)

Any feedback given by the participant in the session about the program?

Overall session comment:

Next session (date and plan):

PSW Signature:

Date:

Mature minor assessment protocol. Participant's aged 16 to 17 years old were notified during the phone screen that it was preferred for a parent or legal guardian to attend the preprogram assessment to sign the participant information and informed consent form and allow the participant to continue in the research program. If a participant was determined to not have an appropriate and accessible parental or guardian figure to provide consent, or if the participant preferred not to have parent or guardian consent provided, researchers liaised with their worker about the participant's cognitive capacity, maturity and ability to make informed decisions to provide consent to participate in the project. The participant's capacity to be treated as a 'mature minor' was assessed at the pre-program assessment. This was completed by the following protocol:

- 1. The researcher described the project by going through the participant information and consent form.
- 2. The participant was provided time to read the participant information and consent form.
- 3. The participant was provided time to ask any questions.
- The researcher asked questions from the developed 'Mature Minor Assessment Tool' (see below) to assess their capacity to provide informed consent.

Participants who were able to provide a satisfactory response to questions asked in the 'Mature Minor Assessment Tool' were deemed to be capable of providing informed consent at that time as a 'mature minor' and written informed was obtained. Participants who were unable to provide a satisfactory response to the questions were deemed to be incapable of providing informed consent at that time, and the assessment was terminated.

Mature Minor Assessment Tool

Instructions: At the time consent is sought the researcher will ask the participant several questions from the list below to assess their capacity to provide informed consent and be considered a mature minor. The researcher should tick the "Yes" or "No" box to indicate if the participant sufficiently answered the question.

Questions:			
1. What is your understanding of the project?	□Yes □ No □ N/A		
2. What have you been asked to do in this research?	□Yes □ No □ N/A		
3. Will your involvement in this project affect your routine treatment in any way?	□Yes □ No □ N/A		
4. If you don't want to partake in the project, what will happen?	□Yes □ No □ N/A		
5. If you agree to participate in this project, can you stop at any time?	□Yes □ No □ N/A		
6. If you decide to initially partake in the project and then change your mind and decide to withdraw, who should you tell?	□Yes □ No □ N/A		
7. What is the main aim of this project?	□Yes □ No □ N/A		
8. What is the main risk related to being in this project?	□Yes □ No □ N/A		
9.How long will you be in the research project?	□Yes □ No □ N/A		
10. If you had any problems concerning this project, what should you do?	□Yes □ No □ N/A		
Assessment: 1. Does the individual express a choice about whether or not to participate?	Yes 🗌 No		
2. Does the individual understand the consequences of the project?	Yes 🗌 No		
3. Does the individual have the intelligence, understanding and appropriate emotion mature minor?	tional state to be considered a] No		
4. Does the individual have the decision-making capacity to give informed conse	nt? Yes 🗌 No		
Describe below the evidence that you have that the participant has given in considered a mature minor to participate in the project. Include comments/ participant along with information provided by any secondary source, e.g.	nformed consent and can be /questions made by the Case Manager, Psychiatrist		

If the participant is unable to provide a satisfactory response to the questions asked, then he or she is deemed to be incapable of providing informed consent at that time, and the consenting process will be terminated. The participant will not be able to participate in the project unless a parent or guardian consents.