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Development and Acceptability of Self-Guided Psychoeducational Videos for Use in Healthcare Waiting Rooms

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Abstract

Psychoeducation is a valuable component of the stepped care model, offering a low-intensity intervention that teaches coping strategies for psychological distress. Although substantial research supports the efficacy of psychoeducational interventions, there is limited investigation into the use of psychoeducational videos within healthcare waiting room settings. This thesis employed Doodly Animation Software to develop Self-Guided Psychoeducational Videos (SGPVs) in collaboration with key stakeholders and evaluated their acceptability as a low-intensity psychoeducational intervention for delivery in General Practice (GP) waiting rooms.

The research comprised four studies. The first involved a systematic scoping review of 20 studies examining stakeholder perceptions of animated videos as patient education tools. Across the included studies, sample sizes ranged from 13 to 8,179 participants, reflecting a broad evidence base. Findings demonstrated overall acceptability and highlighted the importance of design features such as concise length, humour, use of colour, and narrative storytelling, particularly for engaging individuals with lower health literacy and minority populations.

The second study developed and evaluated the SGPVs with 23 participants, comprising ten cancer patients (eight recruited through a Māori cancer support group), nine oncology healthcare workers, and four psychologists, to examine their acceptability and perceived usefulness within an oncology waiting room setting. Although the videos were well received,

participant feedback indicated that the intervention was better suited to a General Practice (GP) waiting room setting than an oncology waiting room, prompting a shift in the research focus.

The third study evaluated the revised SGPVs with 15 members of the general public in a GP waiting room context. Participants reported high levels of acceptability, and their feedback informed the final refinement of the videos prior to the quantitative evaluation.

The final study consisted of a quantitative survey of 169 members of the general public assessing the acceptability of, and interest in viewing, the SGPVs in GP waiting rooms. Subgroup analyses examined differences in acceptability and interest according to demographic characteristics, health literacy, and levels of psychological distress. Results demonstrated high levels of acceptability and interest in viewing the SGPVs, particularly among younger individuals and those with lower health literacy.

Overall, the findings suggest that SGPVs are a promising, acceptable, and engaging low-intensity psychoeducational intervention for GP waiting rooms. Their scalability and accessibility highlight their potential to improve mental health literacy, support self-management of psychological distress, and enhance access to early mental health intervention within a stepped care model.

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Preface

This thesis has been formatted in a style similar to a thesis by publication. The empirical studies are presented as separate chapters with their own method, results, and discussion sections to facilitate readability and future publication. At the time of submission, the scoping review chapter was under review for publication in a peer-reviewed journal. The remaining chapters had not been published or submitted for publication.

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Chapter 1 : Introduction

Recent research found that almost half of people in New Zealand will experience mental distress or illness in their lifetime (*Ministry of Health New Zealand Health Survey*, 2023). These findings emphasise the importance of addressing mental health challenges and ensuring accessible support services for all individuals in New Zealand. However, while psychological distress affects individuals from all walks of life, access to professional counselling or psychological services can be limited by various barriers (Tristiana et al., 2018).

To fully understand the challenges in accessing psychological services, the barriers' individuals face and the broader systemic issues that contribute to the growing disparity between demand and availability must be considered. These barriers can be multifaceted, ranging from financial constraints and stigmas to lack of awareness and inadequate resources (Salaheddin & Mason, 2016).

A significant challenge in mental health care is the growing disparity between the growing demand for services and the limited availability of those services. In New Zealand, like many other countries around the world, the demand for mental health services continues to grow at an unprecedented rate; this places significant strain on an already overburdened system that is struggling to meet the needs of its population due to a shortage of mental health professionals (Cunningham et al., 2018). According to government reports, between 2007 and 2017 the country experienced a 73% increase in people accessing resources with no corresponding increase in the workforce (Wilson & Nicolson, 2020). Furthermore, limited access to mental health services, especially in rural or underserved areas, can be a significant barrier for

individuals seeking psychological help. Long wait times, lack of transportation, and scarcity of mental health professionals can also hinder individuals from receiving timely care (Aguirre Velasco et al., 2020).

Another significant barrier to seeking psychological services is the cost associated with therapy or counselling (Dear et al., 2017). Although New Zealand provides publicly funded mental health services through the health system, access to these services is often limited by eligibility criteria, service thresholds, and long waiting times. Consequently, many individuals rely on private psychological services, which may not be covered by insurance and can involve substantial out-of-pocket costs. These financial barriers can deter individuals from seeking timely support, increasing the risk of untreated mental health difficulties (Aguirre Velasco et al., 2020; Elshaikh et al., 2023; Salaheddin & Mason, 2016).

In addition to these practical barriers, stigma surrounding mental health remains a prevalent barrier that prevents individuals from seeking psychological services (Aguirre Velasco et al., 2020; Elshaikh et al., 2023; Hood et al., 2021; Salaheddin & Mason, 2016). Fear of judgment, societal stigma, and negative perceptions of mental health services can deter individuals from acknowledging their mental health struggles and seeking professional help (Aguirre Velasco et al., 2020). A survey from 2018 indicated that New Zealanders felt more comfortable having a neighbour from a different ethnicity than having a neighbour with a mental illness, highlighting the existing stigma surrounding mental health (Wilson & Nicolson, 2020).

To address some of these barriers, stepped care models have emerged as a promising framework for delivering mental health services (Berger et al., 2022). Stepped care is a model of service delivery that involves matching the intensity of interventions to the individual's needs (van Straten et al., 2015). In a stepped-care approach, individuals are initially offered low-

intensity interventions, such as psychoeducational materials or self-help resources to help them manage their own health and well-being, with the option to "step up" to more intensive interventions if needed, such as in person therapy (Salmon et al., 2023). Offering low-intensity interventions can help avoid the need for more expensive intensive options as well as prevent deterioration by providing early intervention (Cunningham et al., 2018). This tiered approach allows for more flexible and responsive delivery of care, ensuring that resources are allocated efficiently and that individuals receive the level of support that is most appropriate for their needs. Figure 1 below shows the stepped care model.

Figure 1 *Mental Health Stepped Care Model*



Note. A stepped care approach to mental health service planning. From "PHN Mental Health Flexible Funding Pool Programme Guidance: Stepped Care," by Australian Government Department of Health, 2019, P. 8.

Stepped-care models have demonstrated effectiveness in enhancing access to mental health services, reducing wait times, and optimising the use of limited resources (van Straten et al., 2015). This approach is recommended for increasing both the accessibility and efficacy of

mental health care, as many individuals respond well to low-intensity treatments and do not require more intensive or costly interventions (Salmon et al., 2023).

Psychoeducation can serve as an initial intervention within the Stepped Care Model, supporting self-management and early engagement with mental health support. It has gained increasing recognition as an accessible and convenient resource for individuals experiencing psychological distress (Kolaas et al., 2023). Psychoeducation is a therapeutic approach that encompasses information sharing, problem-solving, and various coping skills training. By employing a multifaceted strategy, it empowers individuals with the knowledge and skills necessary to self-manage their mental health (Sarkhel et al., 2020). The underlying premise of psychoeducation is that educating individuals about mental health conditions, coping strategies, and evidence-based interventions can enhance their understanding of their experiences and provide them with a sense of control over their overall well-being (Motlova et al., 2017).

Supported by a robust body of empirical research, psychoeducation has consistently shown its effectiveness in improving mental health outcomes across diverse populations and settings (Brady et al., 2016; Dolan et al., 2021; Salcedo et al., 2016; Uchino et al., 2012). It equips individuals with practical tools and guidance to help them manage their mental health challenges, including self-help strategies (Gould et al., 2017). Low-intensity interventions like psychoeducation are particularly beneficial for individuals experiencing mild to moderate mental health issues, as they provide more generalised treatment options for those with less complex difficulties (McEvoy et al., 2021).

As the mental health field progresses through advancements in technology, the role of psychoeducation is undergoing transformative shifts, where individuals can access a plethora of mental health resources and self-guided educational tools (Bond et al., 2023). By harnessing the

accessibility and scalability of digital technologies, psychoeducation can extend its reach to a broader audience, including those in underserved or remote communities, empowering individuals to adopt a proactive stance toward their mental health and well-being (Jones et al., 2019; Mohd Khairi et al., 2024; H. Wang et al., 2024; Yang et al., 2023).

Moreover, psychoeducation can be delivered via a video format. Psychoeducational videos are educational resources that combine psychological principles with visual media to deliver information in a clear and engaging format (Sarkhel et al., 2020). By delivering information in a visual and auditory format, psychoeducational videos can overcome literacy challenges, making mental health information more accessible to a wider range of individuals (Ito-Jaeger et al., 2022). Additionally, the interactive and engaging nature of videos can increase viewer engagement and retention of key messages, leading to better outcomes in terms of knowledge retention and behaviour change (Mayer, 2005). By promoting self-care strategies, coping skills, and resilience-building techniques, psychoeducational videos empower individuals to take proactive steps towards managing their mental health and well-being, potentially reducing the overall demand on mental health services in the long run (Berger et al., 2022).

Psychoeducational videos can also be delivered by self-guided formats, offering individuals the flexibility to engage with mental health resources independently. Self-guided interventions are when the user engages with interventions on their own without any additional support or guidance from a trained professional. The advantages of these interventions include an increased sense of empowerment for the user as well as increased flexibility and autonomy compared to a guided approach or in person therapy (Ebert et al., 2017). As a result, self-guided interventions are not limited by the capacity and volume of therapist or practitioner support and can be simultaneously used by multiple people (Edge et al., 2023). Research has shown that self-

guided mental health interventions, including psychoeducational videos, can be as effective as traditional face-to-face interventions in preventing and alleviating symptoms of anxiety and depression. These findings highlight the potential of self-guided interventions to complement and even surpass the outcomes of clinician-guided treatments, especially in terms of scalability, accessibility, and cost-effectiveness (Bisby et al., 2024; Dear et al., 2017; Edge et al., 2023).

A potential setting to deliver self-guided psychoeducational videos (SGPVs) are General Practice (GP) waiting room settings. Delivering SGPVs in GP waiting rooms can reach a broad and captive audience (Harding et al., 2005). Waiting rooms are often populated by individuals who are already facing various health concerns, including psychological distress. By providing these videos in such a setting, healthcare providers can effectively target a captive audience that is likely to benefit from mental health resources (Harding et al., 2005). The integration of SGPVs in GP waiting rooms represents an innovative approach to increasing access to psychological resources for individuals who may not otherwise seek help from a psychologist or counsellor due to stigma, or for those who prefer self-help resources (Dahne et al., 2019). Providing SGPVs in waiting rooms can enhance access to mental health education and strategies at their convenience.

It may also benefit those who choose not to engage with in-person services. A study conducted in 2006 found that a significant number of individuals expressed potential embarrassment when considering seeking assistance from mental health experts (Barney et al., 2006). Additionally, some participants anticipated receiving unfavourable reactions from professionals in this field (Barney et al., 2006). Patients waiting for appointments are in a unique position to engage with content that addresses their mental health needs. This setting reduces the barrier of entry as individuals can absorb information passively while waiting for their appointment (Edge et al., 2023).

In summary, SGPVs that teach coping strategies for general psychological distress present a low-intensity option for individuals who may be hesitant to engage with in-person mental health care services. As noted, stigma surrounding mental health issues can deter individuals from seeking help (Berger et al., 2022). By utilising self-guided videos, people can explore coping strategies privately, without the fear of judgment that might accompany attending clinics and in-person therapy. This anonymity can encourage individuals to take the first steps toward managing their mental health (Berger et al., 2022). Furthermore, with the shortage of mental health professionals, self-guided psychoeducational videos can serve as a supplementary resource, providing immediate support to those in distress while alleviating some of the pressure on traditional services (Edge et al., 2023).

Research Aims

This thesis targets the general public and healthcare workers in New Zealand and examines the acceptability of delivering self-guided psychoeducational videos (SGPVs) in General Practice (GP) waiting rooms. The videos were designed to teach coping strategies for general psychological distress and to resonate with a lay audience, including people with low health literacy.

Initially, the goal of this research was to create psychoeducational videos tailored for cancer patients, specifically to be shown in oncology waiting rooms. However, challenges were encountered during the pilot study that prevented the study from moving forward as initially planned. One of the primary objectives of pilot studies is to assess their feasibility, which heavily relies on the successful recruitment of participants (In, 2017). Unfortunately, the researcher was unable to gather a sufficient number of cancer patients to provide the feedback necessary for this research.

Compounding this issue, the screens designated for showcasing the videos in the oncology waiting rooms malfunctioned and there was a significant delay in remedying the issue, further stalling the research project. Faced with these setbacks, the researcher took the opportunity to reevaluate the target population. Rather than targeting cancer patients, the focus was shifted to the general population, and the utilisation of the SGPVs in general practice (GP) waiting rooms. The videos were originally developed to teach general coping strategies for managing distress, making them versatile enough to be utilised across various healthcare settings and waiting rooms. This flexibility meant that the video content did not need to be modified to cater to a different target audience, allowing for the redirection of the research strategy to a GP waiting room setting.

Thesis structure

The remainder of this thesis comprises a literature review, four studies, and a general discussion that integrates the findings across the research programme. Chapters Two through Five present the literature review, which establishes the theoretical and empirical foundations for the research and outlines the evidence underpinning the development of the self-guided psychoeducational videos (SGPVs).

Chapter Six presents Study One, a systematic scoping review examining stakeholder perceptions of animated videos as patient education tools. The findings informed the design principles and development of the SGPVs. Chapter Seven presents Study Two, which describes the development of the SGPVs and their evaluation with cancer patients, oncology healthcare workers, and psychologists. Feedback from this study informed revisions to the intervention and identified that the videos were better suited to a general practice (GP) waiting room setting than an oncology setting. Chapter Eight presents Study Three, which evaluated the revised SGPVs

with members of the general public in a GP waiting room context. Participant feedback informed the final refinement of the videos prior to quantitative evaluation. Chapter Nine presents Study Four, a quantitative survey examining the acceptability of, and interest in viewing, the SGPVs among members of the general public. Finally, Chapter Ten integrates the findings from all four studies, discusses their implications for research and clinical practice, and provides concluding remarks.

Chapter 2 : Primary Care as a Gateway for Mental Health Promotion

The Need for Integrating Mental Health Care into Primary Healthcare in New Zealand

Health is now widely recognised as encompassing both physical and mental well-being. The World Health Organization has acknowledged health as "a state of complete physical, mental and social well-being," emphasising that mental health is an integral component of overall health (Armitage, 2023). Despite this recognition, many primary healthcare systems around the world, including New Zealand, continue to prioritise physical health, often neglecting the mental health needs of their populations (Cumming, 2011). Given the high prevalence of mental disorders that are responsible for reduced quality of life, increased mortality, and substantial social and economic costs, this oversight cannot be sustained (Cunningham et al., 2018; Gong et al., 2022).

The core rationale for integration is clear: primary healthcare is the most accessible and acceptable point of contact for individuals, families, and communities (Funk et al., 2008). Moreover, because primary care facilities are often located within communities, they help reduce indirect costs such as transportation and lost productivity, making mental health support more affordable and sustainable for patients, families, and the wider health system (Funk et al., 2008).

Stigma is another barrier that deters many from seeking specialised mental health services. Because primary care services are not associated with specific mental health conditions, they tend to be less stigmatised, which encourages more individuals to be receptive to mental health interventions without fear of discrimination (Funk et al., 2008).

Improving Outcomes Through Integration

The relationship between physical and mental health is well established, with evidence demonstrating a bidirectional influence between the two. Improvements in physical health have been associated with enhanced mental well-being, while chronic physical conditions, disability, and sleep disturbances are linked to increased risk of anxiety, depression, and reduced self-esteem (Akbar et al., 2022; Zhang & Sun, 2024). Furthermore, individuals with severe mental illness experience significantly higher rates of early mortality, largely due to comorbid physical conditions such as cardiovascular disease, underscoring the inseparability of physical and mental health outcomes (McCarthy et al., 2014)

In this context, primary care and general practice in particular - plays a critical role. GPs are often the first point of contact for individuals experiencing both physical and psychological distress and already manage a substantial proportion of mental health presentations, including anxiety, depression, and stress-related concerns (Funk et al., 2008). Delivering mental health education within GP settings therefore aligns with existing care pathways and may help to normalise mental health discussions, reduce stigma, and increase early engagement with support (Funk et al., 2008). However, despite their central role, GPs frequently face significant time constraints and may have limited specialist training in mental health interventions, restricting their capacity to provide in-depth psychological care (Wolff et al., 2010).

In New Zealand, these challenges are compounded by a shortage of specialist mental health professionals, resulting in long wait times and limited access to care (Cunningham et al., 2018). Consequently, scalable, low-intensity strategies such as psychoeducational interventions delivered within primary care environments represent a pragmatic and complementary approach to supporting population mental health.

The Role of Stepped Care and Psychoeducation

As previously discussed, a promising strategy for addressing gaps in mental health service provision is the implementation of a stepped care model, which emphasises delivering the right level of intervention based on an individual's needs. This tiered approach promotes resource efficiency by prioritising low-intensity interventions - such as psychoeducational programmes and self-help resources as first-line supports, while reserving more intensive and specialised services for those with higher levels of distress. These low-intensity interventions can be effectively delivered within primary care settings, including healthcare waiting rooms, where existing wait times can be utilised to provide accessible mental health education, coping strategies, and early support. Within this framework, self-guided psychoeducational videos (SGPVs) represent a practical, scalable intervention that aligns closely with the principles of stepped care.

Self-Guided Psychoeducation

The use of self-help strategies for managing mental health has grown in popularity over the years (Beatty & Lambert, 2013; Norcross, 2000). While the public generally believes in the effectiveness of counselling, few individuals with depression actually pursue it in practice (Jorm et al., 2004; Lauber et al., 2005; Roness et al., 2005). Self-help strategies, which include information and skill development for coping and self-managing symptoms are often preferred for several reasons including lower costs, easier access, and reduced stigma associated with psychiatric services (Marley, 2011; Norcross, 2000).

Self-help treatments can be categorised into "self-guided", which involves no professional involvement, and "guided" self-help, which includes professional facilitation (Gellatly et al., 2007; Khan et al., 2007). Self-guided mental health interventions, including

psychoeducational videos, have shown promise in addressing mild to moderate symptoms of anxiety and depression. A systematic review and meta-analysis by Edge et al. (2023) revealed that these interventions can reduce the onset of depression by 33% compared to controls among a general population, demonstrating clinically meaningful benefits for preventing depression among the general population. Additionally, Bisby et al. (2024) found that self-guided internet-delivered treatment for anxiety and depression among the general population can lead to similar clinical benefits as therapist-guided treatments, with no significant difference in the occurrence of sudden gains between the two groups. The study highlights the public health potential of self-guided interventions, especially as a low-intensity first step for mental health intervention.

Similarly, Dear et al. (2017) compared clinician-guided and self-guided internet-delivered interventions for young adults with anxiety and depression, finding no significant differences in symptom improvement between the two formats and reporting high satisfaction rates in both groups. These findings suggest that self-guided mental health interventions can reduce symptoms of anxiety and depression and, in some studies, have demonstrated outcomes comparable to clinician-guided treatments. However, findings across the literature are mixed, and guided interventions may remain more appropriate for individuals with greater symptom severity or more complex presentations. Nevertheless, self-guided interventions offer important public health advantages due to their scalability, accessibility, and lower resource requirements.

These studies highlight the potential of SGPVs as valuable tools to teach coping strategies for managing psychological distress. These videos can provide practical guidance on stress management techniques, relaxation exercises, mindfulness practices, and problem-solving skills to help individuals build resilience, improve emotional well-being, and navigate challenges more effectively in their daily lives (Bond et al., 2023). SGPVs can offer a way for psychological

interventions to be implemented while maintaining anonymity (Ebert et al., 2017). For individuals experiencing mild to moderate psychological distress, SGPVs may reduce reliance on higher-intensity services by providing accessible, low-intensity support that can be used independently. Consequently, they have the potential to reduce healthcare costs associated with therapist time and service delivery while increasing access to evidence-based psychological support (Paganini et al., 2018). Importantly, SGPVs are intended to complement, rather than replace, clinician-delivered interventions for individuals with more severe or complex mental health needs. By allowing users to engage with interventions without the need for professional guidance, psychoeducational videos may promote autonomy, flexibility, and self-management among individuals experiencing mild to moderate psychological distress (McEvoy et al., 2021). Their scalability, relatively low cost of implementation, and ability to be delivered to large numbers of individuals without ongoing clinician involvement make them particularly well suited as first-line interventions within stepped-care models and public health settings (Emmelkamp et al., 2014).

SGPVs also have the potential to be a valuable tool for improving mental health literacy due to their accessibility, engaging format, and ability to disseminate mental health information in a visually compelling manner. Mental health literacy is defined as understanding how to obtain and maintain positive mental health, understanding mental disorders and their treatments, decreasing stigma related to mental disorders, and enhancing help-seeking efficacy (Carvalho et al., 2022; Kutcher et al., 2016). Mental health literacy comprises several key components, including recognising the signs and symptoms of mental health disorders in oneself and others, understanding the causes, risk factors, and treatments of various mental health conditions,

knowing how and where to seek help for mental health concerns, challenging stigma and misconceptions surrounding mental health disorders (Kutcher et al., 2015).

Enhancing mental health literacy has numerous benefits for individuals and society as a whole. It can lead to improved mental health outcomes, reduced stigma, increased help-seeking behaviours, and better overall well-being (Sampaio et al., 2022). Individuals with higher levels of mental health literacy are better equipped to recognise early signs of mental health issues, seek appropriate support, and engage in self-care practices. This can lead to improved mental health outcomes, reduced distress, and enhanced quality of life (Carvalho et al., 2022).

According to Bjørnsen et al. (2017), mental health literacy has evolved from focusing on mental illness and risk factors to promoting mental wellness that can be strengthened by education initiatives. SGPVs therefore have the potential to improve mental health literacy due to their accessibility, engaging format, and ability to disseminate mental health-related information in a visually compelling manner. Janoušková et al., 2017). These videos can cover a wide range of topics, from common mental health disorders to coping strategies and available resources (Salganik, 2019) that can increase mental health literacy.

Delivering SGPVs in a Healthcare Waiting Room

As previously noted, the general practice (GP) setting presents a valuable opportunity for disseminating self-guided psychoeducational videos, effectively utilising the time patients spend in the waiting room. According to Barlow (2002) the average amount of time spent in a physician's waiting room varies between 19 and 50 minutes; this time could be effectively utilised by providing SGPVs in the waiting room setting. Furthermore, patients are likely to view their General Practitioners and the information provided by their practices as reliable and

trustworthy, making the GP waiting room an ideal setting for delivering educational material (Penry Williams et al., 2019).

Previous research has found patients are positive about health information in the waiting room (Moerenhout et al., 2013). A study by Penry Williams et al. (2019) found televised health 'infotainment' content received the most positive feedback among the available materials in GP waiting rooms. The authors attributed these findings to the visually engaging presentation of the televised information and the range of health topics covered. Another study found over half of participants in waiting rooms with TV screens stated that they usually watched it (Maskell et al., 2018). Given this positive reception, TV screens could be effectively utilised to deliver SGPVs, enhancing patient engagement and education during their wait.

Existing evidence suggests that the waiting room experience is related to patient satisfaction (Dansky & Miles, 1997; Oermann, 2003; Oermann et al., 2001). When aligned with patient-centred care, the availability of educational materials can enhance overall health awareness and contribute to higher levels of patient satisfaction (Gignon et al., 2012; Sherwin et al., 2013). On the other hand, longer wait times are related to lower satisfaction; however, if the patient is occupied during the wait time, the satisfaction increases significantly, even if the amount of wait time remains unaltered (Oermann et al., 2001). For example, research from Oermann et al. (2001) found that patients who watched an educational video on glaucoma in an ambulatory care clinic were more satisfied with the care they received compared with patients who received routine care. Another study by Papa et al. (2008) created an instructional waiting room video explaining what patients can expect during their visit to their emergency department. Satisfaction scores were significantly higher in the group who watched the video compared with the control group. Taken together, these findings reflect the potential of the waiting room as a

setting to deliver health related educational material as well as improving satisfaction among patients.

While previous research has focused on using the GP waiting room to deliver health information, the waiting room setting could also be used to deliver psychological educational material to improve well-being. Due to time constraints, physicians tend to spend the bulk of their time eliciting and attending to physical signs and symptoms. Consequently, many patients have reported feeling rushed during their clinical encounter with physicians and view this as a barrier to asking advice about psychological concerns (Wolff et al., 2010). Additionally, delivering mental health content in a public space like a waiting room may help reduce the stigma surrounding mental health issues, encouraging open conversations, and destigmatising help-seeking behaviours (Edge et al., 2023)

To the researcher's knowledge, there is only one study that examines the use of a psychoeducational video to promote psychological health in a waiting room setting; however, the study was carried out in a psychiatric waiting room. Naeem et al. (2019) developed a brief psychoeducational video intervention and delivered it in a psychiatric waiting room calling the programme RESOLVE (Relaxation Exercise, SOLving problem and cognitive Errors). The content begins with an explanation of breathing exercises and the fight or flight system. The remainder of the video continues to be centred around a fictional character who uses problem solving techniques to solve a financial problem; the narrator then goes on to explain common cognitive errors. The entirety of the video was brief, only lasting 8 mins 38secs and the video was delivered via electronic media such as a television screen. All participants continued to receive treatment as usual. Those who received the intervention showed improvements in

depression, anxiety and general psychopathology and were also found to seek less professional help compared to those who did not receive the intervention.

This study provides preliminary evidence supporting the potential effectiveness of a single-session psychoeducational intervention delivered via digital media for use in healthcare waiting room settings. However, as this was the first study of its kind, further research is required to replicate and validate these findings using larger and more diverse samples. Additionally, participants viewed the video in a quiet room adjacent to the waiting area rather than within the waiting room itself, limiting conclusions about attentional engagement and receptivity in real-world waiting room environments. Future studies should therefore examine the acceptability and impact of such interventions when delivered in situ to better reflect routine clinical conditions.

Although the current research ultimately focuses on the acceptability of SGPVs within GP waiting rooms among the general population, it is important to acknowledge the study's original focus on cancer patients and the continued relevance of this population. While previous research by Naeem et al. (2019) examined psychoeducational interventions within psychiatric waiting rooms, similar approaches can be extended to other healthcare settings, including GP waiting rooms. Additionally, GP settings are frequently accessed by individuals across the cancer care continuum, including those undergoing investigation, receiving treatment, or managing long-term effects following diagnosis. As such, integrating psychoeducational videos into GP waiting rooms not only broadens access to mental health education for the general public but also provides a valuable opportunity to support cancer patients who may experience psychological distress outside of specialist oncology services.

SGPVs and Cancer Patients

The incidence of cancer worldwide has been increasing with new cases expected to rise by approximately 70% in the next two decades (Laskowska, 2021). One-third of cancer patients will experience difficulties with their mental health; undertreatment of psychological needs has been estimated to occur in up to 40-90% of cases, making the psychological domain the highest unmet need for cancer patients (Schellenkens et al., 2020). Thus, interest in the psychological wellbeing of cancer patients has been steadily increasing, resulting in oncology treatment being not only concerned with how long someone lives, but also their quality of life (González-Fernández et al., 2018).

There is substantial evidence that untreated mental health difficulties can negatively affect cancer treatment outcomes. Poor psychological health has been associated with worse physical health, increased symptom burden, reduced adherence to treatment regimens, longer hospital stays, and lower survival rates among cancer patients (Laskowska, 2021).

The association between psychological distress and cancer survival warrants particular attention. Elevated levels of psychological distress, particularly depression, have been linked to increased mortality among individuals with cancer. In a meta-analysis conducted by Satin et al. (2009), the authors examined whether commonly held beliefs regarding the influence of psychological factors on cancer progression were supported by empirical evidence. Notably, 71% of oncologists and 85% of cancer patients endorsed the view that psychological variables influence cancer outcomes. Focusing on depression - the most extensively studied psychological construct in cancer mortality research - the meta-analysis found that cancer patients experiencing depression had mortality rates up to 39% higher than those without depression.

Plausible explanations exist for both behavioural and biological pathways to explain the connection between depression and increased mortality in cancer patients (Satin et al., 2009; Sun et al., 2015). For example, individuals experiencing depression may be less likely to attend cancer screening programmes, seek medical care, or consistently attend and maintain treatment regimens. Additionally, physical symptoms of depression such as fatigue, weight loss, and sleep disturbances may mask or obscure underlying cancer symptoms, potentially contributing to delays in diagnosis and treatment initiation. After behaviour has been accounted for, depression may have an independent effect on mortality among cancer patients with biological factors influencing cancer progression such as depression's effect on the immune response (Satin et al., 2009; Sun et al., 2015).

These studies indicate that psychological distress is associated with an elevated risk of mortality in cancer patients. Therefore, integrating psychological support and interventions into cancer care is essential for improving overall quality of life and may even improve physical health outcomes as well as survival rates of those affected by cancer (Sun et al., 2015). Consequently, it is important to address the mental health needs of cancer patients not only to improve psychological outcomes, but also physiological outcomes and to decrease costs to the public health care system.

Institutional Challenges in Addressing Cancer-Related Psychological Distress

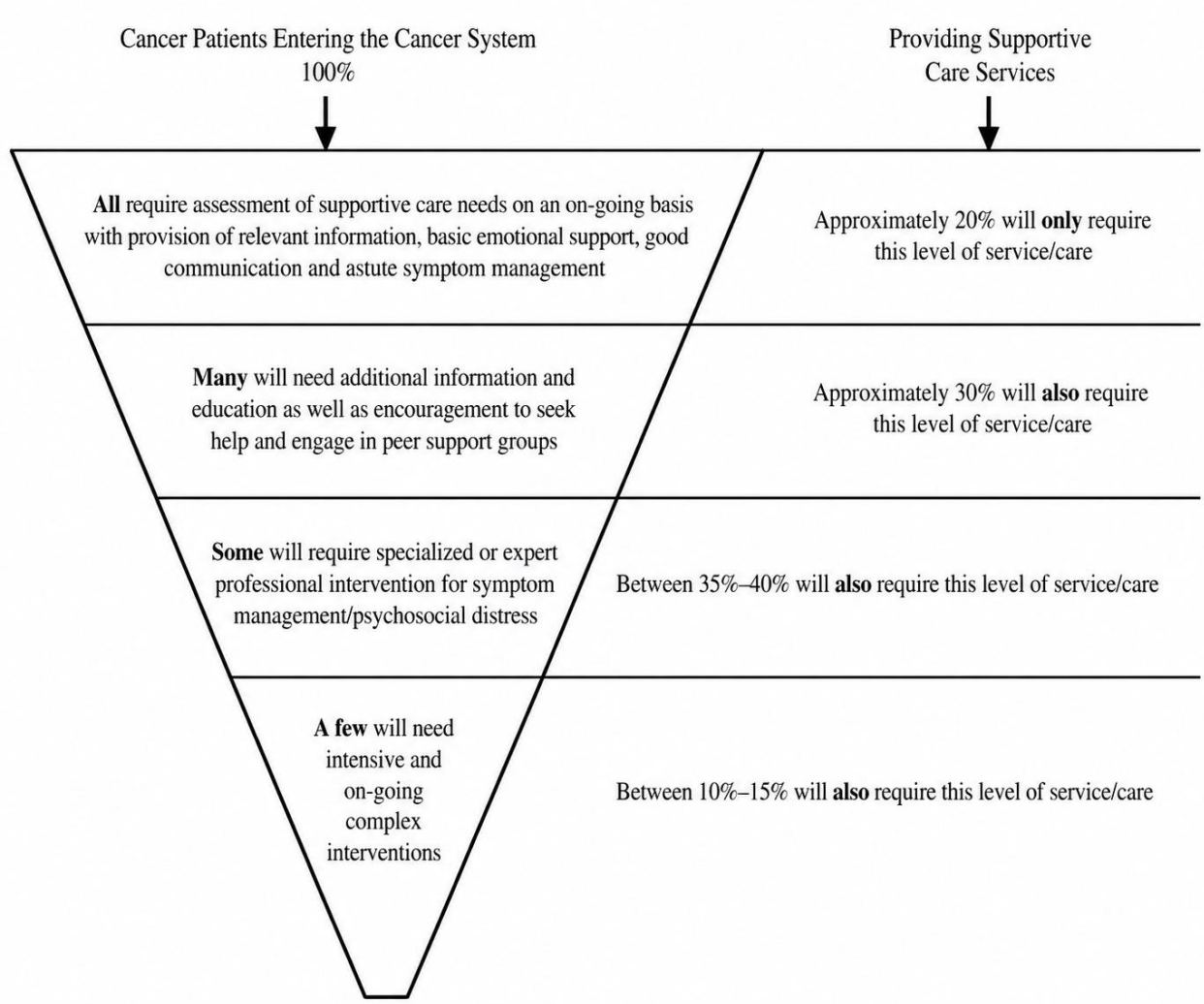
On an institutional level, the issue in trying to meet the psychological needs of cancer patients is one of pragmatics. Some literature suggests meeting the mental health needs of cancer patients by implementing psychological services in hospitals and employing psycho-oncologists to deliver care (Schuit et al., 2021). However, as psychological issues affect up to a third of cancer patients, providing psychological services to one-third of cancer patients would prove

difficult to implement due to limited resources and the costs to deliver such care (Singer, 2018). Low intensity interventions such as psychoeducation can be used to help cancer patients with mild to moderate mental health concerns by providing them with tools to self-manage their own distress, preventing the need for higher level interventions such as psychotherapy or medication (van Straten et al., 2015).

Fitch (2008) and colleagues developed the Supportive Care Framework to address the multidimensional needs of cancer patients, recognising that cancer impacts not only physical health but also emotional, psychological, social, economic, and spiritual well-being. Central to this framework is the recognition that all cancer patients have psychological needs related to coping with the illness and its consequences. Fitch proposes that for most patients, these needs can be effectively addressed through psychoeducation, which supports the development of coping and problem-solving skills and promotes psychological adjustment. By equipping individuals with tools to manage distress early, psychoeducation may reduce the progression to more severe psychological difficulties that require intensive interventions.

This framework aligns closely with the stepped care model (Figure 2), which emphasises matching the intensity of intervention to the level of need. Within this approach, psychoeducation functions as a low-intensity, first-line intervention for individuals experiencing mild to moderate distress, while reserving higher-intensity treatments such as psychotherapy or pharmacological interventions for those with more complex or persistent needs (van Straten et al., 2015).

Figure 2 *Fitch's Supportive Care Framework*



Note. Model of Supportive Care service provision. From "Supportive care framework" by M. I Fitch, 2008. *Canadian Oncology Nursing Journal, 18*(1), p.12.

SGPVs can play a valuable role in providing support and coping strategies for psychological distress among cancer patients by serving as a form of stepped care, providing accessible and scalable support to patients at different stages of their cancer journey. By offering educational content on coping mechanisms and stress management techniques, these videos can

empower patients to better navigate their emotional challenges and enhance their coping skills (van Straten et al., 2015).

In terms of site of delivery, cancer patients often visit their GPs for various healthcare needs, including support for psychological distress related to their condition. Consequently, delivering psychoeducational videos in GP waiting rooms could serve as an accessible and beneficial means of supporting cancer patients from the early stages of diagnosis. SGPVs offer a low-intensity intervention for cancer patients experiencing mild to moderate psychological distress by providing coping and problem-solving strategies that support self-management. Delivered within primary care settings, such interventions have the potential to reduce reliance on higher-intensity services while promoting holistic well-being and improving both psychological and physical health outcomes.

SGPVs and Māori

In addition to potentially benefiting cancer patients, this approach may hold particular promise for Māori, who often face barriers to accessing traditional mental health care. By delivering culturally relevant psychoeducational content, SGPVs have the potential to empower Māori individuals with coping strategies, thereby improving their mental health literacy and access to resources.

Māori are the tangata whenua (indigenous people) of Aotearoa (New Zealand); they possess unique traditions and beliefs, with distinct social, economic, political, and cultural practices that set them apart from non-Māori (Rihari, 2022). In New Zealand, Māori face significant barriers to accessing adequate mental health support, contributing to disparities in psychological well-being (Hamley & Grice, 2021). Research indicates that Māori with mental illnesses receive less support than their non-Māori counterparts, with Māori adults being

admitted to psychiatric hospitals at twice the rate of non-Māori. They are also more frequently committed under the Mental Health Act and often do not seek help until their conditions have severely escalated. Delays in diagnosis further complicate their access to treatment (Baxter et al., 2006). Māori experience a higher lifetime prevalence of mental health disorders compared to non-Māori populations. Additionally, individuals living in areas of greater socio-economic deprivation are more likely to experience psychological distress than those residing in less deprived areas (Rihari, 2022). Due to various factors, many Māori live in poverty and low socioeconomic conditions, increasing their vulnerability to mental illness (Menzies et al., 2020).Furthermore, the unequal access to and lack of cultural safety in mental healthcare contribute to poorer health outcomes for Māori compared to non-Māori (Cunningham et al., 2020)

The colonial history of Aotearoa has also contributed to enduring health disparities between Māori and non-Māori, with significant impacts on employment, education, and healthcare access. The colonial history of Aotearoa has contributed to enduring health inequities between Māori and non-Māori, with long-term impacts on employment, education, socioeconomic conditions, and access to healthcare (Graham & Masters-Awatere, 2020; Palmer et al., 2019; Reid et al., 2019). Literature also identifies institutional racism, inequitable access to culturally safe services, and the ongoing effects of colonisation as important contributors to disparities in mental health outcomes and barriers to accessing mental healthcare for Māori (Cunningham et al., 2020; Palmer et al., 2019; Reid et al., 2019).

Psychoeducation is increasingly acknowledged as an effective tool for improving mental health and well-being across diverse populations, including Māori (Houston et al., 2011; Kreuter et al., 2007; Larkey et al., 2009; Murphy et al., 2013). While traditional mental health

interventions have been important in addressing these challenges, there is a growing emphasis on innovative approaches tailored to meet the unique mental health needs of Māori (Hamley & Grice, 2021). By providing culturally relevant information in accessible formats, initiatives like SGPVs can engage individuals who might struggle with conventional mental health support.

Mental healthcare in Aotearoa has historically been influenced by Western models of psychological assessment and treatment, which may not always align with Māori understandings of health and well-being (Palmer et al., 2019). Increasingly, there is recognition that effective mental healthcare should be both evidence-based and culturally responsive, incorporating Māori models of health alongside established psychological approaches (Black & Huygens, 2007; Durie, 1985). Rather than viewing these approaches as competing systems of knowledge, contemporary practice emphasises integrating evidence-based psychological interventions with Māori values, beliefs, and models of well-being to improve cultural safety, engagement, and health outcomes (Black & Huygens, 2007).

One of the most influential Māori models of health is Te Whare Tapa Whā, developed by Durie (1985). This model portrays health as a four-sided meeting house, with each side representing a different dimension: spiritual health, mental health, physical health, and family health. When all dimensions are in balance, individuals can thrive; however, imbalances in one or more areas can affect overall well-being (Rochford, 2004). The practice of showing SGPVs in a GP waiting room can help to reinforce the Māori worldview of the interconnectedness between physical health and mental health, as emphasised in models like the Te Whare Tapa Wha framework. Displaying these videos in a healthcare setting that traditionally focuses on physical well-being can help to bridge the gap between physical and mental health care and promote a more comprehensive approach to patient wellness. Integrating mental health content into general

practice waiting rooms acknowledges the intrinsic connection between physical and mental well-being. Importantly, aligning psychoeducational interventions with Māori health values may increase cultural acceptability, foster greater comfort with mental health content, and support increased engagement among Māori patients.

In summary, SGPVs can deliver key messages about mental health, coping strategies, and available support services in an engaging and easy-to-understand format, and have the potential to enhance Māori patients' knowledge and self-efficacy in managing their mental well-being. Collaboration with Māori community members, and cultural advisors is vital to ensuring that psychoeducation initiatives are culturally respectful and appropriate (Wilson et al., 2021). SGPVs that incorporate Māori cultural values such as the Te Whare Tapa Wha framework can empower Māori to take an active role in their mental health, fostering a sense of agency and self-determination.

Chapter 3 : Theoretical Foundations and Evidence-Based Approaches in Psychoeducational Video Development

The upcoming section of this literature review explores the theoretical frameworks and literature that informed the development and evaluation of the self-guided psychoeducational videos (SGPVs). Specifically, it examines the rationale for adopting a narrative approach, the evidence supporting the use of animations and whiteboard animation, and the evidence-based coping strategies incorporated into the videos. The development and evaluation of the SGPVs were informed by several complementary theories, models, and frameworks, each contributing to a different aspect of the research, including the rationale for the intervention, the design and presentation of the videos, the selection of coping strategies, and the evaluation of stakeholder acceptability. Table 1 provides an overview of the role of each theory, model, and framework within the current research.

Table 1 *Summary of the Theories, Models, and Frameworks Informing the Development and Evaluation of the SGPVs*

Theory / Model / Framework	Role in the Research
Stepped Care Model	Provided the rationale for a scalable, low-intensity intervention.
Narrative Theory	Guided the development of engaging, story-based psychoeducational videos.
Cognitive Theory of Multimedia Learning	Guided the design and presentation of the animated educational content.
Health Literacy Principles	Guided the development of accessible and easy-to-understand psychoeducational materials.
Cognitive Behavioural Therapy (CBT) and Acceptance and Commitment Therapy (ACT)	Informed the coping strategies taught within the videos.
User-Centred Design	Guided the iterative development and refinement of the videos through stakeholder feedback.
Theoretical Framework of Acceptability	Guided the evaluation of stakeholder acceptability of the intervention.

Narrative approach

Storytelling is the longest standing form of human communication and knowledge transfer; from the earliest myths to contemporary story-based podcasts, humans have been using narratives to explain the world around them (Davies et al., 2019). Stories can function as

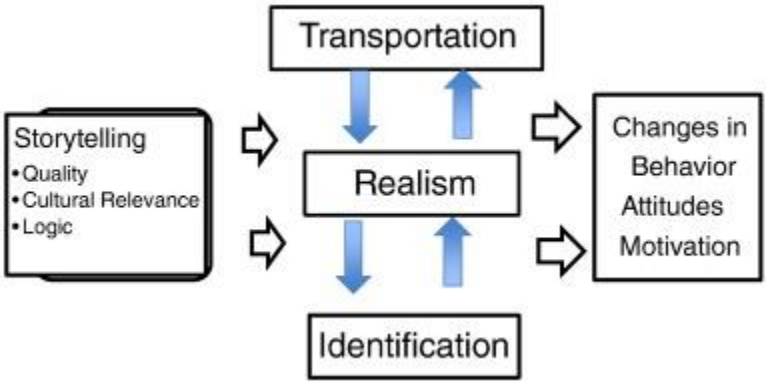
cornerstones for learning, providing both the context for understanding and internalising new information as well as a framework for remembering what we learn (Schneider et al., 2023).

Two cognitive theories explain how the use of stories (narratives) can improve learning. The schema theory developed by Bartlett (1995) proposes that individuals encode information in a narrative format, which he refers to as a schema. A schema comprises of cognitive structures that help individuals make sense of their worlds by storing knowledge about various events, concepts, or situations. Schemas are stored as knowledge units and help guide how new information is understood and interpreted. On the other hand, the script theory, developed by Schank and Abelson in the 1970s (Schank & Abelson, 2013), is a cognitive framework that proposes individuals organise and understand everyday information through "scripts." Scripts involve sequences of actions such as situations, conditions, or roles such as going to a party or riding a train. When individuals encounter situations that resemble stored scripts, they can anticipate what will happen. Scripts can help people process information more efficiently and make inferences about events with incomplete information. In other words, scripts allow people to "fill in the gaps" and create meaning out of stories. This helps to streamline information and alleviate the load on working memory, fostering active learning and engagement.

Bartlett's schema theory and Schank and Abelson's script theory help to explain how narratives improve engagement and recall, thereby fostering learning (Schneider et al., 2023). Both schemas and scripts can provide cognitive frameworks that individuals can draw on when interpreting plots or characters within narratives which can enhance comprehension and relatability. Narratives can be thought of as cognitive scaffolding for transferring knowledge that can help to improve memory and comprehension (Dickey, 2006).

According to Narrative Theory, storytelling affects changes in the listener's behaviour, attitudes, and motivation through the interactions of transportation, identification, and realism (Figure 3) (Haeok Lee et al., 2016). The concept of transportation is drawn from transportation theory (Green & Brock, 2000), which provides a foundation for the cognitive-affective influence of narrative communication. Transportation theory explains how a story changes attitudes, motivations, and behaviours by breaking down cognitive resistance in the viewer. In the theory of health communication, transportation addresses the experience of people who are exposed to narrative and enter the world of the narrator, which enhances the influence of the narrative. This occurs through transformation and identification, because the storyteller capitalises on commonly used ways of interacting which increases personal relevance and reduces counter-arguing in the listener/ viewer (Kreuter et al., 2007). For transportation to occur, the viewer should perceive the narrative as authentic and relevant to the real world and the characters similar to the viewer (Kreuter et al., 2007).

Figure 3 *Narrative Theory*



Note. Storytelling/Narrative communication (SNC) theory. From "Storytelling/ narrative theory to address health minority populations," by H. Lee, J. Fawcett, and R. DeMarco, 2016, Applied Nursing Research, 30, p. 59.

Identification is defined as an experience where the reader/viewer adopts the perspective of a character and sees the narrative through the character's eyes (Busselle & Bilandzic, 2009). Identification is an important mechanism where narrative communication changes attitudes or persuades influence. Identification with characters increases absorption, reduces counter arguing and enhances acceptance of the values and beliefs portrayed in the story. Identification is a function of how well the message corresponds to the users needs and wants and how this is communicated through the design characteristics of the health education intervention (Adam et al., 2019). According to Adam et al. (2019) the effectiveness of interventions is dependent on how well users can identify with the content presented. Furthermore, according to Bandura (2002) social cognitive theory, individuals learn not only from direct experiences but also from observing others and modelling observed behaviours. The Elaboration Likelihood model (ELM) is another theoretical model that postulates the effectiveness of processing health messages depends on the viewer' identification and their engagement with the storyline (absorption and transportation) (Siev et al., 2022).

Realism is defined as whether the story is perceived as authentic and similar to the real world from the listener/ viewer's perspective (Murphy et al., 2013). Realism in a story increases engagement or transportation for the listener/ viewers. The more characters in the story and the events in the story are perceived as real, the greater likelihood of identifying with the character (Busselle & Bilandzic, 2009).

Storytelling maybe a particularly effective method for delivering health communication (Haeok Lee et al., 2016). Entertainment-education (E-E) has been a successful narrative approach in health education (Slater, 2002). Previous research has identified several characteristics of effective health education interventions including the integration of pictures,

narratives, and entertainment-education in which the educational messages are embedded. There is a substantial body of research that suggests E-E is an effective way of influencing beliefs, attitudes and behaviours (Slater, 2002; Slater & Rouner, 2006). This approach is particularly effective in populations with lower motivation and ability to cognitively evaluate health messages being delivered (Adam et al., 2019).

A study by Davis et al. (2020) found those without a university education favour E-E style narrative style videos. As those without a university education are often the most difficult to reach for science communication, entertaining narration would be more effective to engage this population (Davis et al., 2020). Entertaining narratives when communicating science have been shown to not only improve engagement but also comprehension and information retention compared to an expository narrative. Stories were found to impose less cognitive demands, and bolster learning (Davis et al., 2020; Sáenz & Fuchs, 2002; Slater, 2002; Slater & Rouner, 2006).

A study by Gaudiano et al. (2019) used Narrative Theory to inform the development of a self-help video intervention. They developed an Acceptance and Commitment Therapy (ACT) based brief video using storytelling designed to be especially appropriate for primary care settings, where the need for psychosocial treatment is high, but access is low. Gaudiano et al. (2019) proposed that a narrative-based approach has the potential to increase patients' acceptability of and engagement with traditional self-help interventions. They used storytelling to communicate key processes in ACT. The narrative-based video intervention demonstrated significant improvements in depressive symptoms among participants. Mindfulness also improved and satisfaction with the intervention was high, suggesting the narrative-based approach may enhance engagement and effectiveness in self-help treatments for major depressive disorder.

Traditionally, health communication has often emphasised scientific, logic-based, and expository approaches to presenting health information. In contrast, many non-Western societies have long relied on oral traditions of storytelling to help people understand and make sense of health, wellness, and illness experiences, while also encouraging behavioural change (Houston et al., 2011; Kreuter et al., 2007; Larkey et al., 2009). As current health communication approaches have not always adequately addressed the needs of diverse populations or reduced health disparities, narrative approaches have emerged as a promising complement to traditional information-based health education (Haeok Lee et al., 2016; Hinyard & Kreuter, 2007). Rather than presenting health information solely through factual or expository instruction, narrative approaches embed educational messages within stories that may enhance engagement, relatability, and intervention acceptability. Narratives may be particularly effective in enhancing health communication and promoting behavioural change in racial, ethnic, and minority populations with strong traditions of storytelling, such as Māori (Houston et al., 2011; Kreuter et al., 2007; Larkey et al., 2009; Murphy et al., 2013).

In Aotearoa New Zealand, many mental health professionals, including clinical psychologists and counsellors, advocate for the use of narrative and storytelling in their therapeutic work (Standing & Kahu, 2021). Storytelling allows individuals to make sense of their experiences, providing coherence and meaning to their lives through personal narratives (Fisher, 1984). In Māori culture, pūrākau are traditional narratives that enhance therapeutic practices. Unlike "myth," which suggests fiction, pūrākau are cultural treasures that draw upon the natural, social, and spiritual realms of Māori life. They are vital in shaping Māori identity and contribute to community well-being by transmitting knowledge and cultural expectations (Standing & Kahu, 2021). Levy and Waitoki (2016) argue that integrating pūrākau into therapeutic settings

offers a valuable framework for contemporary healthcare practices. Participants in a recent study by Standing and Kahu (2021) noted the specific advantages of incorporating pūrākau, highlighting that these narratives benefit not only Māori clients but individuals from various backgrounds as well. This highlights the potential of storytelling to resonate across cultural boundaries.

The findings from Standing and Kahu (2021) strongly support the use of narratives as alternatives to traditional Western psychological models, offering a more accessible approach that avoids complex terminology. Participants emphasised that the characters in these stories often mirror their own experiences, creating a safe space for them to explore psychological issues. This indirect approach allows individuals to extract personal meaning from the narratives, fostering a sense of self-determination that is crucial for therapeutic progress. By empowering clients to take ownership of their healing journeys, they can choose their focus and dictate the pace of their progress (Standing & Kahu, 2021).

In summary, the use of narrative approaches, such as storytelling and Entertainment-Education (E-E), has shown promising results in enhancing health communication including psychological health, particularly in diverse populations. By grounding messages in storytelling, complex information becomes more accessible and culturally relevant, leading to improved intervention acceptability and engagement. Understanding the mechanisms of transportation, identification, and realism through Narrative Theory can further enhance the effectiveness of narrative-based interventions in health education. The study by Gaudiano et al. (2019) serves as a practical example of how storytelling can be utilised to communicate key processes in therapeutic interventions such as Acceptance and Commitment Therapy (ACT) in primary care

settings. The present research intends to develop SGPVs using a storytelling approach to help enhance the acceptability and comprehensiveness of the videos.

Animated psychoeducational videos

The development of psychoeducational videos can be expensive and time consuming to produce. Animated videos on the other hand carry some key advantages compared to other formats. For example, animated videos do not require actors or camera equipment, and it is relatively easy to add, remove, or modify content in animated videos (Akihito Kakinuma et al., 2011). Furthermore, animations have the potential to explain complex concepts in a simple manner engendering comprehension among those with lower levels of health literacy (Meppelink et al., 2015).

The main design guidelines for animations are grounded in the cognitive theory of multimedia learning (CTML) (Mayer, 2005). The CTML, developed by Richard Mayer, posits that people learn more effectively when information is presented in both visual and auditory channels simultaneously (Mayer, 2005). Animated videos used for educational purposes align closely with this theory by engaging learners through a combination of visual elements, text, narration, and animations (Moe-Byrne et al., 2022). By incorporating multiple modalities, animated videos can stimulate dual-channel processing, allowing learners to better process and retain information. Additionally, animated videos adhere to the multimedia principle, which suggests that learning from words and pictures together is more effective than learning from words alone (Mayer, 2002). Furthermore, by following principles such as coherence (excluding extraneous information) and contiguity (presenting related elements close in time and space), educators can design animated videos that optimise learning outcomes and help individuals comprehend and retain complex concepts more efficiently (Sorden, 2012). Overall, the CTML

provides a solid foundation for the design and implementation of animated videos that enhance the educational experience for learners.

Whiteboard animations, a subset of animations, are becoming increasingly popular for educational purposes (Schneider et al., 2023). They can be described as videos depicting the process of drawing a final image, typically on a whiteboard or similar surface (Türkay, 2016). The educational content is conveyed through hand-drawn illustrations that can be accompanied by a voiceover or text. Unlike traditional animations, whiteboard animations have a light-hearted quality that reflects the gradual creation of the content, aiding in comprehension for learners (Schneider et al., 2023). The narration further enhances knowledge acquisition by providing spoken explanations alongside the animated visuals (Li et al., 2019).

According to the social agency theory proposed by Mayer (2002), individuals tend to learn more effectively when they feel a sense of connection to the instructor, as this connection motivates learners to invest more effort into engaging with the learning materials. In whiteboard videos, viewers can see the hand and part of the arm of an instructor actively illustrating concepts, potentially fostering a stronger sense of social responsibility to engage with the content (Bouhnik & Marcus, 2006).

Despite their potential benefits, empirical research on the effectiveness of whiteboard animations in multimedia learning is currently limited (Schneider et al., 2023). There is some research suggesting whiteboard animated videos have a positive effect on the retention of new information as well as subjective experiences of enjoyment and engagement (Türkay, 2016). In a study by Türkay (2016), four instructional methods were compared: whiteboard animation, slideshow, audio, and text, all presenting the same learning material. The results showed that participants exposed to the whiteboard animation format demonstrated higher levels of retention,

engagement, and enjoyment than those in the other conditions, though the authors note that novelty effects may have contributed to these differences.

More research is needed to understand why participants respond more favourably to whiteboard animated videos; one explanation is the novelty of animated videos. Novelty sustains users' attention, elicits curiosity (Pace, 2004) and experiencing novelty is generally enjoyable (Biederman & Vessel, 2006). Another explanation is that animated videos have been perceived as emotionally appealing (Bradford & Bharadwaj, 2015) and the visual design elements of animations affect learners' emotions fostering learning (Um et al., 2012). Furthermore, visuals can be processed up to 60,000 times faster than text, making them particularly effective for conveying complex topics quickly (Eisenberg, 2014). whiteboard animations simplify and clarify concepts, enabling learners to understand and retain information in a fraction of the time it would take through text alone (Wiseman, 2013).

Previous research has supported the use of whiteboard animated videos in health education and promotion. A community-based participatory study in Canada by Saini et al. (2020) evaluated a whiteboard style animated video developed with Inuit community members to promote awareness and prevention of acute gastrointestinal illness. Participants reported that the video was novel, engaging, and well suited to deliver public health information, and that its use of culturally relevant visuals and narrative supported its impact. The study suggested that the video reinforced health knowledge and may encourage behavioural intentions, though it did not involve a formal comparison with other health promotion tools such as posters or pamphlets.

Another study that utilised whiteboard videos in health education was by E. W. Li et al. (2020) who developed an animated whiteboard video to recruit donors of hematopoietic stem cell transplantation. They found the video significantly improved objective and self-reported

knowledge about stem cell donation as well as reduced ambivalence toward stem cell donation. Nearly all participants found the video appealing and agreed or strongly agreed the video helped them understand stem cell donation. The findings from these studies support the use of whiteboard animated videos as novel and appealing tools to deliver health related education and information.

While research has found whiteboard videos have the potential to deliver health education in a novel, appealing and engaging format (Feeley et al., 2022; Moe-Byrne et al., 2022), to date, whiteboard videos have been primarily used to communicate health related information such as patient education about health conditions and treatment options. There are limited studies to support the use of whiteboard animated videos to deliver psychoeducation related to psychological health. Most of the research carried out in this domain has focused on the mental health literacy of young adults (Sampaio et al., 2022).

Several studies have explored the use of short animated videos to engage young people with mental health content, with findings primarily relating to reach, acceptability, and perceived impact rather than clinical outcomes. In a participatory study by Dunn et al. (2018), young people with lived experience of depression collaborated with filmmakers to create a short animation about depression and therapy. The resulting film was widely disseminated online, receiving over 12,000 views on YouTube, and qualitative feedback indicated that the process of co-creation was experienced as empowering and that the animation was perceived as authentic and relatable by viewers.

Similarly, Coughlan et al. (2021) developed a series of short animated videos aimed at raising awareness of common mental health difficulties among young people. These animations reached a broad audience, accumulating approximately 16,000 views on social media within 12

months of release, suggesting strong public engagement and acceptability. However, the study primarily reported dissemination and engagement metrics rather than direct measures of learning or behaviour change.

More recently, Ito-Jaeger et al. (2022) evaluated co-created digital animations addressing salient mental health themes and found that participants perceived the videos as having the potential to improve mental health literacy, particularly by increasing understanding of mental health and reducing stigma. Participants described the animations as relatable and believed they helped to normalise common mental health experiences and facilitate more open conversations about mental health. However, the findings reflected participants' perceptions of the animations rather than measured changes in mental health literacy, stigma, or help-seeking behaviours.

To summarise, the use of whiteboard videos to deliver psychoeducation shows great promise as a novel, engaging, and cost-effective method that can promote mental health literacy. While most studies have focused on using animated videos in health education, there is a growing interest in utilising this format in psychoeducation related to psychological health. Currently, to the researcher’s knowledge, there are no studies investigating the use of whiteboard animated videos that aim to teach coping strategies for psychological distress. The present research intends to explore the acceptability of SGPVs developed with Doodly whiteboard animation software that aim to teach coping strategies for general psychological distress.

Chapter 4 : Theoretical Foundations of Coping Strategies

This chapter outlines the theoretical foundations and empirical evidence underpinning the coping strategies incorporated into the self-guided psychoeducational videos (SGPVs). Given the role of psychoeducation as a low-intensity, first-line intervention within a stepped care model, the coping strategies selected for inclusion needed to be evidence-based, accessible to a lay audience, and suitable for delivery via digital media in primary care settings. This chapter therefore reviews key coping frameworks and interventions that have demonstrated effectiveness in reducing psychological distress and supporting self-management across diverse populations.

The chapter begins by defining coping and distinguishing between adaptive and maladaptive coping strategies, highlighting their differential associations with psychological well-being. It then examines coping styles commonly used in mental health interventions, including problem-focused, emotion-focused, and social coping. Cognitive Behavioural Therapy (CBT) is presented as a primary theoretical framework informing the coping strategies used in the SGPVs, with particular attention given to problem-solving and behavioural activation as low-intensity, evidence-based interventions well suited to self-guided and digital delivery. The chapter also explores mindfulness-based approaches, including savouring, as third-wave coping strategies that promote emotional regulation and resilience. Finally, deep breathing exercises are discussed as a practical, physiological coping strategy that can be easily taught through psychoeducational videos and implemented independently by viewers. Collectively, this chapter provides the rationale for the selection of coping strategies included in the SGPVs and establishes their relevance within primary care and stepped care models of mental health support.

Understanding Coping Strategies

Coping is defined as the thoughts and behaviours that are mobilised in response to internal or external stressful situations (Rieger et al., 2018). Coping strategies are generally categorised as positive (adaptive) and negative (maladaptive). Examples of positive coping strategies include seeking support and engaging in physical exercise, whereas examples of negative strategies involve avoidance and self-destructive behaviour (Lemaire & Wallace, 2010).

A substantial body of research demonstrates that coping strategies are associated with psychological well-being. Meta-analytic findings indicate that maladaptive coping strategies such as avoidance, denial, and disengagement are consistently associated with higher levels of psychological distress, depression, and poorer mental health outcomes, whereas adaptive coping strategies - such as problem-focused coping, positive reappraisal, and seeking social support - are linked to better psychological adjustment and well-being (Aldao et al., 2010; Compas et al., 2017; Hinch & Sirois, 2024; Penley et al., 2002). Reviews of coping in health and illness contexts similarly show that adaptive coping is associated with improved emotional functioning, while reliance on maladaptive coping predicts worse psychological outcomes across diverse populations and stressors (Compas et al., 2017; Hinch & Sirois, 2024).

A study by Meng and D'Arcy (2016) investigated the relationship between psychological wellbeing, distress, and ways of coping among the general population and its subgroups using national representative data from Canada. They found that distress was positively correlated with negative coping strategies and negatively related to positive coping. Positive coping predicted a higher level of psychological wellbeing, while negative coping was correlated with a lower level of psychological wellbeing. Notably, distress was pronounced among those with psychiatric illness and chronic physical disease. The authors suggested that these populations should

prioritise reducing distress to enhance their psychological well-being through positive coping strategies. Meng and D'Arcy (2016) also proposed that mental health prevention and promotion initiatives aimed at the general population should prioritise the reduction of negative coping strategies and up take of positive coping strategies. They emphasised that enhancing public awareness and usage of adaptive coping strategies through digital health prevention methods can lead to improved psychological well-being. The strengths of this study lie in its large, national based population, allowing for comparisons across subgroups, which enhances the generalisability of the findings. In the case of this research, SGPVs delivered in GP settings could teach positive coping strategies that can help patients recognise and shift away from negative coping mechanisms.

Coping strategies can be categorised as not only positive or negative, but also into several styles. Problem-focused is a proactive form of coping which addresses the problem causing distress and includes active efforts to manage stressful situations. Examples include taking direct actions to address stressors such as planning, time management, and suppressing competing activities (Ding et al., 2021). Emotion-focused coping refers to using skills for processing and dealing with feelings that arise due to stressful situations. Examples of emotion-focused coping strategies include positive reframing, journaling, breathing techniques, meditation, acceptance, and humour (Folkman, 2008). Additionally, social coping involves seeking emotional or instrumental support from one's community to reduce stress (Frydenberg, 2014). These are examples of positive coping strategies that could be taught in SGPVs.

Cognitive Behavioural Therapy as a Framework for Coping

CBT is a well-established and evidence-based therapeutic approach that is highly suitable for informing coping strategies in psychoeducational videos due to its proven effectiveness in treating a wide range of mental health conditions (Hofmann et al., 2012). CBT is grounded in the understanding that thoughts, feelings, and behaviours are interconnected, and that by addressing and modifying maladaptive thought patterns and behaviours, individuals can achieve positive changes in their emotions and overall well-being (Nakao et al., 2021). This structured and goal-oriented approach to therapy provides practical tools and techniques that are easily adaptable for educational purposes, making them accessible and applicable to a broad audience (Hofmann et al., 2012).

The roots of CBT can be linked back to the initial phase of behavioural therapy, known as "first-wave," emerged in the 1950s (Blackwell & Heidenreich, 2021). Albert Ellis established rational emotive therapy to assist individuals in challenging their irrational thoughts during challenging situations, while Aaron Beck applied cognitive therapy to assist individuals dealing with depression based on Ellis's model. Over time, behavioural therapy and cognitive therapy were fused in terms of theory and application, giving rise to the development of "second-wave" CBT (Blackwell & Heidenreich, 2021).

Many individuals experiencing psychological issues receive treatment in primary care settings. Research suggests that CBT can be successfully modified and applied in such environments (Fenn & Byrne, 2013). The National Institute for Clinical Excellence (NICE) guidelines recommend offering CBT based guided self-help programs for anxiety and depressive disorders within a stepped care approach (NICE, 2011). One study by Proudfoot et al. (2004) demonstrated the effectiveness of computer-delivered CBT, known as 'Beating the Blues' as a

treatment for anxiety and/or depression in primary care settings. The treatment included a 15-minute introductory video and 8 modules that included cognitive and behavioural components. Their results, based on a large sample size, found that treating patients in primary care who are experiencing anxiety and/or depression with a computerised cognitive-behavioural therapy program resulted in notable enhancements across all measured response variables. Specifically, levels of depression and anxiety decreased, while work and social adjustment improved. These improvements were both significant and substantial in nature with large effect sizes. The findings by Proudfoot et al. (2004) highlight the potential for self-guided CBT as a suitable stepped care approach for patients with mild anxiety and depression in primary care settings.

By incorporating CBT principles into coping strategies presented in SGPVs, viewers can learn concrete skills for managing distress, improving coping mechanisms, and fostering resilience in the face of challenges (Atik, Stricker, Schückes, & Pittig, 2023). Furthermore, the evidence base supporting the efficacy of CBT lends credibility and reliability to the coping strategies featured in the videos (Hofmann et al., 2012). Overall, drawing on CBT as a theoretical foundation for coping strategies in psychoeducational videos equips viewers with practical and evidence-based tools for enhancing their psychological well-being.

Problem-Solving as a Coping Strategy

Problem-solving is a cognitive behavioural intervention that facilitates the development of practical problem-solving skills. It involves a systematic approach, including problem identification, goal setting, generating alternative solutions, evaluating options, implementing the chosen solution, and assessing outcomes (D'Zurilla & Nezu, 2010). Problem-solving involves identifying and addressing challenges or stressors in a systematic and structured manner. By breaking down problems into manageable steps, individuals can develop effective solutions,

make informed decisions, and take proactive steps to overcome obstacles. Problem-solving skills not only enhance resilience and self-efficacy but also empower individuals to approach difficulties with a positive and solution-focused mindset (Wagner et al., 2014).

There is research to suggest that a guided self-help strategies based on the principles of problem solving can be used as a stepped care approach. For example, a study investigating a guided self-help intervention based on the principles of problem-solving therapy for head and neck and lung cancer patients was found to be an effective low intensity intervention as part of a stepped care approach and was found to be more effective compared to usual care. The self-help component of the stepped care approach was delivered via the internet or a booklet (Jansen et al., 2019). This highlights the potential of a self-help video-based intervention that incorporates problem solving as a coping strategy.

Behavioural Activation as a Coping Strategy

Another strategy that is commonly used in CBT is behavioural activation. Behavioural activation (BA) is a core component of CBT that focuses on increasing engagement in rewarding and meaningful activities to improve mood and well-being (Fenn & Byrne, 2013). BA is increasingly recognised as a powerful intervention for major depressive disorder. It is considered a versatile driver of transformation across different therapeutic approaches and mental health contexts, motivating individuals with depression to engage in uplifting activities (Wang & Feng, 2022). By encouraging individuals to schedule enjoyable and fulfilling activities, set achievable goals, and monitor their daily routines, BA helps counteract feelings of apathy, lethargy, and low motivation often associated with depression and other mental health challenges (Coffman et al., 2007). Engaging in pleasant activities can boost mood, increase energy levels, and promote a sense of accomplishment and satisfaction (Wang & Feng, 2022). Research has demonstrated that

BA outperforms cognitive therapy in producing more favourable outcomes for individuals facing moderate to severe depression (Coffman et al., 2007).

One of the key advantages of BA is its status as an evidence-based, low-intensity intervention, making it easily adaptable for distribution in digital formats including psychoeducational videos (Wang & Feng, 2022). The study by Dahne et al. (2019) aimed to explore the feasibility and effectiveness of a self-help Brief Behavioural Activation mobile application called "Moodivate" for treating depressive symptoms in adults receiving care through primary care practices. The study found that participants using Moodivate experienced significant decreases in depressive symptoms over time compared to those receiving treatment as usual. The results suggested that Moodivate showed promise for treating depression in primary care settings among a racially and socially economically diverse group of adults. The study also highlighted the potential of digital technology to provide accessible and evidence-based treatment for patients with depressive symptoms in primary care, addressing barriers to traditional psychotherapy access. However, the study had a limited sample size and was the first of its kind to investigate the effectiveness of a self-help app based on BA principles among primary healthcare patients. Nonetheless, this study highlighted the potential of BA in self-directed mental health interventions in a primary care setting.

Another study by Weitzel et al. (2022) explored the effectiveness of an self-guided online intervention in treating depression within primary care settings. The study was an RCT investigating the benefits of using online self-guided interventions, particularly for individuals who may not seek traditional mental health treatment due to stigma or a preference for self-help methods. The study showed that participants who engaged in the online intervention demonstrated improved behavioural activation, with increased engagement in pleasant activities

and enhanced enjoyment of such activities over time. The authors of this research emphasised the value of self-guided interventions in complementing primary care, providing a flexible and accessible option for a broader population.

The study by Dahne et al. (2019) and Weitzel et al. (2022) not only demonstrated the potential effectiveness of the using an online intervention in treating depressive symptoms, but also points to the broader potential of utilising SGPVs to teach principles of behavioural activation in a waiting room setting in primary health care. By incorporating SGPVs into the waiting room environment, primary care practices could offer patients valuable insights and strategies related to behavioural activation. This approach has the potential to address some of the barriers to traditional psychotherapy access by providing patients with educational resources and tools to proactively manage their depressive symptoms.

To summarise, by incorporating CBT interventions into coping strategies such as problem solving and BA, viewers can learn concrete skills for managing distress, improving coping mechanisms, and fostering resilience in the face of challenges (Atik et al., 2023). Furthermore, the evidence base supporting the efficacy of CBT lends credibility and reliability to the coping strategies featured in SGPVs. Overall, drawing on CBT as a theoretical foundation for coping strategies in psychoeducational videos not only aligns with best practices in mental health interventions but also equips viewers with practical and evidence-based tools for enhancing their psychological well-being.

Mindfulness Based Coping Strategies

Mindfulness-based interventions are widely recognised as evidence-based approaches for improving mental health and well-being, with systematic reviews showing benefits across the general population and in people living with chronic health conditions such as cancer patients

(Štánerová et al., 2025; Witarto et al., 2022). While mindfulness has been promoted for centuries within Buddhist and other spiritual traditions, its integration into Western medical and mental health contexts for psychological well-being is a relatively recent development, primarily starting in the 1970s (Kabat-Zinn, 1982). Mindfulness is considered a third-wave therapy because it represents a more recent evolution in the field of psychotherapy, building upon first and second wave therapies (Hayes & Hofmann, 2021).

The third wave of therapies, which includes approaches like Mindfulness-Based Stress Reduction (MBSR), Dialectical Behaviour Therapy (DBT), and Acceptance and Commitment Therapy (ACT) emphasise the importance of developing mindfulness skills to enhance psychological well-being and promote effective coping strategies (Hayes & Hofmann, 2021). These therapies focus on increasing awareness of one's thoughts, emotions, and bodily sensations in the present moment, cultivating acceptance and nonjudgmental attitude towards experiences, and fostering a sense of compassion towards oneself and others (Keng et al., 2011). This shift in focus towards acceptance and mindfulness distinguishes third-wave therapies from earlier therapeutic approaches and highlights the growing recognition of the interconnectedness of mind, body, and emotions in promoting mental health and well-being (Churchill et al., 2010).

The effectiveness of mindfulness-based interventions is supported by a growing body of research demonstrating their positive impact on mental health outcomes. Studies have shown that regular mindfulness practice can enhance emotional regulation, increase resilience to stress, improve concentration and focus, and foster a greater sense of well-being (Keng et al., 2011; Schuman-Olivier et al., 2020). Mindfulness has also been shown to reduce anxiety and depression (Hayes & Feldman, 2004). The key components of mindfulness (such as being present and accepting one's experiences without judgment) are seen as remedies for various

forms of psychological distress like rumination, anxiety, worry, fear, and anger. These distressing emotions often arise from unhelpful habits of avoidance, suppression, or excessive engagement with one's thoughts and feelings (Hayes & Feldman, 2004). One key strength of mindfulness as a coping strategy is its versatility and accessibility. Mindfulness techniques, such as focused breathing and meditation, can be easily taught and practiced by individuals of all ages and backgrounds (Schuman-Olivier et al., 2020), making them suitable for inclusion in SGPVs aimed at a diverse audience.

Savouring as a Mindfulness Based Coping Strategy

Savouring is a mindfulness coping strategy that involves deliberately focusing on and fully appreciating positive experiences, emotions, and sensations in the present moment. Whether savouring a delicious meal, a beautiful sunset, a heartfelt conversation, or a small achievement, the act of savouring allows individuals to deepen their connection to positive emotions and experiences, fostering a sense of contentment and fulfilment. By savouring, individuals can enhance their enjoyment, gratitude, and overall well-being by immersing themselves in the richness and beauty of positive moments. This practice encourages individuals to slow down, pay attention, and engage their senses in experiencing pleasure and joy in everyday activities (Klibert et al., 2022).

The premise of savouring is that the pursuit of happiness is one of the basic concerns of humans and people can purposely attend to positive stimuli and engage in activities that bring about positive feelings and experiences (Bryant & Veroff, 2007). There are three components of savouring: reminiscing of past positive experiences, savouring the moment, and anticipating upcoming positive experiences (Bryant & Veroff, 2007). In terms of mindfulness interventions, savouring the moment has been found to have the strongest impact on psychological wellbeing

(Bryant & Veroff, 2007; Kiken et al., 2017). Savouring has been inversely associated with anxiety and depressive symptoms (Eisner et al., 2009) and is associated with higher positive affect and life satisfaction (Bryant, 2003). By utilising savouring as a coping strategy, individuals can develop a greater appreciation for the simple pleasures in life, build resilience to stress and negativity, and cultivate a more positive and optimistic outlook. In SGPVs, savouring can be presented as a coping strategy that viewers can easily incorporate into their lives.

Overall, mindfulness-based coping strategies can empower individuals to respond more skilfully to challenging situations, enhance self-awareness, and promote psychological resilience (Hayes & Hofmann, 2021). Mindfulness serves as a valuable evidence-based theory to base coping strategies on in SGPVs, offering viewers effective tools for enhancing their mental health and emotional well-being.

Deep Breathing Exercises

Deep breathing exercises (DBE), particularly diaphragmatic breathing, can serve as an effective coping strategy for alleviating stress and can be easily taught within the framework of psychoeducational videos in a primary care setting. Research in psychology has shown that practicing breathing techniques can be a successful non-pharmacological method for improving emotions, such as reducing anxiety, depression, and stress. Studies by Stromberg et al. (2015), Zaccaro et al. (2018), and Dhawan et al. (2015) have highlighted the positive effects of breathing practices on emotional well-being.

Deep breathing affects the stress response system and relaxes the mind and body (Kim & Kim, 2005). Deep breathing also stimulates circulation, improves oxygen transfer to tissues and facilitates a relaxation response by calming the nervous system (Bărbuceanu, 2020). When we engage in deep, slow breathing exercises, signals are sent to the brain to activate the

parasympathetic nervous system, which is responsible for promoting relaxation and restoring the body to a calm state after a stressor (Zaccaro et al., 2018). The parasympathetic nervous system is often referred to as the "rest and digest" system because it helps conserve energy, slow the heart rate, lower blood pressure, and promote digestion (Tavoian & Craighead, 2023). By stimulating this part of the nervous system, deep breathing can counteract the effects of the sympathetic nervous system, which is responsible for the body's "fight or flight" response to stress (Ma et al., 2017). Engaging in deep breathing exercises can help reduce the levels of stress hormones like cortisol in the body, lower heart rate and blood pressure, and promote a sense of calm and relaxation. This physiological response can also have a positive impact on mental well-being by reducing feelings of anxiety, tension, and overwhelm (Ma et al., 2017).

Deep breathing as a coping strategy for psychological distress is beneficial because it provides a simple and effective way to regulate emotions and calm the mind (Zaccaro et al., 2018). By activating the parasympathetic nervous system response through deep breathing, individuals can create a physiological state that supports relaxation, stress reduction, and overall mental health (Tavoian & Craighead, 2023). DBE are non-invasive, cost effective, and can easily be incorporated into SGPVs as a coping skill for managing stress.

There is evidence to suggest self-guided deep breathing exercises are effective. A study by Jacobsen et al. (2002) evaluated two forms of stress management training for chemotherapy patients, including professionally administered and self-administered. Each form provided instruction for relaxation techniques including abdominal breathing, progressive relaxation training with guided imagery, and coping self-statements. Participants were instructed to imagine their abdomen as a balloon that inflates and deflates as they exhale. Once the abdominal breathing skill was developed, participants were guided through a paced breathing exercise that

is designed to induce a sense of relaxation. In the professionally administered form, participants were provided instruction by a mental health professional, whereas in the self-administered form, the training was provided through a package of educational resources. Interestingly, only the self-administered form was found to be superior to usual care in improving quality of life. Furthermore, the costs of this self-administered form were up to 68% less than the average cost of other professionally administered stress management interventions for chemotherapy patients. These results suggest that self-administered forms of stress management training may be effective and therefore could be utilised in SGPVs.

In conclusion, deep breathing exercises present a highly effective, accessible, and economical strategy for managing stress and promoting emotional well-being. Research highlights the significant benefits of these techniques, demonstrating their ability to activate the parasympathetic nervous system, thereby facilitating relaxation and counteracting the stress response. The evidence supporting self-guided deep breathing practices highlights their potential as a non-invasive and cost-effective intervention that could be taught as a coping strategy in SGPVs.

Chapter 5 : A Collaborative Approach to Video Development and Intervention Acceptance

This chapter examines the role of stakeholder engagement and intervention acceptability in the development and implementation of self-guided psychoeducational videos (SGPVs). Given that psychoeducational interventions are most effective when they are relevant, usable, and responsive to the needs of their intended users, this chapter draws on participatory research principles and user-centred design frameworks to highlight the importance of involving stakeholders throughout the development process. It also introduces acceptability as a key implementation outcome, emphasising its role in determining whether novel interventions are adopted, engaged with, and sustained in real-world healthcare settings. Together, these perspectives provide a conceptual foundation for the collaborative video development process used in this research and for the subsequent evaluation of stakeholder acceptance of SGPVs in primary care environments.

Stakeholder engagement

To enhance the adoption and impact of psychological interventions, researchers are increasingly acknowledging the significance of participatory research principles. This approach involves incorporating the perspectives of stakeholders involved in health interventions, such as recipients and providers of interventions, to identify crucial elements for the design and assessment of therapeutic programs (Levac et al., 2019). Engaging stakeholders fosters inclusivity and collaboration with individuals who offer unique viewpoints and have a vested interest in research outcomes (Maurer et al., 2022). Involving consumers, patients, and other

healthcare stakeholders as research partners holds strong potential for generating evidence that better reflects patient needs (Forsythe et al., 2019).

Stakeholders are people, organisations, or communities with a direct stake in the process and results of a project, research effort, or policy initiative (Concannon et al., 2012). Engagement is an ongoing process that involves actively seeking the knowledge, experience, judgment, and values of individuals chosen to represent diverse interests in a given issue, with two main goals: to build shared understanding and to enable decisions that are transparent, well-informed, and effective (Deverka et al., 2012).

Findings from Maurer et al. (2022) highlight the benefits of stakeholder engagement such as improvements to studies' feasibility, acceptability and user centredness. This focus on stakeholder engagement closely aligns with the principles of user-centred design (UCD), which emphasises the active involvement of end-users in the design process (Garcia-Lopez et al., 2020). One of the primary benefits of UCD is its ability to enhance user engagement (Garcia-Lopez et al., 2020). By prioritising the input of users, resources are more likely to resonate with the target audience, fostering a deeper emotional connection. This aspect is particularly crucial in mental health contexts, where engagement plays a vital role in facilitating effective learning and promoting behaviour change (Vial et al., 2022).

Additionally, UCD significantly improves usability by focusing on the design of intuitive and accessible interfaces. This is especially important for users with varying levels of health literacy (Ackerman et al., 2025). By ensuring that materials are easy to understand and navigate, UCD can effectively reduce barriers to engagement, allowing a broader audience to access valuable mental health information.

Another useful aspect of UCD is its capacity to tailor content to diverse needs. Different user groups often possess unique cultural, educational, and psychological requirements (Young et al., 2024). By incorporating diverse perspectives, UCD ensures that content is culturally relevant and relatable, which is particularly important in multicultural contexts, such as New Zealand. What's more, the iterative nature of UCD also encourages continuous improvement. By incorporating ongoing testing and user feedback, resources can be refined over time, ensuring that they remain effective and relevant as user needs evolve (Chammas et al., 2015).

Numerous research has demonstrated the benefits of a UCD approach. For example, research by Vial et al. (2022) highlights that user-centred design must address the complexities of user engagement and involvement to effectively improve mental health interventions. They detail how participatory design methods can lead to better alignment between user needs and mental-health app functionality.

Schnall et al. (2016) reinforce the importance of designing health interventions based on end-user needs, asserting that without this focus, mobile health applications may fail to be utilized or misused. Their findings emphasise that user-centred designs result in interfaces that significantly enhance the overall utility of health apps, ensuring they are more acceptable and practical for the intended audience. Garcia-Lopez et al. (2020) highlight the benefits of designing educational resources using an iterative UCD process, rather than in a traditional format. They found that an iterative UCD process leads to the continuous improvement of educational resources, ensuring they remain effective and relevant as user demands evolve.

Furthermore, the study by Mirkovic et al. (2014) highlights the critical role of UCD in developing effective health technology interventions for cancer patients. By conducting usability tests and semi-structured interviews with users, the research identified design and functionality

issues, revealing key insights into patient needs and preferences. This iterative approach not only informed improvements for the Connect Mobile app they developed but also emphasised how understanding user requirements can enhance the design of mobile health applications. The study illustrated that integrating user feedback is essential for creating technology that effectively supports patients in managing their health-related issues.

In the context of this research, UCD and stakeholder engagement can be used to identify potential issues, gaps, or areas for enhancement that may not have been apparent during the video development process (Boaz et al., 2018). Ultimately, stakeholder feedback in a pilot test of videos helps to validate the content, ensure its relevance and effectiveness, and enhance its overall quality. By incorporating diverse perspectives and insights from stakeholders, SGPVs can be developed that are well-received, impactful, and tailored to the needs of the intended audience, maximising their effectiveness in promoting mental health and well-being.

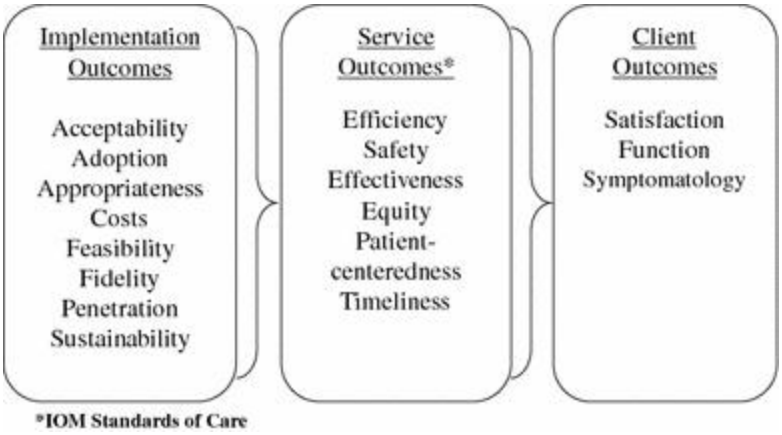
Evaluating acceptance

Before implementing SGPVs in a GP waiting room setting, it is important to evaluate their acceptability among key stakeholders. Acceptability refers to the perception among key stakeholders that a given intervention is perceived as agreeable, palatable or satisfactory. What is considered acceptable is specific to the intervention being implemented. As described by Sekhon et al. (2017), acceptability is a multifaceted concept that captures whether both those delivering and those receiving a healthcare intervention view it as appropriate, based on their anticipated or actual cognitive and emotional reactions to the intervention. Thus, the successful implementation of an intervention is dependent upon its acceptability among key stakeholder recipients (Diepeveen et al., 2013; Stok et al., 2016).

Acceptability has become a crucial factor in the design, evaluation, and implementation of healthcare interventions. Successful implementation relies on the acceptability of the intervention to both those delivering it, such as healthcare professionals, and those receiving it - primarily patients. When patients find an intervention acceptable, they are more likely to engage with the intervention, leading to better clinical outcomes. Conversely, if healthcare professionals perceive an intervention as having low acceptability, they may not deliver it as intended, which can negatively affect the intervention's overall effectiveness (Sekhon et al., 2017).

Acceptability is one of the key outcomes of implementation science and is integral to the design, evaluation, and implementation of healthcare interventions (Proctor et al., 2011). Implementation science is a systematic approach to the implementation of evidence-based practices that aims to improve the quality and effectiveness of healthcare services (Proctor et al., 2011). According to Proctor et al. (2011), it is critical to distinguish between implementation outcomes and clinical treatment outcomes. Proctor et al. (2011) defines implementation outcomes as the results of deliberate and purposive actions to implement new treatments, practices, and services. They precede clinical or treatment outcomes, because they are a necessary precondition; if an intervention is not implemented well, it will not be effective. Evaluating implementation outcomes such as acceptability before treatment outcomes is therefore necessary, Figure 4 shows the types of implementation outcomes.

Figure 4 *Implementation Research Outcomes*



Note. Types of outcomes in implementation research Adapted from Proctor et al. (2011)

The purpose of assessing acceptability as an implementation outcome is to help researchers understand the factors that increase user engagement and the barriers that may disconnect users or consumers from engaging with the intervention (Proctor et al., 2011; Sekhon et al., 2017). Even if an intervention is highly effective, if there is a lack of acceptability among key stakeholders, it will not be sustainable (Proctor et al., 2011). Certain implementation outcomes may be more important at certain phases of the implementation process than others (Proctor et al., 2011). Assessing stakeholder acceptability is considered more important in the early stages of the implementation process to assist with adoption, and at later stages to assist with the intervention's sustainability. It is important during the early stages of the implementation process because the acceptability of an intervention will likely affect adoption, penetration, and sustainability (Proctor et al., 2011; Sekhon et al., 2017).

In summary, the primary objective of this project is to assess the acceptability of the psychoeducational videos created as part of this research. Understanding acceptability is crucial because it acts as a barometer for engagement among key stakeholders, which includes both

healthcare providers and patients. If these stakeholders perceive the videos as valuable, relevant, and easy to integrate into their routines, they are more likely to utilise them.

Furthermore, assessing acceptability early in the implementation process allows researchers to identify and address potential barriers that could hinder stakeholder engagement. For instance, if patients find the content of the videos too complex or not aligned with their needs, modifications can be made to enhance relevance. Similarly, if healthcare providers believe the videos do not fit into their workflow or lack credibility, adjustments can be made to ensure they are perceived as trustworthy and easy to incorporate into practice.

This process not only enhances the likelihood of successful adoption but also contributes to the long-term sustainability of the intervention. Ultimately, prioritising acceptability not only serves as a foundational step in the implementation process but helps to increase the likelihood that the intervention remains responsive to the needs of its users.

In summary, A collaborative and user-centred approach is critical to the development and successful implementation of SGPVs. Participatory research principles and UCD frameworks highlight the value of engaging stakeholders including patients, healthcare professionals, and service providers throughout the development process to ensure interventions are relevant, usable, culturally appropriate, and responsive to user needs. Evidence from the literature indicates that stakeholder involvement enhances feasibility, acceptability, and engagement, which are particularly important in mental health interventions where user uptake strongly influences effectiveness.

Acceptability is a key implementation outcome within implementation science, reflecting stakeholders' cognitive and emotional responses to an intervention and serving as a necessary

precursor to adoption, sustained use, and impact. Assessing acceptability early in the implementation process allows for the identification and resolution of potential barriers to engagement and supports long-term sustainability. Together, these perspectives provide a strong conceptual foundation for the collaborative development of SGPVs and justify the prioritisation of stakeholder acceptability as a central outcome in the empirical studies that follow.

Literature Review Summary and Implications

On review of existing literature, it is evident that the integration of SGPVs in a GP waiting room setting represents an innovative approach to increase access to psychological resources for individuals who may not otherwise seek help from a psychologist or counsellor due to stigma, or for those who prefer self-help resources. These videos may benefit those who choose not to engage with in-person services as they offer a private and confidential way for individuals to learn about mental health topics and develop coping skills. Furthermore, delivering SGPVs in GP waiting rooms can offer mental health education to underserved populations and remote areas across New Zealand. By providing information on coping strategies, these videos can empower individuals to take charge of their mental well-being and have the potential to reduce the demand on an overstretched mental health care system.

The challenges faced in meeting the psychological needs of cancer patients, especially given the limited resources and workforce shortages in mental healthcare, further highlight the potential importance of psychoeducational videos. Integrating SGPVs into GP waiting rooms could serve as low-intensity support, equipping patients with tools for self-management and potentially alleviating the need for more intensive treatments. By leveraging primary care settings to deliver psychoeducational interventions, healthcare providers can enhance the overall

support system for cancer patients, promoting holistic well-being and improving patient outcomes across both psychological and physiological domains.

In terms of developing SGPVs, research points to storytelling as potentially being a particularly effective approach to teach the coping strategies. Storytelling can engage less involved audiences, reach low-knowledge audiences, and render complex information comprehensible. This approach has also been shown to resonate well with minority populations that have a rich tradition of storytelling, such as Māori.

Although the development of psychoeducational videos can require substantial resources, whiteboard animations offer a cost-effective and flexible alternative. This format facilitates efficient content creation and modification while supporting comprehension of complex psychological concepts, particularly for individuals with lower levels of health literacy. SGPVs can incorporate a range of adaptive coping strategies, including problem-focused coping, which addresses stressors directly; emotion-focused coping, which supports the processing of emotional responses; and social coping, which involves seeking support from others. In addition, evidence-based techniques such as problem-solving, behavioural activation, mindfulness practices, and relaxation strategies including diaphragmatic breathing exercises can be presented within SGPVs to support psychological well-being

To increase the acceptability of these videos, this research will actively involve stakeholders in the video development process. Engaging key stakeholders can help to increase the chance that the content will resonate with the intended audience and addresses their unique needs and preferences.

Chapter 6 Study One: Scoping Review

Preface

Upon conducting a thorough investigation into the existing literature on patient perspectives concerning the use of animated psychoeducational videos for mental health outcomes, it became evident that there is a significant gap in research on this specific topic. The scarcity of studies directly addressing this area resulted in insufficient evidence to support the execution of a systematic scoping review. However, there is a body of research that explores patient perspectives on the broader application of animated videos as educational tools in healthcare settings. This led to the decision to focus the review on this more established topic, as it still holds relevance to the overarching goal of enhancing mental health education through animated media.

By synthesising evidence on patient perceptions and experiences of animated educational videos, this scoping review sought to generate insights to inform the design and development of videos within the current research. Understanding how patients engage with and respond to animated educational content can enhance the acceptability, relevance, and effectiveness of such resources, while ensuring they are responsive to the needs and preferences of the intended audience. In doing so, this review aims to bridge the gap between existing literature and the practical development of self-guided psychoeducational videos for psychological distress.

Study 1. Investigating Stakeholder Perceptions of Animated Videos as Patient Educational Tools: A Scoping Review.

Chapter Overview

Animated videos are increasingly used to communicate health information, yet stakeholder perspectives on their acceptability and perceived value are not consistently synthesised across healthcare contexts. This scoping review maps the existing evidence on how stakeholders including patients, caregivers, and members of the public perceive animated videos used for patient education. Findings from this review are used to inform the development of the SGPVs in the present thesis, particularly in relation to design features that support engagement and understanding across diverse audiences.

The chapter first outlines the background and rationale for examining stakeholder perceptions of animated patient education videos, followed by the scoping review methodology (search strategy, eligibility criteria, and synthesis approach). Results are then presented descriptively (study characteristics) and thematically (key perception themes), before discussing implications for the development and delivery of SGPVs and identifying priorities for future research.

Background

Animated videos have gained recognition in recent years as effective patient education tools for delivering health-related information (C. S. Meppelink et al., 2015), with studies highlighting their ability to simplify complex medical topics as well as promote health literacy (Slater & Rouner, 2006). While several studies have highlighted the potential of animated videos to enhance patient understanding, few studies have explored patient perspectives regarding the use of animated videos as patient education tools (Feeley et al., 2023; A. Kakinuma et al., 2011; C. S. Meppelink et al., 2015; Moe-Byrne et al., 2022; Slater & Rouner, 2006). It is essential to consider the perspectives of patients themselves regarding the effectiveness and acceptability of animated videos for health education to increase health literacy (Göttgens & Oertelt-Prigione, 2021).

Utilising innovative approaches such as animated videos can effectively bridge the gap in health literacy and improve patient outcomes (C. S. Meppelink et al., 2015; Slater & Rouner, 2006). With advancements in technology, the use of animated videos as patient educational tools presents a cost-effective way to explain healthcare concepts in an engaging, easily understandable, and relatable manner (Calderón et al., 2014; George et al., 2013; A. Kakinuma et al., 2011; C. S. Meppelink et al., 2015; Occa & Morgan, 2019).

Despite the potential benefits of animated videos for patient education, it is important to consider the perspectives of stakeholders including patients and other intended end users of these interventions regarding their perceptions and experiences with such educational tools (Göttgens & Oertelt-Prigione, 2021). Understanding stakeholder perspectives can help identify key factors that influence the acceptability and effectiveness of animated videos as patient educational tools

(Elg et al., 2012; Farrington, 2016; Göttgens & Oertelt-Prigione, 2021). By understanding stakeholder perceptions of animated videos, healthcare providers can tailor their educational materials to meet the diverse needs and preferences of their patient populations, ultimately improving health literacy and patient engagement (Slater & Rouner, 2006).

This scoping review aims to explore and synthesise the current evidence on stakeholder perceptions regarding the use of animated videos as educational tools in healthcare. The focus of this scoping review is to aggregate existing evidence, identify patterns within the data, and provide valuable insights into the factors that influence stakeholder engagement and acceptability of animated videos as patient educational tools.

Method

As the literature investigating the use of animated videos as an educational tool in health care is scarce, a scoping review methodology was chosen to examine the literature for current evidence of stakeholder's perspectives towards the use of animated videos in a health care context. Thematic synthesis was well suited to this review due to the objectives of the research including aggregating existing evidence and identifying patterns within the data (Thomas & Harden, 2008). While thematic synthesis is mostly used for qualitative research outcomes, it can also be used for the synthesis of quantitative outcomes where there is heterogeneity in outcome variables and measurements (Popay et al., 2005).

Eligibility criteria

Stakeholders were defined as the end users of the animated videos; this included both patients and the general public, as well as family and caregivers of patients. Studies were screened according to inclusion and exclusion criteria. Studies were included in the review if stakeholders were 18 years or older, the interventions being investigated were animated health educational videos, the intervention was delivered in a hospital/ clinic setting or community setting, and the papers were written in English. Studies were excluded from the review if the animated video was not the sole intervention being investigated, the intervention was aimed at educating health care professionals, the studies involved children and adolescents, the animated videos were interactive, stakeholder perceptions/ attitudes were not assessed, or if the educational videos were outside the context of health education.

Search strategy

The SPIDER tool was used to guide the searches. This tool offers a systematic search strategy that was devised for qualitative and mixed methods research studies by defining key

elements of non-quantitative research questions (Methley et al., 2014). SPIDER is an acronym that stands for sample size, phenomenon of interest, study design, evaluation, and research type. The sample being investigated in this review was adults aged 18 years and older, the phenomenon of interest was health educational animated videos, the study design included any published literature, the evaluation was stakeholder perspectives, and the research type included quantitative, qualitative, and mixed method study designs, although only narrative data was extracted.

The databases searched were Psych Info, CINAHL, Web of Science core collection, Medline via Web of Science, and Scopus. The search was conducted using the search terms health* AND animat* AND (perception* OR attitude* OR reaction* OR accept* OR satisfaction). The search terms were kept broad to ensure all relevant articles were captured.

Study Selection

All records identified through the database searches were imported into reference management software by C.F., who identified and removed duplicate citations prior to screening. The remaining records were then subjected to a structured, two-stage screening process in accordance with scoping review methodology and PRISMA guidance.

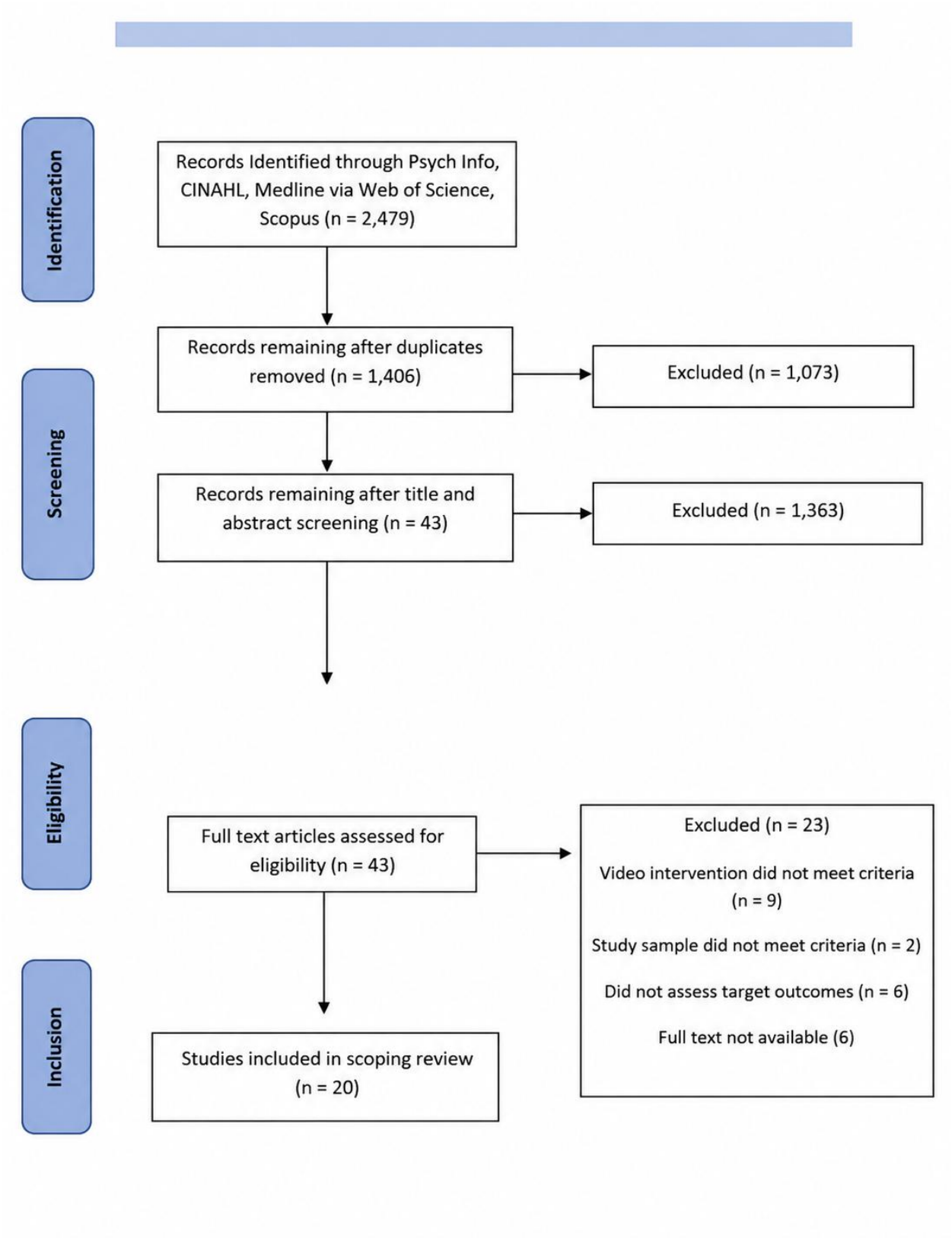
In the first stage, C.F. screened the titles and abstracts of all retrieved records against the predefined inclusion and exclusion criteria to determine potential relevance. Articles were assessed according to the target population, intervention type (animated health education videos), setting, and whether stakeholder perceptions or attitudes were evaluated. Records that clearly failed to meet the eligibility criteria, such as studies not involving animated videos, those focused on educating healthcare professionals rather than patients, or those involving children or

adolescents, were excluded during this initial screening phase. To enhance the rigour of the screening process, N.W. independently screened a random 10% sample of titles and abstracts. Inter-rater agreement during this stage was 85%, indicating a high level of consistency between reviewers.

Articles identified as potentially eligible progressed to the second stage, which involved full-text screening. C.F. reviewed all full-text articles against the inclusion and exclusion criteria, including participant characteristics, intervention features, study context, and outcome measures. N.W. independently reviewed all studies that met the inclusion criteria to confirm their eligibility for inclusion in the review. Reasons for exclusion at the full-text stage were systematically documented to ensure transparency and are presented in the PRISMA flow diagram (Figure 5).

Any discrepancies identified during the screening process were resolved through discussion between C.F. and N.W., with reference to the predefined eligibility criteria. Where clarification was required, the full text was re-examined to ensure accurate interpretation. This consensus-based process resulted in 100% agreement on the final study inclusion decisions. Ultimately, 20 studies met the eligibility criteria and were included in the scoping review. The overall study selection process is illustrated in Figure 5.

Figure 5 *PRISMA flow chart of study selection*



Data Extraction and Synthesis

Information regarding each study's year of publication, geographical location, context, description of the intervention, target audience, video length, study design, control conditions, and outcome measures was extracted and recorded by C.F. using Microsoft Excel. also developed a coding framework in Microsoft Excel to organise and code data relating to stakeholders' perceptions of the animated videos (Levac et al., 2010). This framework was applied across all included studies to ensure consistency in data extraction and coding.

The data reviewed consisted of participants' accounts, text, and tables from the results sections, as well as the authors' interpretations of the findings presented in the discussion sections. Using the coding framework developed by C.F. and N.W. independently conducted line-by-line coding of all included studies to identify key concepts, ideas, and patterns within the data (Thomas & Harden, 2008). The reviewers then met to compare and discuss the codes, resolving any differences through discussion before grouping related codes into broader themes and concepts that captured patterns across the included studies.

These themes were subsequently synthesised into a narrative summary that integrated findings across the heterogeneous evidence base, consistent with established guidance for narrative synthesis in systematic and scoping reviews (Popay et al., 2005). Throughout this process, themes were reviewed and refined collaboratively by C.F. and N.W., with repeated reference to the original studies to ensure coherence, accuracy, and agreement in interpretation (Braun & Clarke, 2023).

Results

This scoping review synthesised evidence on stakeholder perceptions of animated videos as educational tools across a range of healthcare contexts. As shown in Figure 6, the included studies spanned multiple areas of health, with the largest number focusing on health promotion and chronic conditions such as nephrology and oncology. Figure 7 shows that the studies were predominantly conducted in high-income countries, particularly the United States and New Zealand.

Figure 6 *Educational videos classified by area of specialisation.*

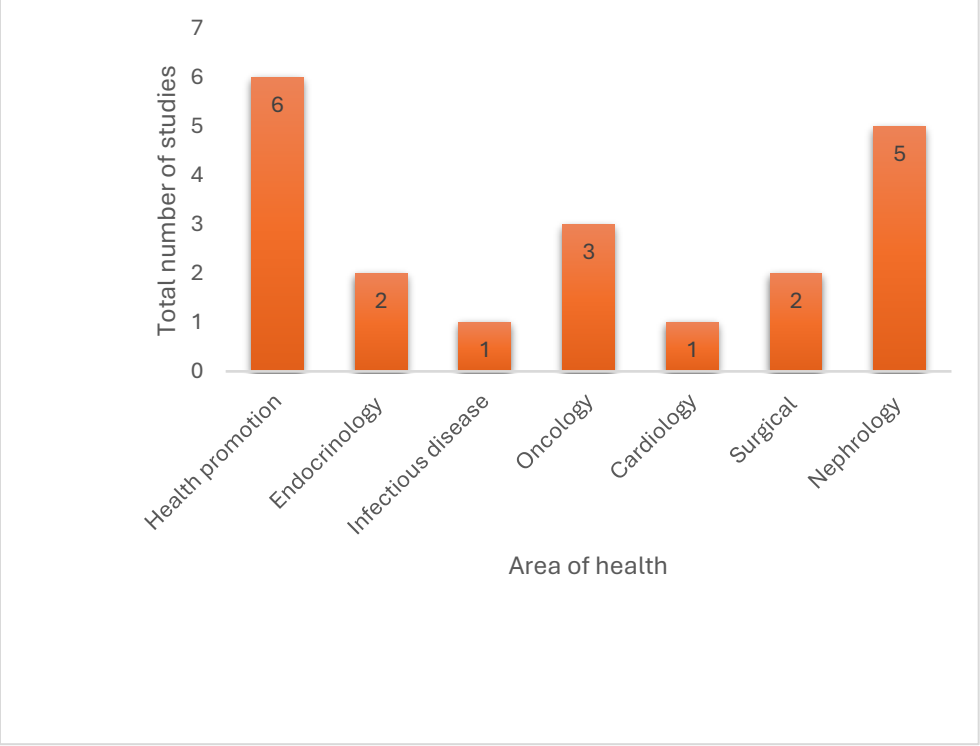
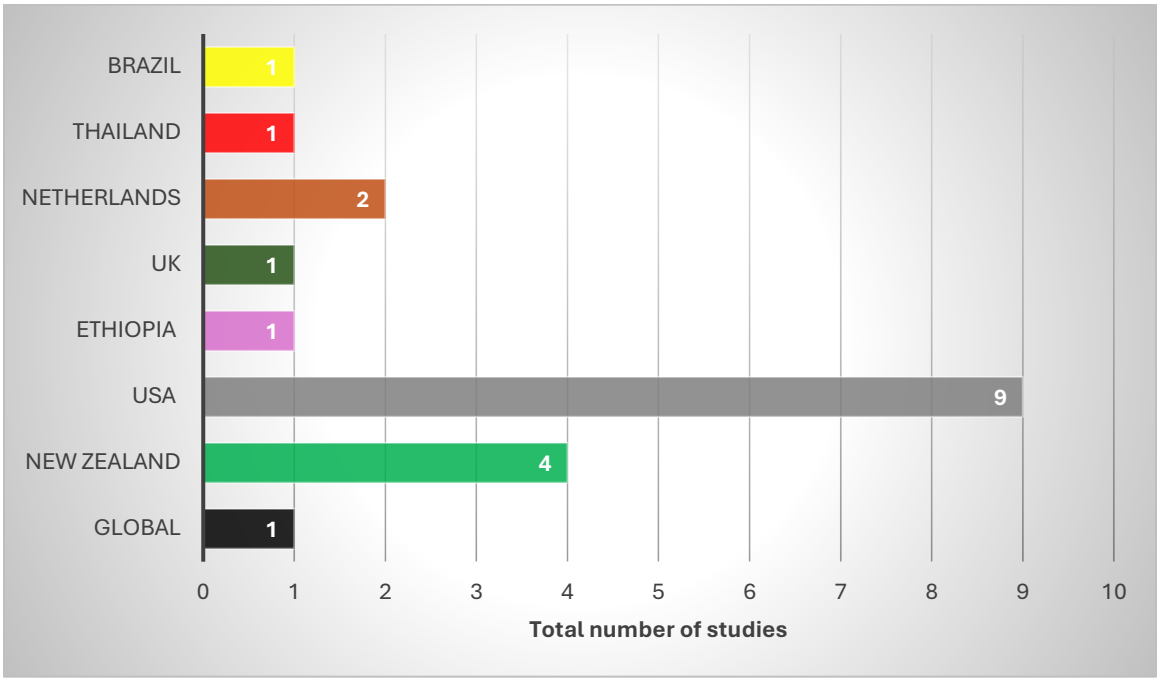


Figure 7 *Studies grouped by countries.*



An overview of the characteristics of the included studies is shown in Table 2. Of the twenty studies included, only five were randomised controlled trials. Six of the studies were pilot studies, with the earliest pilot study published in 2015 (Bello-Bravo et al., 2015), highlighting that animated health education videos are a relatively recent area of investigation within healthcare. Six studies used a mixed methods design, three used a qualitative design, and eleven used a quantitative design. For the studies that reported the duration of the video animations, video length ranged from less than one minute to 15 minutes.

Table 2 *Characteristics of included studies*

Author	Country of origin	Setting and area of health	Study design	Sample size (n)	Video duration (min)	Video description	Data collection method	Outcomes measured	Outcome (positive/ negative/ N/A)
Adam et al., (2021).	Global study	Online community health promotion (maternal and child health)	Mixed methods, sequential explanatory study design	Survey (330) Interview (20)	Not specified	Animation prototype preferences for video-based health communication	Survey and interviews	Design preferences.	N/A
Alyami et al., (2022).	New Zealand	Primary care/community – Type 2 diabetes	Mixed method pilot study. Design	32	7	Educational video about type 2 Diabetes.	Questionnaires and semi-structured interviews	Cross-cultural acceptability	Positive
Andraka-Christou, Alex, & Lyneé Madeira, (2019).	USA	Community health education/ promotion	Qualitative pilot study	39	Not specified	Educational video about Substance Use Disorder and treatments.	Focus groups	Preferences and suggested changes	N/A
Bello-Bravo, Olana, & Pittendrigh, (2015).	Ethiopia	Community health education/ promotion	Quantitative Pilot study	108	Not specified	Educational animated videos about agricultural and health practices.	Survey	Acceptability Usefulness Accessibility Feedback about content development	Positive
Brennan, Geary, & Gallagher, (2021).	Dublin	Community health education/ promotion	Quantitative pre-post test design	8,179	2.5	Educational animations about brain health to prevent dementia.	Survey, open-ended questionnaire	Enjoyment	Positive
Brock, & Smith, (2007).	USA	HIV outpatient clinic	Quantitative quasi-experimental study	51	Not specified	An educational video for patients with HIV.	Survey	Attitudes towards the video	Positive
Govender, Taylor, Smith, & Gardner, (2019).	USA	Hospital oncology clinic	Qualitative design	13	>1	An education video to teach head and neck cancer patients about	Focus groups	To obtain feedback about the videos.	Positive

						normal and abnormal swallowing.			
Hookaew, Karnka, & Sermsuk, (2016).	Thailand	Hospital chemotherapy unit	Quantitative quasi-experimental study	36	9	A breathing technique for pain using cartoon animation.	Survey	Usefulness comprehensibility credibility appropriateness.	Positive
Jones, Ellis, Nash, Stanfield, Broadbent, Jones, & Ellis, (2016).	New Zealand	Hospital cardiology service	Randomized control trial	35	15	An educational video about acute coronary syndrome.	Questionnaire	Satisfaction with the intervention	Positive
Jones, Fernandez, Grey, Petrie, Jones, & Petrie, (2017).	New Zealand	Community health education/ promotion to prevent osteoporosis	Randomized control trial	126	10	An educational video about the etiology of osteoporosis and how treatment can help to reduce bone loss.	Questionnaire	Acceptability	Positive
Jones et al., (2019).	New Zealand	Hospital (surgical patients)	Parallel 3-arm randomized control trial	97	10	An educational video to improve post-operative mobilization.	Questionnaire	Preferences for visual health information.	positive
Author	**Country of origin**	**Setting and area of health**	**Study design**	**Sample size (n)**	**Video duration (min)**	**Video description**	**Data collection method**	**Outcomes measured**	**Outcome (positive/ negative/ N/A)**
Kayler et al., (2021)	USA	Renal transplant clinic	Qualitative pre-post test design	28	2	An educational video about evaluation and listing for kidney transplantation.	Questionnaire	Acceptability	Positive
Kayler et al., (2020).	USA	Renal transplant clinic	Mixed methods quasi-experimental study	116	1-2	An educational video about kidney donation and transplantation.	Surveys, focus groups	Acceptability	Positive
Kayler, Dolph, Cleveland, Keller, M., & Feeley, (2020).	USA	Renal transplant	Pilot randomized control trial	144	2.05-2.16	An educational video about kidney allocation	Survey	Acceptability	Positive

						to support transplant decision-making.			
Kayler, Keller, Crenesse-Cozien, Dolph, Cadzow, & Feeley, (2019).	USA	Renal transplant clinic	Quantitative quasi-experimental, one-group, pre-post study	50	2.07	An educational video about kidney allocation to support transplant decision-making.	Survey	Acceptability	Positive
Meppelink, van Weert, Haven, & Smit, (2015).	Netherlands	Community health education/ promotion about cancer screening	Randomized control trial	231	3.14	An educational animation about colorectal cancer screening.	Questionnaires	Attitudes towards the video	Positive
Schnitman, Gomes, Deckelbaum, & Utiyama, (2022).	Brazil	Hospital (surgical)	Mixed method prospective quasi-experimental pilot study	34	8.55-9.05	Patient education tool for urgent abdominal surgeries in a public hospital in Brazil.	Questionnaire	Acceptability	Positive
Smith, S., Haseley, Keller, Cadzow, Feeley, & Kayler, (2021).	USA	Renal transplant clinic	Mixed method pre-post quasi-experimental pilot study	24	3.25	An educational video about live kidney donor surgical complications.	Interviews	Acceptability	Positive
Valera, Acuna, Alzate-Duque, Liang, Cupertino, & Merulla, (2021).	USA	Community cancer screening waiting room	Quantitative quasi-experimental study	13	2-6	Cancer-related educational videos including etiology, prevention, detection, diagnosis, treatment, and survivorship.	Questionnaire	To obtain feedback about the videos.	Positive
van het Schip, Cheung, Vluggen, Hoving, Schaper, & de Vries, (2020).	Netherlands	Primary care - Endocrinology	Mixed methods quasi-experimental pilot test	15	>5	An educational video to improve physical activity in type 2 diabetes.	Interviews, questionnaire	Attractiveness Comprehensibility Acceptance	Positive

Note. A positive outcome refers to the videos being evaluated positively by the majority of participants involved in the studies.

Description of themes

The findings of this review revealed several key patterns in stakeholders' perceptions of animated videos as patient education tools. Through the thematic synthesis, seven main themes were constructed to represent these perceptions. Each theme is described below.

Acceptability

Acceptability was constructed as a key theme in the review, reflecting stakeholders' positive views regarding the use of animated videos as a format for delivering health-related information. The majority of the studies found participants perceived the animated videos as engaging and effective tools for health education (Adam et al., 2021; Alyami et al., 2022; Andraka-Christou et al., 2019; Bailey et al., 2021; Bello-Bravo et al., 2015; Brennan et al., 2021; Govender et al., 2019; Hookaew et al., 2016; Jones et al., 2016; Jones et al., 2017; Jones et al., 2019; Kayler et al., 2021; Kayler, Dolph, et al., 2020; Kayler et al., 2019; Kayler, Majumder, et al., 2020; Schnitman et al., 2022; Smith et al., 2021; Valera et al., 2021; van Het Schip et al., 2020).

While most studies did not explicitly examine why participants found the videos acceptable, several factors influencing acceptability were identified through analysis across the included studies. For example, acceptability was more likely to occur if the video animations were localised for target audiences such as cultural representations of characters that individuals could identify with (Adam et al., 2021; Alyami et al., 2022; Kayler et al., 2019; Smith et al., 2021; Valera et al., 2021). Another study found there were varying acceptability levels between different groups of participants (Schnitman et al., 2022). For example, participants with lower education levels were found to be more accepting of animated videos as patient education tools

compared to those with higher education, indicating potential differential impact based on educational background (Schnitman et al., 2022). Similarly, younger individuals and women were identified as more accepting of health educational animated videos, highlighting the importance of tailoring educational content to diverse demographic groups (Schnitman et al., 2022).

Design

Participants' perceptions, opinions, and suggestions about the design features of video animations, collectively referred to as *design*, were a focus of six of the reviewed studies (Adam et al., 2021; Alyami et al., 2022; Andraka-Christou et al., 2019; Bello-Bravo et al., 2015; Smith et al., 2021; van Het Schip et al., 2020). One study indicated a preference for bright or high-contrast colours to enhance viewer engagement (Adam et al., 2021). Another study revealed a split among participants, with some favouring neutral serene colours and others emphasising the importance of bright colours in conveying the message (Hookaew et al., 2016). Overall, no clear consensus was identified across the included studies.

With respect to voice-over and narrative style, participants expressed a preference for local-sounding voices that supported identification with the content and enhanced engagement (Adam et al., 2021; Kayler et al., 2021). The use of familiar, everyday language further contributed to perceptions of trustworthiness and credibility, suggesting that conversational delivery styles may help reduce psychological distance between the viewer and the information presented (Andraka-Christou et al., 2019). Together, these features aligned with a broader preference for narrative storytelling approaches, which were perceived as more engaging and relatable than traditional, didactic forms of information delivery (Adam et al., 2021; Andraka-Christou et al., 2019).

Design elements such as video length, speed, and humour were also discussed. Participants generally favoured shorter videos with a focus on a few key messages, as opposed to longer videos covering multiple topics (Adam et al., 2021; Alyami et al., 2022; Andraka-Christou et al., 2019; van Het Schip et al., 2020). One study noted divergent opinions on video speed, with some participants finding it too slow while others deemed it too fast (Alyami et al., 2022). While some participants favoured the inclusion of humour in video animations to sustain interest (Andraka-Christou et al., 2019), others cautioned against using humour that could be perceived as childish, potentially coming across as condescending to viewers, or that might detract from the video's message (Andraka-Christou et al., 2019).

Perceived Impact

The theme of *Perceived Impact*, which refers to participants' perceptions of the effects of video animations, was constructed from findings reported across 13 of the included studies (Alyami et al., 2022; Andraka-Christou et al., 2019; Bailey et al., 2021; Brennan et al., 2021; Govender et al., 2019; Jones et al., 2016; Jones et al., 2017; Jones et al., 2019; Kayler et al., 2021; Kayler et al., 2019; Kayler, Majumder, et al., 2020; Meppelink et al., 2015; Smith et al., 2021). Participants expressed positive impacts on their knowledge, finding the animated videos both informative and engaging, and stating that they enhanced their understanding of their health condition and treatment (Brennan et al., 2021; Brock & Smith, 2007; Govender et al., 2019; Keller et al., 2021). Some participants indicated that the animated videos influenced their intentions to adopt positive lifestyle changes after viewing them (Brennan et al., 2021).

Additionally, a few studies revealed that the video animations affected patients' beliefs about their medication, with participants reporting more positive beliefs about the effectiveness of treatment in managing their illness (Jones et al., 2016; Jones et al., 2017). Affective outcomes

were also evident within this theme, as participants reported reduced levels of fear and anxiety about their health conditions and treatment following exposure to the video animations (Brennan et al., 2021; Jones et al., 2017; Jones et al., 2019; Kayler et al., 2021; Smith et al., 2021).

In some of the studies, participants noted that the video animations prompted them to contemplate the importance of adhering to their treatment regimen and reinforced the significance of self-care behaviours (Alyami et al., 2022; Brock & Smith, 2007; Jones et al., 2017). However, for some participants in one study, the video animations elicited feelings of guilt regarding their prior low adherence to treatment and self-care behaviours (Alyami et al., 2022). The study did not elaborate on whether this guilt helped to motivate participants to improve their treatment adherence and self-care behaviours or whether their feelings of guilt discouraged them. Nonetheless, the majority of participants in this study (Alyami et al., 2022) found the animated video motivated them to make positive lifestyle changes or encouraged them they were on the right track.

Relatability

Relatability refers to participants' perceptions of being able to identify with or relate to the content of the video animations. The theme of *Relatability* was constructed from findings reported across five of the included studies (Adam et al., 2021; Alyami et al., 2022; Bello-Bravo et al., 2015; Govender et al., 2019; van Het Schip et al., 2020). Participants reported they related to the video animations when the characters in the videos were personalised to match patients' demographics with participants appreciating diversity enabling identification (Alyami et al., 2022; Andraka-Christou et al., 2019; van Het Schip et al., 2020). However, some participants felt that health conditions can affect anyone regardless of ethnicity or gender and said personalising the animated characters was unnecessary (Alyami et al., 2022).

Additionally, participants in another study (van Het Schip et al., 2020) mentioned that they were more likely to engage with the video animations if the content was relevant to their current situation. For example, some felt that the video animations lacked new information and therefore didn't meet their needs, but they acknowledged that they could be relevant for newly diagnosed patients who have limited insight or information about their health condition.

Comprehension

Comprehension, as perceived by the participants, relates to their ease of understanding the educational material presented in the video animations. The theme of *Comprehension* was constructed from findings reported across 15 of the included studies (Alyami et al., 2022; Andraka-Christou et al., 2019; Bailey et al., 2021; Bello-Bravo et al., 2015; Govender et al., 2019; Hookaew et al., 2016; Jones et al., 2016; Jones et al., 2017; Kayler et al., 2021; Kayler, Dolph, et al., 2020; Kayler et al., 2019; Meppelink et al., 2015; Smith et al., 2021; Valera et al., 2021; van Het Schip et al., 2020). The effectiveness of video animations was notably pronounced among individuals with low health literacy (Kayler, Dolph, et al., 2020; Meppelink et al., 2015). The use of simple, nonmedical everyday language, coupled with creative visuals, were identified as significant factors that enhanced the comprehensibility of the video animations, particularly for individuals with low health literacy (Alyami et al., 2022; Brennan et al., 2021; Govender et al., 2019; Hookaew et al., 2016; Smith et al., 2021; Valera et al., 2021; van Het Schip et al., 2020). In one study, participants described previously received information as confusing and reported a tendency to overlook pamphlets available at clinics or other health centres. Consequently, participants regarded video animations as a superior alternative to written information (Alyami et al., 2022).

Usefulness

The theme of *Usefulness* pertains to how participants perceived the video animations in terms of their utility, practical value, or ability to meet their needs. This theme was constructed from findings reported across five of the included studies (Bello-Bravo et al., 2015; Govender et al., 2019; Hookaew et al., 2016; Jones et al., 2016; Kayler, Dolph, et al., 2020). However, most studies did not specify the factors that determined whether the video animations were considered useful or not. In one study, participants reported that the video animations helped improve their understanding of their health and were beneficial to them in some way (Kayler, Dolph, et al., 2020). The flexibility of this learning format was seen to support individualised learning by enabling self-paced and repeat viewing of the animated videos, and it was noted that animated videos can serve as a valuable source of information accessible in the participants' home environment (Kayler, Dolph, et al., 2020). The findings from this study (Kayler, Dolph, et al., 2020) suggest that participants found the delivery method to be useful in addition to the video content.

Dissemination

Dissemination refers to how the video animations can be delivered to the public or the target stakeholder population. The theme of Dissemination was constructed from findings reported across three of the included studies (Bello-Bravo et al., 2015; Kayler, Dolph, et al., 2020; Valera et al., 2021). Participants preferred to watch video animations at health centres/ clinics because such centres usually have TVs and video players for patients and their companions to watch while waiting for their appointments (Bello-Bravo et al., 2015; Valera et al., 2021). Other suggested settings were community organisations such as women's associations, homeless shelters, or correctional settings (Bello-Bravo et al., 2015; Valera et al., 2021). Mobile phones were another suggested option for widespread dissemination. Increasing

access to mobile phones provides opportunities to disseminate video animations via mobile phones, and short videos enable ease of streaming and sharing across video platforms and social media (Bello-Bravo et al., 2015; Kayler, Dolph, et al., 2020).

Discussion

In this scoping review, the researcher aimed to synthesise the current evidence on stakeholder perceptions regarding the use of animated videos as an educational tool in healthcare. The review encompassed a diverse range of studies that investigated the perceptions of acceptability of animated videos on diverse patient populations in various healthcare settings, providing a comprehensive understanding of stakeholder perspectives. The findings from this scoping review were synthesised into seven themes related to stakeholder perceptions of animated videos as patient education tools: *acceptability, design, comprehension, perceived impact, relatability, usefulness,* and *dissemination.* These themes provide valuable insights into the factors influencing stakeholder engagement.

Acceptability was constructed as a key theme in the review, reflecting stakeholders' generally positive perceptions of animated videos as a format for delivering health-related information. The majority of the studies reviewed found that animated videos were engaging and effective tools for health education. However, the review also highlighted several factors that may influence acceptability, including education level, age, gender, and cultural relevance. For instance, participants with lower education levels were found to be more accepting of animated videos as patient education tools than those with higher education (Schnitman et al., 2022), indicating a potential differential impact based on educational background.

There is research that shows those with lower health literacy levels derive a greater benefit from health educational video animations (Kayler, Dolph, et al., 2020; Meppelink et al., 2015). Those with lower education levels may be more accepting of animated videos as patient education tools because they derive a greater benefit from them compared to those with higher education. This relationship between acceptability and effectiveness has been identified by

Perski and Short (Perski & Short, 2021) who developed a dynamic model linking acceptability, engagement, and effectiveness. According to these authors, an intervention's effectiveness is linked to its acceptance among users and therefore helps to explain why those with lower education levels are more accepting of animated videos as patient education tools.

Similarly, younger individuals were identified as more accepting of patient education animated videos (Schnitman et al., 2022). This finding is supported by a literature review investigating the use of multimedia interventions in adolescents. They found adolescents are positive towards the use of multimedia technologies to increase healthcare knowledge (Geckle, 2016). For older adults, barriers to using digital technologies exist, including lower levels of digital literacy given their lack of overall use of existing technologies (Kokorelias et al., 2022), and their lack of perceived usefulness (Gitlow, 2014). This lack of digital literacy and perceived usefulness could conceivably impact older adults' acceptance of digital technologies. However, another study in this review by Brennan et al. (2021) found older adults were positive towards animated videos about brain health and dementia, indicating animated videos are acceptable to older adults. Importantly, the authors noted that the participants were a self-selecting sample who were already motivated to learn about brain health and had the digital literacy skills to take part in an online learning course limiting the generalisability of the study. In conclusion, these results indicate older adults appear to be accepting of health educational animated videos, but younger people may have a higher level of acceptance towards this intervention; more research is needed to clarify this.

Women were also found to be more accepting of health educational animated videos (Schnitman et al., 2022), a finding that aligns with broader evidence suggesting that females are generally more likely than males to engage with technology-based health information (Ek, 2015;

Gelb et al., 2012). This pattern may reflect well-documented gender differences in health-seeking behaviour, with women more likely to access healthcare services and engage with health information for both physical and mental health concerns (Thompson et al., 2016). Greater familiarity and comfort with health information-seeking may, in turn, contribute to higher levels of acceptability of digital health education tools among women.

However, this trend is not uniform across contexts. In contrast, Kim et al. (2014) found that men were more receptive to receiving information about depression through a technology-based medium in an emergency department setting. This finding suggests that digital formats may offer a less confronting or more acceptable avenue for help-seeking among men, particularly in situations where stigma or discomfort with face-to-face discussions may act as barriers. Taken together, these findings highlight the importance of accounting for gender differences, context, and preferences when designing health education interventions. Tailored and inclusive approaches that consider how different groups engage with digital health information may help maximise acceptability and engagement across diverse populations.

Relatability and *usefulness* were developed as key themes through the thematic synthesis, reflecting stakeholders' emphasis on content that felt relevant, meaningful, and applicable to their own circumstances. Participants frequently valued animated videos that reflected situations, experiences, or challenges similar to their own, suggesting that perceived relevance plays a key role in engagement with educational materials. This aligns with evidence indicating that health education is more effective when individuals can see their own experiences represented in the content, as this facilitates identification, attention, and perceived personal relevance (Kreuter et al., 2007; Meppelink et al., 2015).

Relatable characters and scenarios were particularly important in supporting understanding and engagement, as they helped ground abstract or complex health information in familiar, everyday contexts. Prior research has shown that narrative and character-based approaches can increase message processing and acceptance by reducing psychological distance between the viewer and the information presented (Kreuter et al., 2007; Slater, 2002). In the context of animated patient education, this suggests that relatability may enhance both comprehension and perceived usefulness by helping viewers integrate new information with their existing knowledge and lived experience.

Usefulness was also closely linked to the flexibility and accessibility of animated videos. Participants valued the ability to engage with content at their own pace, revisit information as needed, and access videos outside of clinical encounters, including in home settings. These features support self-directed learning and may be particularly beneficial for individuals with varying levels of health literacy or those who feel overwhelmed during in-person consultations (Meppelink et al., 2015). Digital and video-based education formats have been shown to reduce cognitive load when information is presented visually and sequentially, making them especially suitable for conveying health information in an accessible manner (Mayer, 2005).

These findings are consistent with broader literature emphasising the importance of tailoring health education interventions to users' needs, preferences, and contexts. Reviews of digital and multimedia health interventions indicate that personalised, accessible, and user-centred materials are more likely to be perceived as useful and to support engagement and learning (Monteiro Grilo et al., 2022; van den Berg et al., 2023). Together, this evidence reinforces the potential of animated videos as flexible, relatable, and user-friendly tools for

patient education, particularly when designed with attention to context, representation, and ease of use.

Design elements of animated videos played a crucial role in shaping stakeholder perceptions. Participants expressed preferences for specific *design* features, including the use of colour, shorter video length, humour, relatable character representations, and narrative storytelling approaches. While some participants preferred bright colours to capture attention, others favoured neutral serene colours, highlighting the diversity of preferences among stakeholders. Preferences were noted for shorter videos, with only a few key messages per video versus longer videos covering multiple topics. Furthermore, the incorporation of relatable characters and storytelling techniques was identified as essential for enhancing engagement, particularly among individuals with lower health literacy levels. Preferences for humour were also included in the design theme. Participants appreciated humour as it helped them stay engaged in the animated videos. However, caution was advised against using humour that might appear childish or distract from the video's intended message.

Research suggests that the use of humour in educational contexts may improve attention and information retention. For example, an integrative review of humour in nursing education found that humour can help reduce stress, improve attention, and increase focus, which may support retention of educational content (Haydon et al., 2023). However, research has also shown that humorous messages can lead to decreased problem perception and problem-solving behaviour when the message is received as non-serious (McGraw et al., 2015). This was reflected in one study included in this review that reported participants found humour helped them to maintain interest in the animated videos, but warned against using humour that could

seem childish, or that would distract from the message of the video (Andraka-Christou et al., 2019).

The preferences for *design* elements found among the studies in this review are consistent with previous research. For example, research has found storytelling may be particularly effective in enhancing health communication and promoting behavioural change in racial, ethnic, and minority populations with a tradition of storytelling (Houston et al., 2011; Kreuter et al., 2007; Larkey et al., 2009; Murphy et al., 2013). Storytelling can engage less involved audiences, render complex information comprehensible, and culturally ground information relevant to the target audience (Houston et al., 2011; Kreuter et al., 2007; Larkey et al., 2009; H. Lee et al., 2016; Murphy et al., 2013) emphasising the potential of animated videos to resonate with diverse audiences through relatable and culturally relevant storytelling.

Comprehension was developed as a central theme through the thematic synthesis, with stakeholders consistently highlighting the importance of clear, simple language and visually supportive content in facilitating understanding of health information presented in animated videos. Participants frequently reported that the combination of everyday, non-medical language and creative visual representations made complex medical concepts easier to grasp, reduced cognitive burden, and enhanced overall clarity. These features were particularly valued by individuals with lower levels of health literacy, who often experience difficulty processing dense, text-based or jargon-heavy health information.

Empirical studies have demonstrated that visual-based and multimedia interventions are especially effective for individuals with low health literacy. For example, Moe-Byrne et al. (2022) reported that multimedia health interventions enhanced understanding and recall of medical information in underserved populations. Feeley et al. (2023) further highlighted that

animated videos can bridge communication gaps by simplifying language and reinforcing key messages visually, thereby supporting knowledge acquisition and informed decision-making.

Importantly, participants in several studies described animated videos as more accessible and easier to engage with than written pamphlets, which were often perceived as overwhelming or confusing. This aligns with findings from Pate et al. (2020) who demonstrated that visual explanations can reduce misinterpretation of health information and improve conceptual understanding. Together, these findings highlight the value of animated videos as an inclusive educational format capable of improving comprehension across diverse patient populations, particularly those at risk of poor health outcomes due to limited health literacy.

The *perceived impact* of animated videos on stakeholders was another significant theme identified in this review. Stakeholders reported positive impacts on their knowledge, intentions to make positive lifestyle changes, beliefs about medication, and affective outcomes such as reduced anxiety and fear. Additionally, the review highlighted the potential for animated videos to reinforce the importance of treatment adherence and self-care behaviours, underlining their potential to motivate and empower patients in managing their health. These findings resonate with prior studies showing the positive effects of multimedia interventions on knowledge acquisition and behavioural outcomes (Chatterjee et al., 2021; Moe-Byrne et al., 2022), supporting the value of animated videos as effective tools for facilitating patient education and engagement. However, studies investigating mental health and emotional outcomes is scarce (Keller et al., 2021); as a result, more research is needed in this area to determine whether health educational animated videos are effective in reducing health related anxiety and fear.

While the theme *dissemination* was only found in a few of the articles reviewed, it was included as a theme because it could be a key aspect that is missing from other studies that

develop patient education video animations. In the theme of *dissemination*, stakeholders highlighted the significance of effective and widespread dissemination of animated videos to reach the intended target audiences. Preferences for dissemination settings such as healthcare clinics, community organisations, and mobile platforms were identified, highlighting the importance of strategic and accessible distribution channels for maximizing the impact of patient education videos. These findings emphasise the need for comprehensive dissemination strategies to ensure the broad accessibility and relevance of animated videos across diverse stakeholder groups and healthcare settings, contributing to improved health literacy and engagement.

Research suggests the waiting rooms of health centres are an ideal way to disseminate patient education (Newman-Casey et al., 2019). Partnering and working together with communities within the targeted services could also help support the dissemination of animated health educational videos (Valera et al., 2021). Given dissemination is a key factor in the delivery of patient education video animations, more research is needed to explore how to effectively disseminate them so they can reach the intended target audiences.

Taken together, the findings of this scoping review suggest that the identified themes interact dynamically to shape stakeholder engagement with animated patient education videos. Design features such as narrative storytelling, relatable characters, appropriate use of colour, humour, and concise video length appear to function as foundational elements that influence both comprehension and relatability. When videos are designed in ways that align with viewers' cultural backgrounds, literacy levels, and lived experiences, stakeholders are more likely to understand the content, see its relevance to their own circumstances, and perceive it as useful. Enhanced comprehension and relatability, in turn, contribute to greater perceived usefulness, as individuals feel better equipped to apply the information to their health behaviours and decision

making. These interconnected processes appear to underpin acceptability, with stakeholders more receptive to videos they find easy to understand, personally relevant, and practically helpful. Acceptability then plays a critical role in shaping perceived impact, as engagement with the content is a necessary precursor to changes in knowledge, beliefs, emotional responses, and behavioural intentions.

Finally, dissemination acts as an enabling condition that determines whether these benefits can be realised at scale; even highly acceptable and well-designed videos are unlikely to achieve meaningful impact if they are not delivered through accessible and contextually appropriate channels. Together, these findings highlight a reinforcing cycle in which thoughtful design supports comprehension and relatability, which enhances usefulness and acceptability, thereby increasing engagement and perceived impact, provided that effective dissemination strategies are in place. This integrated perspective underlines the importance of adopting a holistic, user-centred approach when developing and implementing animated psychoeducational interventions in healthcare settings.

Implications of findings

The strong interrelationship between acceptability, design, comprehension, relatability, and perceived usefulness suggests that animated videos are most effective when these elements are considered collectively rather than in isolation. Design decisions such as the use of simple, everyday language, supportive visuals, short video length, and narrative storytelling are not merely aesthetic choices, but foundational components that shape comprehension, engagement, and acceptability, particularly for individuals with lower health literacy.

These findings imply that developers of animated psychoeducational videos should prioritise clarity, simplicity, and narrative coherence when presenting health information. Incorporating relatable characters and contextually relevant scenarios may further enhance users' ability to connect with the material and integrate new information into their existing understanding. Careful and intentional use of humour may support engagement, provided it is appropriate to the topic and audience and does not detract from the seriousness or credibility of the message.

Strengths and limitations

Several methodological strategies were employed in this scoping review to reduce the potential for bias and enhance transparency. These included a systematic search across multiple databases, the use of clearly defined inclusion and exclusion criteria, and a dual-reviewer screening process with independent assessment of study eligibility. Discrepancies were resolved through discussion, which strengthened consistency in study selection and data interpretation.

A key strength of this review lies in the breadth of the included literature. The studies spanned a wide range of healthcare settings, countries, and patient populations, encompassing diverse health conditions, demographic characteristics, and sociocultural contexts. This breadth provides a comprehensive overview of stakeholder perceptions of animated videos as patient education tools and supports the relevance of the findings across multiple healthcare contexts.

However, this same breadth also represents a limitation. The considerable heterogeneity across studies including variation in health conditions, intervention purposes, outcome measures, study designs, and target populations limited the ability to directly compare findings or quantitatively synthesise results. As a result, it was not appropriate to conduct a meta-analysis, and the synthesis relied on narrative and thematic approaches. While this is consistent with the

aims and methodology of a scoping review, it constrains the ability to draw conclusions about the relative effectiveness of animated videos across specific populations or settings.

The limitations of this review were the included studies' small sample sizes, lack of control groups, or lack of randomisation. Thirteen out of the twenty studies reviewed had sample sizes of less than 100 people. Many of the studies reviewed were either pilot studies that had small sample sizes and lacked a comparative or control group, or they were quasi-experimental study designs lacking randomisation. Only five studies included in the review were randomised controlled trials.

Recommendations for Future Research

Although the review found positive stakeholder perceptions of animated videos as patient education tools, there are gaps in the literature that warrant further investigation. These gaps include the impact of animated videos on mental health and emotional outcomes, the effectiveness of different dissemination pathways, and the specific elements related to the perceived acceptability and usefulness of patient education video animations. Future research should aim to address these gaps to advance the understanding of the potential and limitations of animated videos as a tool for patient education.

Conclusion

In conclusion, this scoping review provides valuable insights into stakeholder perceptions of animated videos as patient education tools. The themes developed through the thematic synthesis highlight the importance of stakeholder acceptability, design features, and the perceived impact and usefulness of animated videos. The review found that stakeholders were generally accepting of animated videos as patient education tools, although several factors appeared to influence levels of acceptability. Design was identified as a key theme, with

stakeholder preferences including the use of humour, shorter video length, colour, and narrative storytelling. Incorporating these design features may enhance audience engagement. A narrative approach may be particularly beneficial for engaging individuals with lower health literacy and minority populations with a tradition of storytelling. Furthermore, incorporating relatable characters and storytelling techniques may help patients relate to the content on a personal level, increasing engagement and willingness to adopt healthier behaviours. Further research is needed to better understand the factors influencing acceptability and perceived usefulness across different demographic groups, as well as to explore the effects of animated videos on mental health and emotional outcomes in healthcare settings and the effectiveness of different dissemination pathways.

Chapter 7 - Study Two: Development and Evaluation of the Self-Guided Psychoeducational Videos with Cancer Patients and Healthcare Professionals

Introduction and Aims

The findings from the literature review and scoping review presented in the previous chapter informed the initial development of the self-guided psychoeducational videos (SGPVs) for this research. Building on this foundation, the present chapter describes Study Two, which focused on the development and pilot testing of the SGPVs. The original aim of this study was to design psychoeducational video content tailored for cancer patients to be displayed in oncology waiting rooms, and to evaluate the feasibility, acceptability, and perceived usefulness of the videos from the perspectives of both cancer patients and oncology healthcare workers, including psychologists.

A mixed-methods approach was employed, incorporating content analysis and thematic analysis of participant feedback to identify actionable refinements and to explore overarching themes related to acceptability and usefulness. However, recruitment challenges substantially limited the number of cancer patients who were able to participate, which in turn constrained the feasibility of conducting a full pilot evaluation within the oncology setting. These challenges were further compounded by technical issues, including malfunctioning display screens in oncology waiting rooms, which hindered consistent delivery and demonstration of the videos.

In response to these practical constraints, the study design was adapted. The same SGPVs developed to teach broadly applicable coping strategies for managing psychological distress were redirected to a general practice (GP) waiting room context. This revised setting allowed the

videos to be evaluated within an healthcare environment, while retaining their relevance across clinical populations rather than limiting them to a single diagnostic group.

Despite the limited recruitment of cancer patients, the data obtained from cancer patients and oncology healthcare professionals were retained and considered valuable. Feedback from a diverse group including two cancer patients, a Māori cancer support group, and oncology healthcare workers (including psychologists) was used to inform content refinement and ensure cultural, clinical, and contextual relevance of the videos.

This chapter presents the methodology, findings, and overall discussion of the pilot study evaluating the acceptability and perceived usefulness of the SGPVs within an oncology waiting room context. It outlines how content analysis and thematic analysis of stakeholder feedback were used to guide refinements to the videos and to inform subsequent implementation in a general practice setting.

Method

Research procedure

Ethics

Ethical approval for this study was obtained from the Mid Central District Health Board and the Massey University Human Ethics Committee (4000028966). All participants provided informed consent (Appendix One) prior to participation, ensuring they understood the study's purpose, procedures, and any potential risks involved.

Video Development

The development of the self-guided psychoeducational videos (SGPVs) was informed by both the literature review and the findings of the systematic scoping review (Study One). The literature review informed the theoretical foundations, evidence-based coping strategies, and educational principles underpinning the SGPVs, while the scoping review identified design characteristics associated with stakeholder acceptability. Together, these findings guided the development of the SGPVs. Table 3 summarises how the findings from Study One were translated into specific design decisions.

Table 3 *Translation of Findings from Study One into the Design of the Self-Guided Psychoeducational Videos (SGPVs)*

Finding from Study One	Application in the SGPVs
Storytelling	Videos were developed using narrative scripts that embedded coping strategies within everyday scenarios.
Relatable characters	Characters, settings, and dialogue reflected everyday New Zealand contexts to increase relevance and identification.
Simple language	Plain English was used throughout to maximise accessibility, particularly for individuals with lower health literacy.
Humour	Appropriate humour was incorporated to enhance engagement while maintaining the educational intent.
Short videos	Videos were designed to be approximately 3-5 minutes in duration to maintain attention and suit waiting room settings.
Visual explanations	Whiteboard animations and illustrations were used to reinforce key concepts and support comprehension.

Phase One

The video development process comprised three phases. In the first phase, the researcher created the self-guided psychoeducational videos (SGPVs) using Doodly, an animation software tool that utilises a simple drag-and-drop interface, allowing users to select characters, props, and backgrounds before arranging them on a whiteboard, blackboard, greenboard, or glass board to create animated videos. The coping strategies depicted in the videos were derived from a review of the literature to identify psychological strategies that had demonstrated efficacy for mild to moderate psychological distress (refer to the literature review, page 51–63). The aim of the

videos was to educate viewers on coping strategies grounded in empirical research. The videos featured animated visuals illustrating common psychological coping mechanisms through a narrative-driven approach. The coping strategies incorporated into the videos were selected in collaboration with two senior clinical psychologists with extensive experience working with oncology patients, who supervised the project. Collectively, these design decisions ensured that the SGPVs were grounded in evidence-based psychological practice while also incorporating design features shown to enhance stakeholder acceptability and engagement.

Framework

Narrative Theory, identified in the literature review as an appropriate theoretical framework and supported by the findings of the scoping review highlighting the value of storytelling, guided the development of the videos. Narrative theory serves as an effective framework for developing psychoeducational videos due to its inherent capacity to engage viewers on an emotional and cognitive level (Culler & Culler, 2011). By structuring the videos around storytelling and narrative elements, such as characters, plot development, and conflict resolution, Narrative Theory creates an engaging and relatable context for conveying psychological concepts and coping strategies (Murray, 2015). Stories have a unique power to capture attention, evoke empathy, and foster a deeper understanding of abstract ideas, making them ideal for delivering educational content in an engaging and memorable manner (Murray, 2015). Using a narrative approach can enhance comprehension and retention of the video content (Davis et al., 2020). Furthermore, narratives may be a particularly effective communication strategy for populations with a tradition of storytelling, such as Māori. The researcher aimed to use images and narratives that were relevant and relatable to the target audience (New

Zealanders) by using examples or scenarios that resonated with their experiences of psychological distress.

The development of the SGPVs was also guided by the Cognitive Theory of Multimedia Learning (Mayer, 2005), with recommendations from the scoping review reinforcing the importance of concise videos, visual simplicity, and clear presentation. Strategies included ensuring that the videos were short in length and focused on one specific topic or a few key messages within each video to maintain viewer engagement and prevent cognitive overload. Simple and clear visuals were used on the whiteboard to illustrate coping strategies related to psychological distress to aid understanding of the concepts presented.

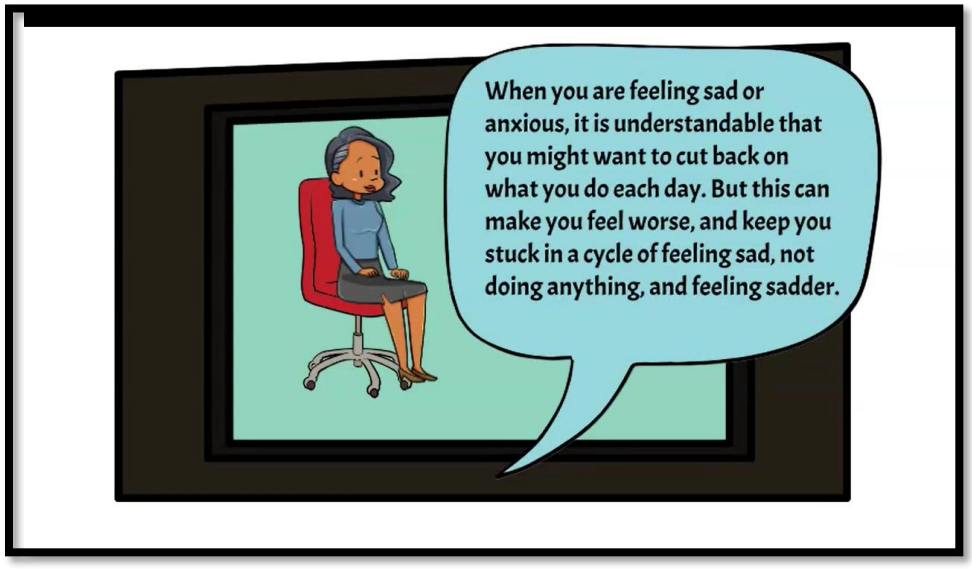
Content

The coping strategies presented in the videos were informed by Cognitive Behavioural Therapy (CBT) and Acceptance and Commitment Therapy (ACT). A total of six psychoeducational videos were developed, each ranging from approximately 2 to 5 minutes in duration. The videos incorporated background music to enhance engagement and complement the narrative-driven animations. CBT-informed strategies included behavioural activation, problem-solving, and help-seeking behaviours. ACT-informed strategies emphasised acceptance of emotional experiences and present-moment awareness, including savouring practices. Diaphragmatic breathing was included as a self-regulation strategy commonly used across CBT- and ACT-based interventions to support emotional regulation and physiological calming. The following sections provide a brief overview of the six SGPVs, outlining the narrative approach and storyline used to communicate each coping strategy.

Behavioural Activation Video

The “Behavioural Activation” video was grounded in CBT and serves as a proactive, problem-focused coping strategy (Wang & Feng, 2022). It tells the story of a woman who has been feeling down, lacking motivation and energy, which led her to isolate herself and abandon the activities she once enjoyed. One day, while watching television, she came across a TV show featuring a clinical psychologist who was sharing coping strategies. The psychologist provided psychoeducation on depression, explaining how it can be perpetuated through patterns of avoidance behaviours, and a lack of engagement in pleasurable activities. These patterns create a cycle that reinforces feelings of sadness and hopelessness (Wang & Feng, 2022). To break this cycle, the clinical psychologist offered practical advice on behavioural activation, encouraging the audience to deliberately plan to engage in activities they previously enjoyed, even when motivation is lacking. After watching the TV show, the woman felt inspired and gained awareness about the importance of engaging in activities that she enjoys such as gardening, spending time with her whānau, and exercising. After engaging in these activities, her energy and mood improved, and she realized the value of engaging in things she enjoys, even if she is lacking the motivation to do so. An illustrative still from this video is presented in Figure 8.

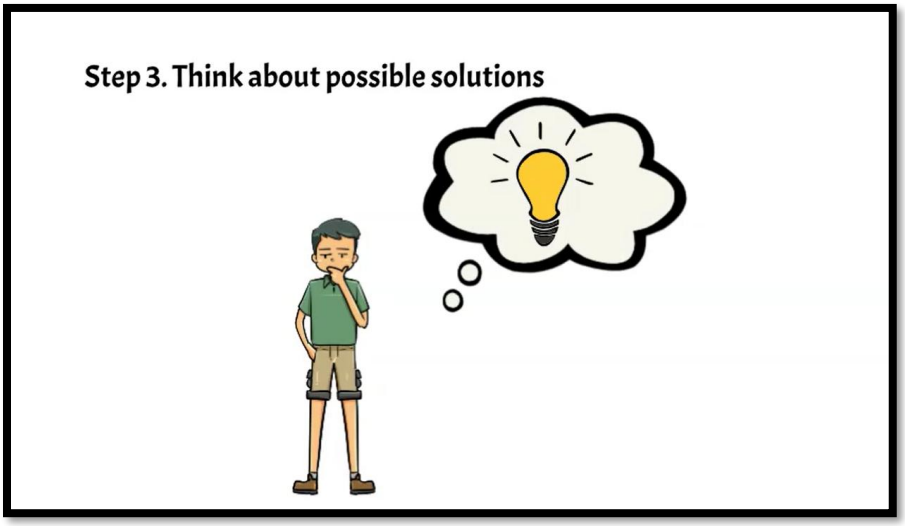
Figure 8 *Image from the Behavioural Activation Video*



Problem-Solving Video

The "Problem-solving" video was grounded in CBT and served as a proactive, problem-focused coping strategy (Wagner et al., 2014). It follows a male protagonist who confides in a close friend about his distress over financial stress and relationship issues. In response, the friend shares advice, introducing five steps of problem solving: Identify the problem, understand the problem, brainstorm solutions, implement best action, and review the results (Wagner et al., 2014). Inspired by this guidance, the protagonist applies these steps to his situation, realising that the financial stress is affecting his mood and, consequently, his relationship. This insight motivates him to take action, such as having an open conversation with his wife and engaging in stress management activities to improve their dynamic. A representative frame from the video is shown in Figure 9.

Figure 9 *Image from the Problem-Solving Video.*



Asking for Help Video

The "Asking for Help" video is based on the premise that social coping (support-seeking) can help individuals reduce stress by seeking emotional or practical support from their community (Frydenberg, 2014). Seeking help is a crucial coping strategy that involves reaching out to others for support, guidance, and assistance during times of distress or difficulty, whether it's seeking help from friends, family members, mental health professionals, or support groups. Asking for help is considered an important coping skill as it promotes effective coping strategies, problem-solving, and building a strong support network (Frydenberg, 2014). The narrative in the seeking help video centres around a woman struggling with a chronic illness. During a conversation with her friend, she expresses her difficulties in managing daily life and the stress that accompanies it. Her friend gently encourages her to create a list of areas where she needs support and motivates her to reach out to friends for assistance. Figure 10 provides a visual example from this video.

Figure 10 *Image from the Asking for Help Video.*

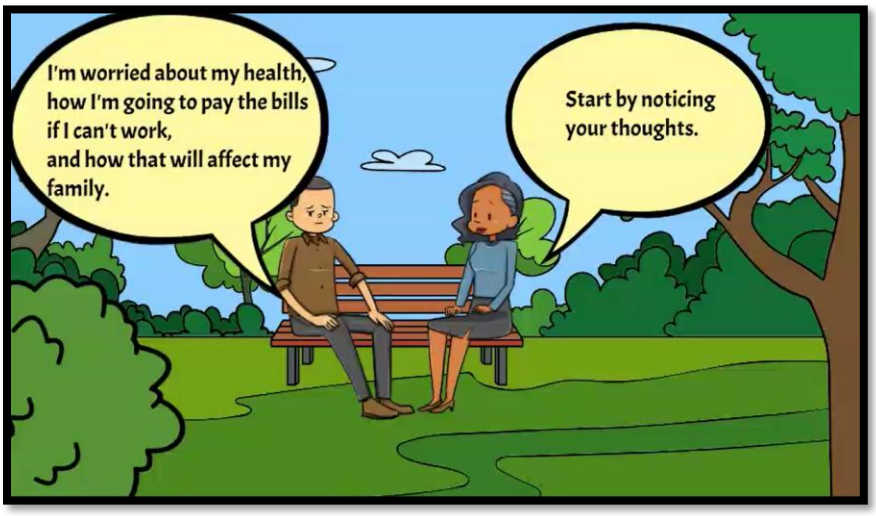


Acceptance of Emotion Video

The "Acceptance of Emotion video" is based on a technique used in Acceptance and Commitment Therapy (ACT). The premise of acceptance of emotion as a coping strategy is that it is a self-regulation strategy that involves an open and receptive approach to one's own emotions, thoughts, or external circumstances (Wojnarowska et al., 2020). The goal of this strategy is to not change the experience of emotions, but to receive them without trying to control or change them (Hayes, 2004). The narrative in the "Acceptance of Emotion" video is based on a man who is struggling with health issues. He experiences anxiety about how these struggles might affect his finances and his ability to support his family. A friend introduces him to mindfulness techniques, teaching him how to accept difficult emotions to help manage his anxiety. This process begins with noticing and observing his thoughts, followed by labelling his feelings and recognising where they arise in his body. The friend advises him to refrain from resisting these thoughts and emotions, instead encouraging him to be a non-judgmental observer.

This practice of observing his thoughts and feelings aids in emotional regulation, allowing him to eventually focus on problem-solving. A screenshot from the video is included in Figure 11.

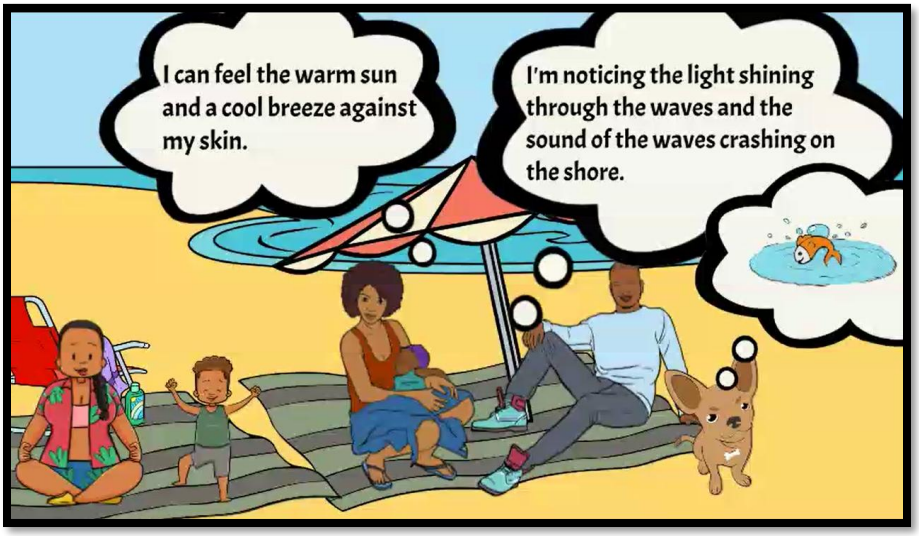
Figure 11 *Image from the Acceptance of Emotion Video.*



Savouring Video

The "Savouring" video aimed to teach a coping strategy that involves consciously focusing on positive experiences and emotions (Cullen et al., 2024). The narrative revolves around a family visiting the beach together. Feeling overwhelmed and stressed, the mother of the family suggests focusing on things they enjoy at the beach so they could appreciate the moment. As they explore their surroundings, the family shares their appreciation of what they can see, touch, hear, and smell. This practice not only grounds them in the present but also deepens their appreciation for the beauty around them. Figure 12 depicts a still image from this video.

Figure 12 *Image from the Savouring Video.*

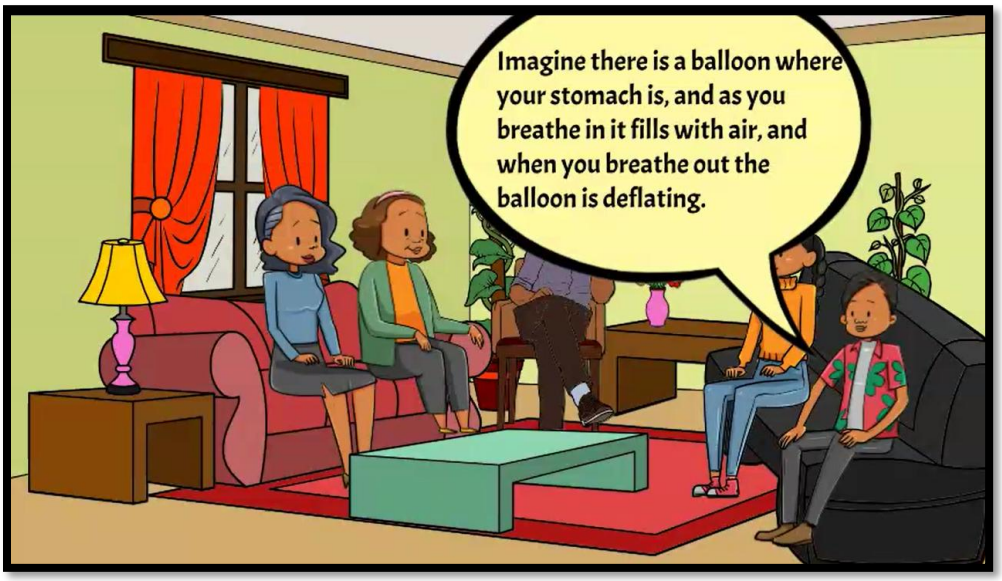


Deep Breathing Video

The "Deep Breathing" video teaches deep breathing as a coping strategy. Diaphragmatic breathing (deep breathing) activates the vagus nerve, which triggers the body's relaxation response (parasympathetic nervous system) and lowers the body's stress response (or sympathetic nervous system) (Bărbuceanu, 2020). The video features a narrative about a teenage boy who learns in school about deep breathing exercises designed to reduce stress and anxiety. He shares this newfound knowledge with his family, starting with instructions on how to practice deep breathing. He encourages them to place one hand on their chest and the other on their stomach, inhaling deeply while keeping the chest still and allowing only the stomach to move. To illustrate the technique, he asks them to imagine a balloon in their stomach, filling up with air as they breathe in and deflating as they breathe out. The video includes visuals of a balloon inflating and deflating to enhance understanding. Next, he introduces the concept of box breathing, which involves inhaling for four seconds, holding the breath for four seconds, exhaling for four

seconds, and then holding the breath again for four seconds, repeating the cycle. After his explanation the frame switches to an image to illustrate the concept of box breathing and enhance learning. He expresses his excitement to try this new technique the next time he feels stressed. A visual still from the video is shown in Figure 13.

Figure 13 *Image from the Deep Breathing Video*



Phase Two – Refining the Videos

This phase involved gathering feedback from a panel of four subject-matter experts comprising of two clinical psychologists, a senior lecturer specialising in health communication, and a Māori clinical psychologist. Feedback was provided iteratively, with revisions made to the videos until all four experts were satisfied with the content's quality.

The expert panel played an important role in validating the SGPVs content due to their specialised knowledge and expertise in relevant fields. Their feedback helped to ensure that the video content was accurate, relevant, and aligned with best practices and research findings in the field of psychology.

In the context of New Zealand, having a Māori clinical psychologist review and validate the psychoeducational videos was important to ensure the video content is sensitive and relevant to Māori culture and perspectives thereby promoting cultural safety (Tan, Stolte, Waitoki, & Scarf, 2023). By involving a Māori clinical psychologist in the validation process, the videos were tailored to resonate with Māori audiences, thereby enhancing their relevance and effectiveness in addressing mental health and well-being for Māori.

Phase Three – Pilot Testing the Videos

Phase Three involved evaluating the videos with psychologists who worked with cancer patients, oncology healthcare workers, and members of a support group for Māori cancer patients. This phase also included interviews with two cancer patients. Although the intention was to conduct a focus group with cancer patients, insufficient participant numbers meant that individual interviews were conducted instead. Involving stakeholders in the evaluation process increased the likelihood that the videos would be relevant, acceptable, and appropriate for their intended audience. By gathering stakeholder feedback, valuable insights could be gained into how the content was perceived, what resonated with viewers, and where refinements could be made (Levac et al., 2019).

Participants provided feedback on each individual video to identify opportunities for refinement and to evaluate the acceptability and perceived usefulness of the coping strategies and their presentation. The purpose of this phase was not to determine which coping strategy or video was preferred or to rank the videos. Rather, feedback was used to inform the iterative development of the SGPVs by identifying aspects of the videos that could be improved, modified, or, where necessary, replaced prior to subsequent evaluation.

Participants and recruitment

The inclusion criteria for participants in this study were being aged ≥18 years and English speaking. Participants also had to belong to one of the following groups: individuals with a diagnosis of cancer, oncology healthcare workers, or psychologists.

To recruit healthcare workers, an advertisement was posted in a newsletter distributed to employees working in oncology services. Individuals who expressed interest in participating were provided with an Oncology Health Care Professional Information Sheet (Appendix Three) prior to participation. Those who chose to participate attended the hospital at a pre-arranged time and location to take part in the research. Psychologists with experience working with cancer patients were recruited through a Cancer Psychology Service and were also provided with the Oncology Health Care Professional Information Sheet (Appendix Three).

To recruit cancer patients, an advertisement describing the study was displayed in the radiation oncology waiting rooms of one of six public cancer centres providing cancer services across New Zealand (Appendix Five). Interested participants contacted the researcher by email and were provided with the Phase One Patient Information Sheet outlining the purpose of the study and what participation involved (Appendix Two).

To recruit Māori participants, a Māori Cancer Coordinator who facilitated support groups for Māori cancer patients was contacted. The Phase One Patient Information Sheet, including details of the study and the researcher's contact information, was provided to the coordinator to distribute to members of the support group (Appendix Two). Individuals who expressed interest

in participating informed the Māori Cancer Coordinator, who then collaborated with the researcher to organise the focus group.

Participant demographics

The focus group comprising of healthcare workers included nine participants, who were predominantly NZ European (7), with two identifying as Māori. The group was predominantly female, with eight women and one man, and exhibited a wide age range, from 26 to 68 years, with a mean age of 46.4 years. In terms of education, six participants held postgraduate degrees while three had undergraduate qualifications. Their professional titles varied, including Advanced Practitioner Oncology Social Worker, Committee and Project Administrator, Spiritual Care & Volunteer Coordinator, Radiation Therapist Clinical Educator, Registered Nurse and Psychologist.

The psychologist focus group comprised four female participants aged between 26 and 59 years with a mean age of 42.5 years. All identified as New Zealand European and held postgraduate qualifications. Participants' professional roles included psychologist and health psychologist.

For cancer patients, two separate interviews were conducted. Both participants were aged 43 and female, with one identifying as Filipino and the other as Brazilian/Japanese. Each held postgraduate qualifications and were in remission at the time of the interview. One participant had experienced a premalignant diagnosis, while the other had been diagnosed at stage two.

The Māori cancer support group comprised 8 participants, including one male and seven females. Among them, 5 participants had completed secondary school, one held a postgraduate qualification, one indicated "other" for education, and one did not specify their educational

background. Six participants identified their ethnicity as Māori, one identified as Māori and New Zealand European, and one did not specify. The ages of the participants ranged from 35 to 83 years, with a mean age of 65.4 years.

Data collection method

Qualitative data was collected from an online focus group and interviews to gather information about the acceptability and usefulness of the SGPVs to assist in the content development phase. Focus groups involve a small group of participants that discuss a specific topic guided by a moderator. This format allows participants to share their ideas, thoughts, and opinions with one another and build on each other's responses. The synergy in focus group interactions can also prompt greater breadth and depth of information and comparison of views within a group that leads to greater insight (Carey & Asbury, 2016). Furthermore, this method is especially useful for exploring new topics (like this one) when there is little information to serve as the foundation for the proposed research (Carey & Asbury, 2016).

The term “online focus group” is used to describe a group of participants that are brought together in a virtual space to address a specific research question or topic using the established processes for focus group research (Stewart & Shamdasani, 2017). Online focus groups can be an effective method for bringing diverse groups of people together who reside in differing geographical regions and are not able to attend face to face focus groups. The content gathered in online focus groups is similar to the content gathered from an in-person focus group (Stewart & Shamdasani, 2017). Online focus groups were chosen for this project to overcome limitations of physically attending the focus group sessions such as participants’ diverse geographic locations, potential physical limitations due to their health status and due to the uncertainty of the recent Covid-19 pandemic.

For the cancer patients, interviews were used as there were not enough participants recruited to conduct a focus group. Interviews allow for an in-depth exploration of an individual's thoughts, feelings, and experiences (Jamshed, 2014). In this research process, semi structured interviews were utilised to gather in-depth insights from participants regarding their perceptions of the SGPVs. The interviews were guided by a structured set of questions to ensure that essential topics were covered. However, the flexibility of the semi-structured format allowed the researcher to delve deeper into participants' thoughts and feedback regarding the video content. This approach facilitated a richer understanding of their experiences and opinions, aligning with the principles of semi-structured interviewing that emphasise both systematic exploration and the freedom to explore unexpected areas of discussion (Jamshed, 2014).

Framework for Interview Questions

As discussed above, Narrative theory was the framework used to develop the SGPVs. This was also the framework used to develop the questions that were asked in the semi-structured interviews with participants. Specifically, the questions were centred on key concepts in narrative theory such as transportation, identification, and realism (Haeok Lee et al., 2016). Transportation refers to the immersive experience where viewers become absorbed in a narrative, often losing track of their surroundings (M. W. Kreuter et al., 2007). Identification occurs when viewers relate to characters or situations within the narrative. Identification is crucial, as strong identification fosters empathy and increases the likelihood of internalising the messages conveyed (Busselle & Bilandzic, 2009). Realism pertains to the authenticity and relatability of narrative elements, such as imagery and settings (Murphy et al., 2013). The questions were designed to provide valuable insights for refining the video content and to assess whether

participants clearly understood the intended messages. Table 3 below outlines the questions and their relevance in relation to narrative theory.

Table 4 *Interview questions and relationship to Narrative Theory*

Question	Relevance to Narrative Theory
Did you identify with any of the characters in the video?	This question targeted identification, which is a core aspect of narrative theory. When viewers identify with characters, they are more likely to experience emotional engagement and empathy, enhancing the impact of the narrative.
Did you feel like the imagery in the videos reflected New Zealand?	This question addressed realism and identification, as authentic representation of settings can enhance the viewer's immersion and connection to the narrative. Realistic imagery can make the story more relatable and credible.
Could you easily follow the storyline?	Clarity in the storyline is crucial for transportation. If viewers can easily follow the plot, they are more likely to become absorbed in the narrative, facilitating a deeper understanding and connection to the content.
Did you find the video engaging?	Engagement is linked to transportation and identification. An engaging narrative captures attention and encourages viewers to become emotionally involved, increasing the overall effectiveness of the message.
Did you understand the underlying educational message of the video?	Comprehension of the educational message is essential for the video to fulfil its purpose. This question assessed whether the narrative effectively communicates the intended

	educational message in a way that people can comprehend.
Do you think this video will be useful to cancer patients and their families?	This question evaluated the practical application of the narrative and educational message.
Do you have any suggestions about how the video could be improved?	Feedback on improvements can provide insights into how effectively the narrative elements and coping strategies resonate with the audience. This can inform about areas that can be improved upon.
What did you like about the videos?	Understanding what resonates positively can help identify the strengths of the narrative, including its characters, themes, and delivery, all of which contribute to effective storytelling.
What did you like about the videos?	This question explored which narrative elements resonated most with participants. Positive responses may indicate effective transportation, identification, or perceived realism, all of which are key mechanisms through which narrative-based interventions enhance engagement and message internalisation.
Are there any topics that you think will be useful to cover?	This question invited input on relevant topics, ensuring that future narratives are grounded in the audience's needs and interests, which can enhance engagement and relevance.
Do you have any general feedback about the videos?	General feedback can provide a holistic view of how the narrative and coping strategies are

	perceived, highlighting overall effectiveness in conveying both story and educational content.
Would you like to see these videos in an oncology waiting room setting?	This question assessed the acceptability and usefulness of the narrative in real-world settings.

During the focus groups and interviews, the researcher used the core questions to guide the interview process. As participants shared their initial responses, the researcher encouraged further dialogue by asking follow-up questions that extended beyond the core questions. Zoom was used to conduct the focus groups and interviews. The videos were shared with participants over Zoom through screen sharing.

Analysis of the Data

In this research, thematic analysis and qualitative content analysis were used. Through the use of these methods, the frequency of concepts was able to be identified while also exploring broader themes within the feedback. Since the goal of this study was to utilise participant feedback to enhance the SGPVs, it was important to consider how often specific suggestions were made, as well as to understand the broader implications of participant experiences and perspectives.

Thematic Analysis

Thematic analysis was used to analyse participant feedback and identify patterns relevant to the acceptability, clarity, and perceived usefulness of the SGPVs. The analysis followed the reflexive thematic analysis approach outlined by Braun and Clarke (2023), which involves six iterative phases: familiarisation with the data, generating initial codes, constructing initial

themes, reviewing themes, defining and naming themes, and producing the final analytic narrative.

Individual interviews and focus groups were audio-recorded and transcribed using Otter.ai transcription software. To ensure accuracy, the researcher subsequently reviewed each transcript while listening to the corresponding audio recording, checking and correcting any transcription errors before commencing analysis.

The analysis began with data familiarisation, during which the researcher read and re-read interview and focus group transcripts to gain an in-depth understanding of participants' perspectives. Initial coding was then conducted using MAXQDA qualitative analysis software (Gizzi & Rädiker, 2021). During this phase, meaningful units of text were identified and labelled with descriptive codes that captured key ideas, reactions, and suggestions raised by participants.

Codes were subsequently examined for patterns and relationships, and conceptually related codes were grouped together to form preliminary categories. These categories were then reviewed and iteratively refined into broader themes that reflected shared meanings across the dataset. Throughout this process, the researcher repeatedly returned to the original data to ensure that the emerging themes accurately represented participants' accounts and remained grounded in the data (Braun & Clarke, 2023).

Although reflexive thematic analysis does not rely on quantification as a defining feature, attention was paid to the *recurrence* of particular codes and ideas across participants to support analytic decision-making and guide video refinement. Specifically, suggestions that appeared

consistently across multiple interviews or focus group discussions were considered more salient when prioritising revisions to the video content.

Integration of Thematic Findings and Video Refinement

In the final stage of analysis, the researcher synthesised the qualitative insights generated through thematic analysis to inform refinement of the video content. The themes captured shared patterns in participants' experiences, perceptions, and suggestions, providing a coherent understanding of how the videos were received and where improvements could be made.

While themes were developed through interpretive analysis rather than frequency counts, attention was given to the recurrence of particular suggestions across participants to support practical decision-making during the refinement process. Suggestions that emerged consistently across interviews and focus groups were considered especially salient when prioritising revisions, as repeated feedback indicated shared concerns or preferences within the dataset. This approach allowed participant input to directly inform content changes while remaining consistent with a reflexive thematic analysis framework.

The refinement process was iterative and collaborative. Two clinical psychologists and a Māori clinical psychologist from the expert panel reviewed the proposed changes across multiple rounds, providing detailed feedback at each stage. Revisions were refined and re-evaluated until consensus was reached that the videos were clinically appropriate, culturally responsive, and aligned with the intended psychoeducational aims. This iterative process ensured that the final versions of the videos accurately reflected stakeholder feedback while maintaining theoretical coherence and relevance for the target audience.

Results

The results section presents the feedback and insights gathered from participants regarding the SGPVs. Participant identifiers and stakeholder groups are presented in Table 5 to provide context for the quotations reported throughout this chapter. This section then presents the key themes developed through the thematic analysis of participants' perceptions of the videos.

Table 5 *Participant identifiers and stakeholder groups for Study Two*

Participant IDs	Stakeholder Group	Data Collection Method
CP01–CP02	Cancer patients	Individual interviews
MCSG01–MCSG07	Māori Cancer Support Group	Focus group
HW01–HW07	Oncology healthcare workers	Focus group
PSY01–PSY09	Clinical psychologists	Focus group

Interview Themes

Usefulness

Usefulness was developed as a key theme through the thematic analysis. Participants, including both cancer patients and healthcare workers, highlighted the practical nature of the coping strategies presented in the SGPVs. Strategies such as deep breathing and mindfulness were perceived as easy to implement within a waiting room setting, with participants commenting that their practicality enhanced the overall usefulness of the videos. Many participants also reported that the videos resonated with their own experiences, increasing the

relatability of the content. Together, these findings suggest that the SGPVs have the potential to support cancer patients in managing psychological distress.

Furthermore, many participants commented that the SGPVs could raise awareness of mental health issues. For example, a participant from the Māori Cancer Support Group (MCSG) explained that the videos could help patients recognise and manage symptoms of anxiety, noting that she had previously lacked knowledge about anxiety and would have found resources such as these extremely helpful. This suggests that the SGPVs may serve as valuable psychoeducational tools that promote mental health literacy and support individuals in recognising and managing their own psychological well-being.

Healthcare workers also valued the way the Problem-Solving video illustrated how stress can have ripple effects on personal relationships. One healthcare worker noted that although financial concerns are often the primary focus, the emotional impact of stress on close relationships is frequently overlooked, commenting that patients may become "a bit grouchy" and "take it out on those they're closest to" (HW05). They suggested that the video could facilitate discussions about how stress affects not only individuals living with cancer but also their whānau and loved ones, helping to acknowledge the broader emotional consequences of cancer for patients and their support networks.

Finally, several participants, including both cancer patients and healthcare workers, highlighted the ongoing need for resources that address both the physical and psychological challenges associated with cancer. Participants perceived the SGPVs as practical resources that could support individuals throughout different stages of the cancer journey by providing accessible coping strategies that could be used both in the waiting room and beyond.

Overall, participants perceived the SGPVs as useful psychoeducational resources that offered practical coping strategies, promoted emotional awareness, and highlighted the interconnected nature of psychological well-being and physical health.

Involving the whānau

Involving the whānau was developed as a theme through the thematic analysis, reflecting participants' emphasis on the importance of social support from whānau [1](family). Participants from the MCSG consistently highlighted the central role of whānau in providing emotional and practical support. As one participant explained, *"Oncology, we don't go in by ourselves. We go in with our whānau"* (MCSG03). Many participants felt it was important for the videos to depict the communal nature of the cancer journey and the pivotal role that family members play in supporting individuals with cancer. Participants noted that the absence of visible support could exacerbate feelings of sadness and helplessness.

Suggestions for refining the videos included incorporating children to ensure they did not feel excluded from a loved one's treatment journey. Participants also recommended including scenes that depicted family members supporting one another, fostering positive emotions and reinforcing the idea that *"It's about picking them up, isn't it?"* (MCSG04). Participants further noted that including whānau in the videos would acknowledge not only the patient's experience but also the emotional impact of cancer on caregivers and family members, highlighting the collective burden that cancer can place on the entire whānau.

[1] Whānau is a Māori word meaning an extended family or community of related families, extending beyond blood ties to include friends and other connections.

Overall, the feedback highlighted the importance of including whānau in the videos, as their support is crucial not only for the emotional well-being of cancer patients but also for fostering a sense of community and connection during challenging times.

Visual elements

Participants in the research provided valuable feedback on the use of visual elements in the SGPVs. In the Savouring video, participants resonated well with the imagery of a dog. Many participants from the psychologist focus group expressed an appreciation for the light-heartedness the imagery of the dog brought to the content. For example, one participant stated, “I thought it was cute,” (PSY02) and another highlighted the humour of the dog. One cancer patient noted that many New Zealanders have dogs, commenting, “Majority of families here in New Zealand have dogs,” (CP01). This reinforced how such visuals can enhance engagement and relatability with the content.

The importance of visuals in supporting diverse learning styles was also emphasised. One healthcare worker noted that the use of visual elements can be helpful for those who process information visually rather than verbally. They stated, “For people who are more visual if they don't think in words, and they think in pictures or like feelings” (HW03). This highlights the potential of visual elements to engage viewers and enhance the comprehension of the videos. In the Deep Breathing video, participants also praised the depiction of the stomach collapsing during the breathing exercises explanation. One healthcare worker stated, “I thought the stomach collapsing was quite cool” (HW05). Such visual elements can make abstract physiological processes more tangible and understandable.

In the Seeking Help video, visuals like the notepad were found to enhance comprehension and engagement, with participants commenting on the positive impact of such elements. One participant from the psychologist focus group remarked, “I really liked the switch to the notepad. That was exactly what I mentioned in the previous one. It was really nice,” (PSY05) while another simply stated, “Love the list” (PSY06). Overall, the feedback emphasised the role that visual elements can play in enhancing engagement with the SGPVs.

However, in the Savouring video, some participants raised concerns about the alignment between the imagery and the narrative. Comments such as “He did not look stressed” (PSY03) and “It was a little challenging” (PSY04) pointed to moments where the visuals did not match the intended emotional tone. One participant mentioned a scene where a character was “not looking at the water,” (PSY04) indicating a disconnect that could distract from the overall message. This feedback highlighted the importance of maintaining coherence between visual elements and the accompanying narrative.

Finally, concerns were raised about font size and visibility, particularly for those with poor eyesight. One participant from the MCSG remarked, “For some of us with not so good eyesight, it’s finding it too fast and maybe too small,” (MCSG05) indicating the need for larger text to accommodate diverse audience needs.

Waiting room setting

Feedback from the MCSG has emphasised the potential effectiveness of SGPVs when delivered in oncology waiting room settings. One participant expressed appreciation for the videos, stating, “You know it's actually really good. You've got you made it right. You've got the

attention of people to watch it" (MCSG01). This highlights the ability of the video content to engage individuals during what can often be a stressful and anxiety-inducing time.

Participants shared their experiences of waiting in oncology settings, noting the common practice of consuming content while waiting. One member from the MCSG stated, "I've been to oncology quite a bit myself and I quite often sit in the waiting room and watch the screens and read what's up there" (MCSG04). This observation indicates that patients are already inclined to absorb information during their wait, making it an ideal opportunity to present psychoeducational material. The members from the MCSG reached a clear consensus that the videos would be valuable in an oncology waiting room setting, with one participant commenting "Good waiting room material" (MCSG03).

Another participant from the MCSG drew a comparison to familiar waiting environments. They shared, "Because these Chinese takeaways have a little TV set up with them and I always end up watching it while you wait" (MCSG05). This further highlighted that individuals are accustomed to engaging with video content while waiting in other situations, reinforcing the idea that healthcare waiting rooms could similarly benefit from the inclusion of educational resources.

Tailoring the videos to cancer patients

The feedback from cancer patients and healthcare workers highlighted the need for content specifically tailored to the experiences and challenges faced by cancer patients. Participants emphasised that coping strategies should be adapted to reflect the unique realities of these individuals, with a focus on low-energy activities rather than high energy options that may not be feasible during treatment. Suggestions included achievable tasks rather than those that

could evoke feelings of guilt or inadequacy. Cancer patients noted that while they may have a desire to engage in activities, this may not always be possible due to treatment side effects, highlighting the importance of setting realistic expectations in the videos.

While there was interest in creating content that could be delivered in a variety of healthcare settings, some of the healthcare workers suggested incorporating elements into the videos to ensure that the narrative acknowledges health struggles. This approach could maintain a broad relevance while still focusing on the unique experiences of cancer patients struggling with health concerns. Overall, the feedback emphasised the necessity for an approach that considers the specific needs and circumstances of cancer patients.

Comprehension

A theme relating to *comprehension* was developed through the thematic analysis, with participants generally expressing an understanding of the storyline and the underlying educational messages. One participant from the MCSG noted, “It’s simple, to the point and it’s how we are and what we’re going through,” (MCSG01) while another praised the video for being presented in “very simple, um layman's terms” (MCSG04). However, in the Behavioural Activation video, one of the cancer patient participants experienced confusion regarding specific elements of the storyline. For example, they were unclear whether the main protagonist was communicating directly with the clinical psychologist or watching her on a screen. They stated, “I didn't quite understand whether the person was talking to the other person… So we're watching a TV or we're watching a computer with it” (CP01). This feedback suggests that improving the clarity and a natural flow to the storyline could enhance audience engagement and comprehension.

Additionally, a few of the cancer patients found the educational message of the Emotional Acceptance video to be unclear. One cancer patient acknowledged that the nuances of this technique were not immediately apparent to her, indicating that it might be too complex for a waiting room setting. She commented, “I think it needs further explanation and would be better taught by a therapist” (CP02), highlighting that the depth of the concept could overwhelm those seeking quick relief in stressful environments. In contrast, she praised a previous video on deep breathing techniques for its straightforwardness and effectiveness, saying, “It’s amazing. I couldn't believe how effective it works” (CP02).

Meanwhile, the psychologist focus group clearly understood the educational message of the Acceptance of Emotion video and its benefits for cancer patients. This was likely due to their existing knowledge of the strategies being presented. However, they did note that the amount of text displayed on the screen could be overwhelming. One participant remarked, “I lost interest two-thirds of the way through because it got to be too much” (PSY06). They suggested a more digestible format that included breaking down large chunks of text into smaller, more manageable pieces displayed for longer periods. They felt this would enhance the clarity of the video, particularly in distracting environments like waiting rooms.

Overall, while many participants appreciated the clarity and simplicity of the videos, in some videos (such as the Acceptance of Emotional video and Behavioural Activation video), there was a need for enhanced clarity to better support comprehension among the viewers.

Cultural appropriateness

A theme relating to *cultural appropriateness* was developed through the thematic analysis, emphasising the need to consider the diverse cultural dynamics present within New Zealand. For instance, feedback from a cancer patient highlighted a common family dynamic observed within Māori culture, where mothers and children often engage in conversations, while fathers may be preoccupied with work obligations. This suggests that the videos should reflect these dynamics to make them more relatable to viewers. However, she also suggested that maintaining the video in its current form with the father actively involved could encourage men to engage in conversations with their children.

One healthcare worker suggested that featuring elders could be more impactful for certain audiences. For example, he commented, "With the people who you're targeting aye, the age-appropriate stuff like the child was giving the example. I think it would be quite amazing if it was a Kaumātua [2] or an older person, you know, cause it's usually the older person, adult sitting in the waiting room not children, so they might actually accept that a lot quicker, rather than seeing a child give an example. Just a thought" (HW04). This feedback highlights the potential benefit of having the elder depicted in the video teach the strategy to better resonate with older audiences.

However, this was contradicted by participants in the MCSG who appreciated the involvement from the child, "You've got the child doing the speaking, which was good. Um, no

[2] Kaumātua – A term for elders in Māori society.

it's really good, the whole video. Quite often you do have the kids do engage in those kinds of topics and that with the whānau, their elders and that, they do um when they see them stressed and things, they do talk to them tend to talk to them like how that was, in that video. And the kids and that, awhi[3]" (MCSG03). Another participant noted from the MCSG "but it's good to keep it like that. Meaning it's a way of encouraging subconsciously that you should talk to their kids" (MCSG04).

A few participants suggested incorporating more Māori language (te reo[4]) to make the content feel more inclusive and relevant. For example, a healthcare worker commented on incorporating more te reo into the video would help to make the video content more relevant to Māori, and New Zealanders in general, "and I wonder if there's a place like, 'awesome mahi[5] son', or something like that just to make it a little bit more inclusive? That family is meant to be represented as a Māori family as well. But actually, it's not even, that is our general lingo and most people would pick up if they are Māori or not" (HW06). This suggests that incorporating more Māori language not only enhances inclusivity but also could enhance the cultural relevance of the content for all New Zealanders.

Participants also appreciated the authentic representation of New Zealand life through activities depicted in the videos, such as beach outings and gardening, which they felt resonated with their own experiences. The subtle integration of cultural elements was particularly well-received, with some participants noting that it effectively captured the essence of New Zealand without feeling overt or forced. Others suggested that incorporating more native flora into the

[3] Awhi - Embrace, hug, or cherish.
[4] Te Reo Māori – The Māori Language.
[5] Mahi – Work, activity or occupation.

background imagery could further reinforce the local context, enhancing the overall authenticity of the content. The representation of diverse skin tones among characters was another positive aspect highlighted by participants, depicting the diversity of cultures within the narrative.

Finally, the casual style of conversation and the use of colloquial expressions in the videos resonated strongly with participants from the MCSG, who felt that this language effectively reflected New Zealand's cultural identity and enhanced their connection to the content. Overall, there was a unanimous agreement among participants from this group that the videos successfully reflected New Zealand, fostering a strong sense of pride in their cultural representation.

Reluctance to seek help

Reluctance to seek help was developed as a prominent theme through the thematic analysis. Many individuals from the MCSG expressed a hesitation to reach out for assistance due to concerns about imposing on others or feeling undeserving of help. Participants articulated a strong sense of shame associated with asking for support, as illustrated by one individual who shared their logistical challenges in accessing care: "I can relate to not asking for help, cause I can't drive... I just have to get a taxi, and it costs me heaps just to see a doctor" (MCSG01). This highlights the barriers that complicate seeking assistance, often leading to feelings of isolation.

Furthermore, many participants reflected on their reluctance to burden family members. One noted, "people do want help, but they don't know how to ask, whakama[6], and they don't

[6] Whakama – Feelings of shame, embarrassment, inadequacy or shyness often stemming from a perceived loss of honour or failing to meet group expectation.

want to ask" (MCSG03). This idea was also expressed by another participant who felt hesitant to share their struggles with family to avoid distressing them.

Additionally, a male participant from the MCSG remarked on how men often feel they have "disappointed too many people," (MCSG05) leading them to suffer in silence: "They've lost their mana[7]. That's basically what it is. They don't feel worthy to ask for help" (MCSG05). This reflects that feelings of unworthiness can also impede individuals from seeking the support they need.

Interestingly, while many participants reported hesitation to seek help from family, there was a greater willingness to reach out to external sources. One individual shared their preference for discussing difficult topics with non-family members to avoid burdening loved ones, especially during challenging times like a cancer diagnosis.

Overall, this theme of reluctance to seek help emphasises the need for increased awareness and strategies to encourage individuals to reach out for support, addressing the underlying feelings of shame and unworthiness that often inhibit them from doing so.

Humour

Many participants, particularly from the MCSG emphasised the importance of *humour* in the videos. They noted that humour helped them feel uplifted and connected with others, especially in the context of cancer treatment. For example, one participant noted, "Think what for me again, humour played a big part in my wellness, with cancer. Because of the seriousness

[7] Mana – Prestige, power, control, authority, influence, status, charisma, and spiritual power which can reside in a person, place, or object.

of it all, and I've had a few. At the end of the day, we find something that can just lift you" (MCSG07). Another participant commented, "It's a good way to connect with people" (MCSG02). Another stated, "Just that bit of humour, always, Kiwis love humour" (MCSG04). Quotes like these highlighted how the use of humour enhanced participants' engagement with the video.

Universal application

While aimed at cancer patients, participants recognised the broader applicability of the content, acknowledging that the coping strategies could benefit anyone dealing with distress. The general feedback about the content of the SGPVs highlighted the videos' relatability and universal nature of the content. As one participant noted, "It's very relatable, even if you don't have any symptoms" (CP01). This idea indicated the videos have the ability to resonate with a diverse audience, transcending specific health conditions.

Participants from the MCSG reinforced this perspective, emphasising that the videos are not solely for those facing severe health challenges. One participant remarked "I like to think that it's definitely not to cancer patients only. It's relatable, wherever the situation" (MCSG03). This highlights the videos' potential to serve as a resource for individuals in a variety of circumstances, broadening their impact and relevance.

Quick Wins

The concept of *quick wins* was developed as a theme through the thematic analysis, with one healthcare worker stating, "There needs to be short, sharp wins, cheap, short and sharp" (HW02). This approach emphasises the preference for easily achievable strategies that viewers can easily understand and incorporate in their lives. Another healthcare worker reinforced this

idea, highlighting that "small things that they can achieve builds them up" (HW06). This idea was further supported with a healthcare worker saying "I think that's another reason why you need to focus on quick wins," explaining that concise, easily applicable strategies can be beneficial, especially for individuals in waiting rooms. They added, "I thought the breathing thing was so good, and it is a quick win, and any other tools that you can just do, anything inside yourself that you can do to remove stress, anything like that. All those kinds of things I think are really good, that you can just do in the waiting room and take home and do them" (HW06). This highlights participants' preference for coping strategies that are simple and easy to use, as well as effective.

Providing context

Participants from the healthcare workers focus group further noted that providing more context and background information could enhance engagement. A recurring theme in the discussions included the need for *whakawhanaungatanga*[8], a Māori concept emphasising the importance of connection and relationship-building. One participant stated, "First one is *whakawhanaungatanga*, it's about introducing the subject so that people will know what they're actually getting into" (HW04).

The healthcare workers also emphasised importance of context. They felt viewers should be prepared and informed before diving into the content. Some participants found the video content abrupt, and got to the point too quickly, leaving a gap in understanding. Another participant noted, "It was like bang, you're into solution rather than talking about issues" (HW06), highlighting the need for a more gradual introduction to the subject matter. Another

[8] Whakawhanaungatanga – A Māori concept referring to the process of building and maintaining relationships.

healthcare worker asked, “Can you give some context to their situation, like, is there a health situation, why are they stressed?” (HW05). This suggests that knowing more about the person’s background would enhance engagement and relatability.

Overall, the feedback from the healthcare workers expressed a need for greater context. As one participant concluded, “I think it would be made even better by what we already, you know in terms of giving it a bit more context and feeling like you know” (HW04). This highlights participant preferences for relatable narratives and the importance of context.

Formatting and pacing

Many healthcare worker participants found the formatting of the text distracting and challenging to read. Several participants suggested that the text should appear in larger chunks rather than letter by letter. For example, one participant recommended having "more than one letter come up at a time" (HW02), while another suggested presenting "one line at a time" (HW04). These comments reflected a shared perception that the existing text presentation interrupted the flow of information and made it more difficult to absorb the educational content.

One participant also highlighted the influence of individual reading speed on the viewing experience, explaining that, "Depending on how fast or slow you read, you're kind of sometimes waiting on the next letter to come up" (HW06). This observation emphasised the variability in viewers' reading abilities and suggested that the pacing of the text could contribute to frustration or disengagement for some individuals.

Participants also provided nuanced feedback regarding the overall length of the SGPVs, particularly in relation to maintaining engagement. One healthcare worker observed that the Problem-Solving video contained "a lot more words" (HW03) and expressed concern that

increasing the amount of text could reduce viewer engagement. However, the same participant also recognised a competing consideration, reflecting that "it's about building those relationships and that engagement, so then on the other hand it actually might be better" (HW03).

Collectively, this feedback highlighted the importance of balancing concise presentation with sufficient narrative depth. Participants recognised that while brevity is important for sustaining attention in a waiting room environment, providing enough context to foster understanding and emotional connection may justify slightly longer presentations when appropriate.

Discussion

The perspectives gathered from cancer patients, oncology healthcare workers, psychologists, and members of a Māori cancer support group (MCSG) informed the initial evaluation of the self-guided psychoeducational videos (SGPVs) designed to teach coping strategies for general psychological distress. This study evaluated the acceptability and perceived usefulness of the videos while identifying opportunities for further refinement. The findings highlighted both the potential benefits of the SGPVs and aspects of the intervention that could be strengthened to better meet the needs of cancer patients and their caregivers. Participant feedback also indicated that, while the videos were acceptable as resources for managing general psychological distress, they were better suited to a general practice waiting room setting than an oncology setting. This finding informed the subsequent evaluation of the revised SGPVs with members of the general public in Study Three. The following discussion explores the major themes developed through the thematic analysis of stakeholder feedback, together with suggestions for refining the video content.

Participant feedback highlighted the *universal application* of the videos, with participants emphasising that the coping strategies could be applied to a broad range of individuals. For example, participants from the MGSG found the videos to be relatable to anyone, regardless of their health status. Some of the healthcare workers and cancer patients felt the videos would be better suited to a General Practice (GP) setting. This suggests that the SGPVs have the potential to teach coping strategies for psychological distress that are applicable to a general audience.

However, while the videos were deemed suitable for a general audience, many participants also expressed that in an oncology setting, the videos should be tailored to reflect the

experiences of cancer patients. Previous research supports this notion of tailoring health education to meet the specific needs of individuals to make the information more personally relevant (Bol et al., 2020). Tailoring content to meet the specific needs of cancer patients who face unique challenges due to their cancer diagnosis can significantly enhance engagement (J. Li et al., 2020). By addressing their specific situations, patients are more likely to pay attention to the information presented, leading to better engagement with the material (Siev et al., 2022). Studies specifically targeting cancer patients and their caregivers demonstrate that tailored interventions lead to higher acceptance rates and better completion of intended programs (Wittenberg-Lyles et al., 2012; Zulman et al., 2012). These findings are also consistent with narrative theory, particularly in terms of identification which emphasises the importance of personal relevance in storytelling (Haeok Lee et al., 2016). Narrative theory posits that when individuals see themselves in a story, they are more likely to connect emotionally, which can lead to improved recall and understanding (Kreuter et al., 2007).

Similarly, some participants in this study found the current video content abrupt, in that it lacked the necessary background information and too quickly went into the solutions. They felt that providing a gradual introduction to the subject matter and more context would improve the video content. This feedback is consistent with previous research which suggests that understanding an individual's background information such as their health situation and stressors enhances engagement and relatability. For example, one study found that tailoring messages in health communication to consider cultural and demographic information can lead to improved outcomes, such as increased rates of mammogram screenings among African-American women when messages were framed in culturally relevant ways (Kreuter et al., 2005). The feedback from stakeholders in this study highlights the need for greater contextualisation in the SGPVs.

This is also consistent with previous research that suggests well-contextualized messages in health communication can enhance engagement (Bol et al., 2020; Hawkins et al., 2008; J. Li et al., 2020).

Contextualisation is a strategy used in tailored health communication to enhance attention, interest, and motivation to process information (Hawkins et al., 2008). Through the use of contextualisation, messages are framed in a context that becomes meaningful to the participant, facilitating a stronger identification with the narrative. This approach is often similar to techniques used by journalists who often highlight a local angle to make broader stories resonate more deeply with their audiences (Hawkins et al., 2008). When health messages are contextualised with regards to an individual's subject reality (through the use of factors such as culture, demographics, and personal circumstances), they are perceived as more credible and engaging (Bol et al., 2020). In the present study, an example of contextualisation emerged through stakeholder recommendations that the videos more explicitly reflect cancer patients' specific experiences in order to strengthen resonance and identification.

Another theme developed through the thematic analysis was *involving whānau*. Māori participants in this study expressed a clear preference for SGPVs that included whānau involvement. Previous research emphasises the importance of whānau in relation to Māori wellbeing (Barton & Wilson, 2008). Studies have shown that strong whānau support contributes to increased life satisfaction, helps to reduce psychological distress, and those with strong whānau relationships experience better recovery outcomes from mental distress (Russel, 2018).

One participant from the MCSG noted how not feeling worthy was a barrier to seeking support from whanau. The participant provided insight into the reluctance of many Māori to seek help due to feelings of lost mana. Mana represents the status, prestige, and authority of

individuals and their whānau. This loss of mana can lead to a hesitation to ask for help, as some individuals may feel that they are no longer deserving of support (Barton & Wilson, 2008), pointing to a potential emotional barrier to help seeking that some Māori may face.

Feedback from members of the MCSG indicated that feelings of being a burden and concerns about imposing on others can act as significant barriers to help seeking, even when support is recognised as necessary and available. This pattern reflects an internal tension between the desire for assistance and the need to preserve relational balance and dignity, a dynamic that aligns with the concept of *whakamā*, which encompasses feelings of shame, embarrassment, or self-consciousness that may inhibit help-seeking behaviour (Sachdev (1990). Importantly, this finding does not suggest an absence of social support but rather highlights challenges in utilising available support.

This interpretation is supported when considered alongside population-level data indicating that Māori generally report high access to social support. Findings from the 2015–2016 New Zealand Mental Health Surveys show that the majority of Māori respondents reported being able to rely on friends or whānau when needed, and felt confident that help would be available in times of difficulty (Russel, 2018). The apparent disparity between these broader findings and the experiences described by participants in this study suggests that structural access to support does not necessarily translate into help seeking behaviour at the individual level. Personal, cultural, and relational factors (such as whakamā) may prevent individuals from drawing on otherwise strong support networks.

Within this context, participants' reflections on the potential value of videos that model and normalise help seeking suggest that SGPVs may play a role in bridging the gap between available support and willingness to seek it. By framing help seeking as a relationally respectful

and culturally congruent behaviour, SGPVs may support both individuals who are struggling to ask for help and those within whānau networks who wish to offer support. This aligns with existing evidence that strong social support is protective for mental well-being and reduces psychological distress (Russell, 2018), and suggests that interventions targeting the process of help seeking may be particularly valuable.

The thematic analysis highlighted the importance of *cultural appropriateness*. According to research, it is important to use culturally relevant language and visuals when developing culturally tailored messages (Joo & Liu, 2021). In discussions with the MCSG, there was a strong consensus that the videos were effective at reflecting their cultural identity. This feedback is significant as interventions aimed at the general population often prove to be less effective for Māori communities and may exacerbate health disparities. In contrast, culturally tailored interventions tend to be more successful and have demonstrated positive outcomes (Verbiest et al., 2018).

Feedback regarding the inclusion of te reo Māori highlights the broader role of language as a marker of cultural recognition, belonging, and legitimacy within health communication. Rather than functioning solely as a linguistic tool, the incorporation of te reo can signal respect for Māori worldviews and contribute to culturally safer healthcare environments (Pitama et al., 2011). Existing literature suggests that the presence of te reo Māori in health settings can enhance engagement and cultural resonance, particularly when used thoughtfully and accessibly (Pitama et al., 2011). Importantly, research cautions against assuming universal fluency, indicating that selective use of commonly recognised terms or phrases may be most effective in balancing inclusivity with comprehension (*Practical solutions for improving Māori health*, 2008).

When considered alongside participant feedback, the strategic integration of te reo within psychoeducational video content may therefore serve a dual function: affirming Māori identity and experiences while also reflecting contemporary Aotearoa New Zealand, where te reo Māori has increasing visibility and recognition across diverse populations. In the context of SGPVs, the selective use of te reo Māori may therefore strengthen cultural authenticity while remaining accessible to a broad audience, supporting engagement and acceptability among both Māori and non-Māori viewers.

Another issue that was raised in discussions about *cultural appropriateness* was the portrayal of family roles. The role of children and elders in terms of presenting information was discussed. In Māori culture, Kaumātua traditionally play a leadership role within the whānau. Both male and female elders served as the leaders, making decisions about whānau land, managing property, overseeing the upbringing and education of children, and representing the whānau in tribal councils (Stephens, 2002). Therefore, having the Kaumātua teach the breathing strategy, while still involving the children, may better reflect traditional Māori family roles and dynamics. This perspective was validated by a Māori clinical psychologist who was part of the expert review panel.

Participants appreciated the use of *humour* in the videos. Research supports the idea that humour can relieve stress and enhance quality of life by transforming negative emotions into positive experiences, often through laughter (Meyer & Venette, 2017). However, while humour can enhance engagement, it may also lead to a diminished perception of serious issues (Meyer & Venette, 2017). This suggests that while humour can be valuable, poorly executed can cause audiences to dismiss the seriousness of the content (Suka & Shimazaki, 2023). Incorporating *humour* into the other SGPVs could increase their appeal and engagement. By skilfully blending

humour with the seriousness of the topic, humour can be used to enhance engagement, while ensuring that the core messages remain impactful.

Furthermore, participants appreciated the use of visuals in the videos finding them engaging, and useful in aiding understanding, particularly with abstract concepts. For example, the depiction of a balloon inflating and collapsing was well received as it helped to explain the breathing strategy. According to research, whiteboard animations are useful visual tools for enhancing the learning process. Animations have a novelty factor that captures attention, leading to emotional engagement, which is enhances the learning process (Türkay, 2016). Additionally, the combination of words and images in whiteboard animations supports dual coding theory, positing that information is processed through both verbal and visual channels. This dual representation allows learners to store data in multiple formats facilitating easier retrieval of information (Sorden, 2012).

The use of colour in the videos was positively received by participants, particularly within the MCSG. Multiple participants commented on the colourful nature of the videos. This feedback highlights the role of colour in creating engaging video content. These findings align with existing literature, which indicates vibrant colours attract attention and enhance the retention of information (Noetel et al., 2022; Sweller, 2011). Additionally, colour can convey meaning and evoke specific emotions, further enhancing viewers' connection to the content (Cakmak et al., 2024). The findings from this study together with previous research indicate that the thoughtful use of colour can enhance engagement.

Participants also provided feedback regarding the text in the videos, which many participants found distracting and challenging to read, indicating that the current method of displaying text interfered with their ability to focus on the content. Extant literature suggests that

formats that disrupt the flow of information can hinder viewer comprehension and engagement (Brame, 2016). Additionally, concerns were also raised about font size and visibility, particularly for those with visual impairments. Clearly visible font sizes are essential for enhancing viewer engagement and accessibility for diverse audiences (Rello et al., 2016).

The pacing of the text was also a point of discussion. Some participants expressed a desire for a more consistent and manageable reading speed. Research indicates that steady pacing allows for better information retention and viewer satisfaction (Guo et al., 2014). However, other issues were raised related to reading speed with one participant noting they found the pacing too slow. These differing perspectives highlight the variability in reading abilities among viewers, which can lead to frustration and disengagement. Research has shown that pacing that is too fast or slow can disrupt cognitive processing, making it challenging for viewers to absorb the material effectively (Brame, 2016). In an effort to create videos that are accessible to individuals with lower health literacy, adopting a slower reading pace was thought to not only accommodate those with varying reading abilities but also enhance comprehension for viewers who may struggle with faster speeds, ultimately making the information more accessible to those with lower health literacy levels (Valera et al., 2021).

Discussions about the formatting of the videos also touched on the amount of information that was presented in each speech bubble. Participants felt that excessive information in a single speech bubble could overwhelm viewers, suggesting a need for brevity and clarity in the presentation of information. Participants suggested that the speech bubbles containing excessive words could be split into multiple speech bubbles. This suggestion aligns with the principle of segmenting, which involves breaking down information in a video lesson into smaller chunks. Simplifying complex information in this way can enhance understanding and retention when

information is presented in multimedia formats (Brame, 2016). This approach enables learners to interact with manageable bits of new content and helps reduce intrinsic cognitive load (Brame, 2016; Mayer, 2005).

In terms of the length of the videos, participants provided nuanced feedback. In general, participants preferred shorter videos; however, they also expressed that some videos may be enhanced by adding additional context, in which case a slightly longer video may be better. Video length can significantly affect viewer engagement. Research indicates that in educational contexts, shorter videos tend to maintain viewer attention more effectively. For instance, studies suggest that videos of 6 to 9 minutes are often ideal for retaining viewer interest (Guo et al., 2014). After analysing results from 6.9 million video-watching sessions, Guo et al. (2014) found that engagement for educational videos under 6 minutes was close to 100%. They found with increased video length; viewer engagement diminished. They posited that making videos longer than 6-9 minutes was wasted effort. Another study by Manasrah et al. (2021) found the ideal tutorial video length to be between 6 and 10 minutes. However, longer videos can be beneficial if they provide in-depth information or facilitate a deeper understanding of complex topics (Mayer, 2002). In this study, all of the psychoeducational videos were under 5 minutes; extending the videos by a few minutes would still fit within the recommend range by Guo et al. (2014) and Weitzel et al. (2022) to retain viewer engagement.

The theme of *comprehension* also emerged. Feedback about the emotional acceptance video highlighted challenges regarding its clarity in a brief format. Participants, including cancer patients, expressed that the video's educational message was often unclear, particularly in a setting like a waiting room, where viewers may seek quick, digestible content. One cancer patient noted that the nuances of emotional acceptance observing thoughts and feelings in the

moment were difficult to grasp without further explanation, suggesting that it might be better suited for more in-depth teaching by a therapist. In contrast, simpler techniques, like the deep breathing technique, were praised for their straightforwardness and immediate applicability, emphasising that complex strategies could overwhelm individuals looking for quick relief. Overall, the feedback suggested that the complexity of the emotional acceptance video might render a brief format insufficient for effectively conveying such intricate concepts.

This aligns with existing literature on the effectiveness of brief interventions in mental health. Studies have shown that easily achievable coping strategies can enhance self-efficacy and foster a sense of accomplishment, which is particularly important for individuals experiencing psychological distress (Bisby et al., 2024; Cwinn et al., 2022). This was reflected in the theme of *quick win* strategies, where participants appreciated strategies that were easy to use and implement like breathing exercises. The accessibility of such strategies makes them particularly valuable in settings such as a waiting room where individuals can implement them without needing extensive training or resources (Tavoian & Craighead, 2023).

Participants generally found the videos useful and expressed the potential of these videos to educate viewers about effective coping strategies. A few of the participants in this study emphasised that many people lack understanding and knowledge about mental health issues, particularly anxiety symptoms. They believed that the videos would be effective in educating the public on how to recognise these conditions. This aligns with the literature that the use of digital media is an effective educational intervention to enhance mental health literacy (MHL). MHL involves understanding mental health disorders, which aids in recognising, managing, and preventing these issues (Kutcher et al., 2016). It also addresses stigma and attitudes that influence help-seeking behaviours (Kaplan et al., 2012; Ojio et al., 2020). Studies have shown

that digital psychoeducational videos can significantly improve MHL, making them a valuable tool for disseminating mental health information (Ito-Jaeger et al., 2022; Mohd Khairi et al., 2024).

Overall, stakeholder feedback highlighted the perceived *usefulness* of the SGPVs as accessible, practical tools for managing psychological distress. Participants' responses suggest that the videos were valued not only for their specific coping strategies but also for their capacity to translate psychological concepts into simple, actionable practices that could be readily applied in everyday contexts. This practical orientation appears to be a key driver of perceived usefulness, particularly in healthcare settings where individuals may have limited time, energy, or cognitive capacity to engage with more intensive psychological interventions. This aligns with broader evidence indicating that brief, self-guided interventions can play a valuable role in reducing distress and supporting emotional regulation, particularly when they are delivered in a way that feels approachable and non-overwhelming (Cheung & Ng, 2023; Cullen et al., 2024).

In the present study, participants within the oncology context expressed support for the use of SGPVs in waiting room settings, viewing this environment as an appropriate and accessible space for delivering psychoeducational content. This aligns with broader literature suggesting that healthcare waiting rooms are an underutilised opportunity for health education. Gignon et al. (2012) note that patients increasingly seek health information and are receptive to educational material while waiting for appointments, and that physicians similarly recognise waiting rooms as potentially effective settings for health education. Despite this, the authors highlight a lack of structured health communication strategies in waiting room environments, with information often delivered passively through pamphlets or posters rather than through engaging media.

The positive responses from participants in this study suggest that SGPVs may help address this gap by offering a more engaging and intentional form of health communication in oncology waiting rooms. This is supported by evidence indicating that media-based interventions are more likely to capture patient attention than traditional print materials. For example, Reddy et al. (2017) found that 61% of patients attended to health education delivered via waiting room television or audio messages, compared to only 4% when information was provided in leaflet form. Similarly, Yvonne Chan et al. (2010) argue that waiting room media are most effective when incorporated into an active health education strategy rather than used in a passive or incidental manner.

Within the cancer care context, where patients may experience heightened anxiety, uncertainty, and emotional distress, the availability of brief, accessible psychoeducational videos in waiting rooms may be particularly valuable. Feedback from participants in this study indicates that SGPVs were perceived as an acceptable and potentially helpful use of waiting time, supporting their feasibility as a low-intensity intervention in oncology settings. Taken together, these findings suggest that implementing SGPVs in waiting rooms could enhance the use of otherwise unstructured waiting time, support patient engagement, and provide timely psychological support that complements existing cancer care services.

Implications of the research

This research was a pilot study that highlights the potential of SGPVs that teach coping strategies for general distress, to be delivered in an oncology waiting room setting. The findings from this research highlighted that stakeholders are receptive to engaging with SGPVs in an oncology waiting room setting. However, this research found that many stakeholders have a preference for SGPVs that are tailored to meet the specific needs and challenges that cancer

patients face. By incorporating feedback from key stakeholders, such as cancer patients, psychologists, and healthcare workers, the SGPVs can be tailored to be more relevant to a cancer population.

This research also emphasises the importance of developing SGPVs that resonate with Māori experiences. By incorporating Māori perspectives into the videos, the SGPVs can be developed to resonate with a Māori audience. Furthermore, the use of practical coping strategies can provide patients with tools to manage stress and anxiety in real-life scenarios. These tools can be easily implemented in various settings, such as waiting rooms, and offer support to individuals experiencing distress who may not otherwise engage in mental health care services.

Overall, the implications of this research highlight the importance of developing culturally sensitive, practical, and engaging interventions that address the unique needs and challenges of individuals facing psychological distress within the context of cancer care.

Strengths and limitations

A key strength of this study was the involvement of diverse stakeholders, including cancer patients, healthcare workers, and psychologists, which allowed for a broad range of perspectives to be incorporated into the development and evaluation of the SGPVs. Importantly, the inclusion of healthcare workers is particularly relevant, as their acceptability of interventions plays a critical role in whether new resources are adopted, delivered as intended, and sustained within healthcare settings. Interventions that are perceived as acceptable and feasible by healthcare workers are more likely to be integrated into routine practice, highlighting the value of including clinician perspectives at an early stage of development. The involvement of Māori participants further strengthened the study by ensuring that Māori perspectives informed the

development of the SGPVs, enhancing cultural relevance and responsiveness for Māori communities.

However, this study also had several limitations, most notably the small sample size of cancer patients. Only two cancer patients were recruited outside of the Māori cancer support group, which limits the generalisability of the findings across different demographic groups and cancer populations. In addition, the participant sample was predominantly female, further constraining the applicability of the findings to male populations.

Conclusion

The feedback gathered from key stakeholders in this research provided valuable insights into the acceptability and usefulness of the SGPVs designed to address general psychological distress, as well as areas for improvement. Overall, participants were accepting of the videos and found them useful, but they also had suggestions for their improvement. Key themes were developed including tailoring the videos to reflect the unique experiences and challenges faced by cancer patients, as well as an appreciation for the universal nature of the videos by other participants. Participants also highlighted the importance of depicting context, whānau portrayal in the videos, as well as cultural elements that were relevant to Māori communities. Additionally, participants emphasised the use of visual elements, humour, formatting and pacing of the videos, and the use of waiting rooms to disseminate the videos.

Interestingly, some participants noted that the current SGPVs appeared better suited for a general audience, such as in a GP practice, rather than specifically for oncology settings. This suggests a recognition of the videos' potential to address general psychological distress, making them relevant to a broad audience beyond cancer patients. While the SGPVs could be delivered in an oncology waiting room setting, they may require further tailoring to resonate specifically

with cancer patients. Alternatively, these videos could remain as generalised resources for addressing psychological distress, making them suitable for delivery in a GP waiting room setting. This consideration is explored in the following chapter.

Chapter 8 - Study Three: Evaluation of the Self-Guided Psychoeducational Videos with the General Public

Introduction and Aims

This chapter introduces Study Three, which evaluated the self-guided psychoeducational videos (SGPVs) with members of the general public. Building on the findings from Study Two, the videos were iteratively refined to enhance their acceptability and usefulness for a broader audience experiencing psychological distress. Feedback from Study Two participants indicated that, while the videos were acceptable as tools for general psychological distress, they would need to be more cancer-specific to be appropriate for an oncology waiting room setting. Participants suggested that, in their current form, the videos were better suited to a general practice (GP) waiting room context. This feedback informed the strategic shift from evaluating the videos in an oncology waiting room setting to evaluating them with the general population within a GP waiting room context. Accordingly, Study Three aimed to evaluate the acceptability and usefulness of the revised SGPVs with members of the general public while identifying opportunities for further refinement before the final quantitative evaluation in Study Four. This chapter outlines the methodology, results, and discussion of the findings.

Method

Research Procedure

Ethics

Ethical approval was obtained from Massey University Human Ethics Committee (4000029352). All participants provided informed consent prior to participation, ensuring they understood the study's purpose, procedures, and any potential risks involved.

Refinement of the Self-Guided Psychoeducational Videos

Based on the findings from Study Two, the self-guided psychoeducational videos (SGPVs) were revised to incorporate stakeholder feedback. During the interviews and focus groups, participants discussed aspects they liked, aspects they disliked, and suggested changes to improve the content, presentation, accessibility, and cultural relevance of the videos. All feedback was reviewed by the expert advisory panel, who determined which refinements were clinically appropriate and suitable for a general audience. While all participant feedback was considered, suggestions raised by multiple participants were given greater weight during the refinement process. This iterative process ensured that the SGPVs remained both evidence-informed and responsive to stakeholder feedback. Table 6 summarises examples of how stakeholder feedback informed refinements to the SGPVs prior to Study Three. The revised narrative storylines for each of the six SGPVs are presented below.

Table 6 *Examples of refinements made to the SGPVs following stakeholder feedback from Study Two*

Theme	Example refinement
Content	Clarified psychological concepts and refined storylines.
Presentation	Adjusted pacing and refined animations to improve engagement.
Cultural responsiveness	Incorporated Māori imagery, increased references to whānau, and included more diverse characters.
Accessibility	Simplified language and refined the visual presentation to improve comprehension.

Behavioural Activation Video

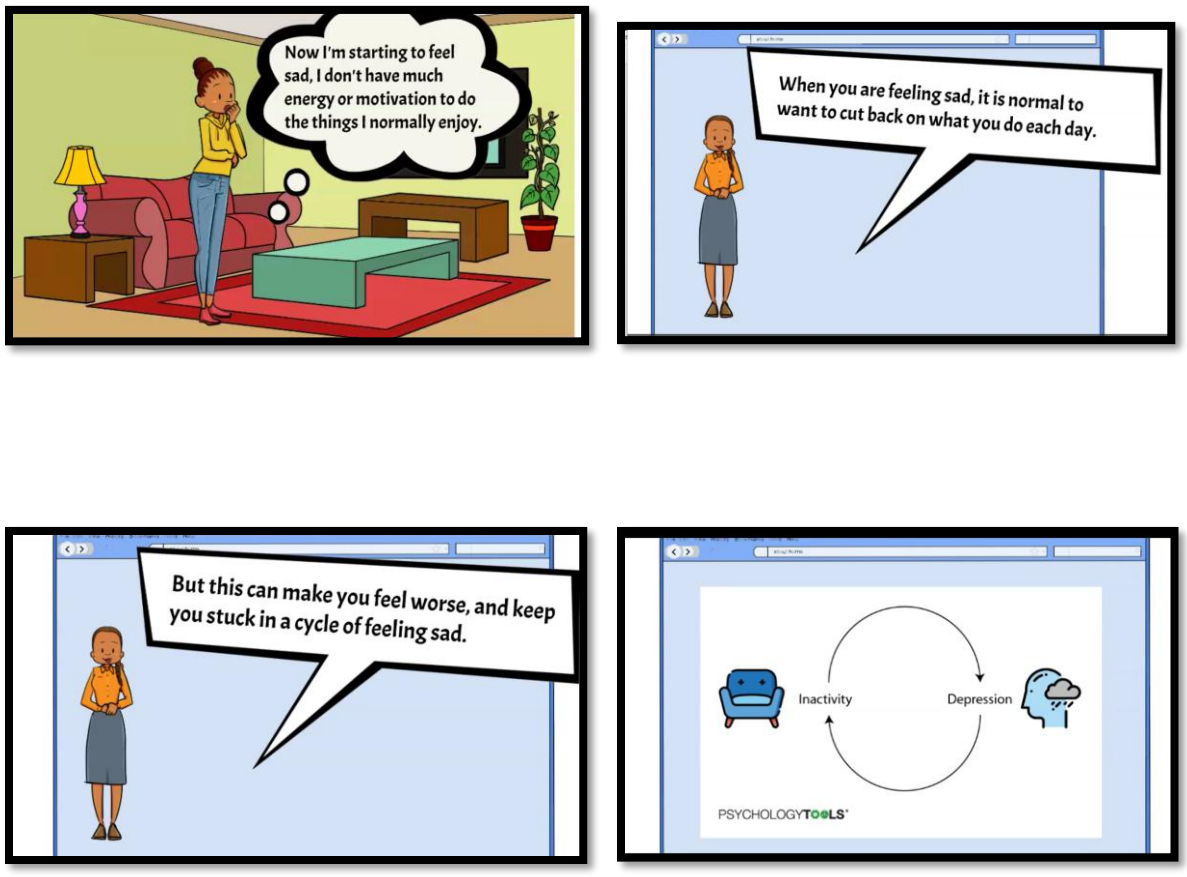
The "Behavioural Activation" video tells the story of Sarah, a woman who has been feeling down and lacking motivation, leading her to isolate herself and abandon the activities she once loved. One day, a friend sends her an email containing a video featuring a clinical psychologist who shares effective coping strategies. The psychologist provides psychoeducation on depression, explaining how it can be perpetuated by avoidance behaviours and a lack of engagement in pleasurable activities, thus creating a cycle that reinforces feelings of sadness and hopelessness (Wang & Feng, 2022). The video includes visual diagrams that depict this cycle.

To break this cycle, the psychologist offers practical advice on behavioural activation, encouraging viewers to intentionally plan to engage in activities they previously enjoyed, even when motivation is low. After watching the video on her computer, Sarah feels inspired and expresses gratitude to her friend for sharing it. She gains insights into the importance of participating in enjoyable activities such as yoga, gardening, spending time with her whānau, and

exercising. Her friend offers to join her in these activities, ensuring she won't have to do them alone.

Together, they engage in various activities, and afterward, Sarah notices an improvement in her energy and mood, realising the significance of doing what she loves, even during low-motivation moments. The video concludes with a message highlighting that as Sarah dedicates more time to things she used to enjoy, like yoga, gardening, and quality time with loved ones, she becomes more relaxed and happier. Figure 14 below shows still images from the Behavioural Activation video.

Figure 14 *Images from the Behavioural Activation Video*



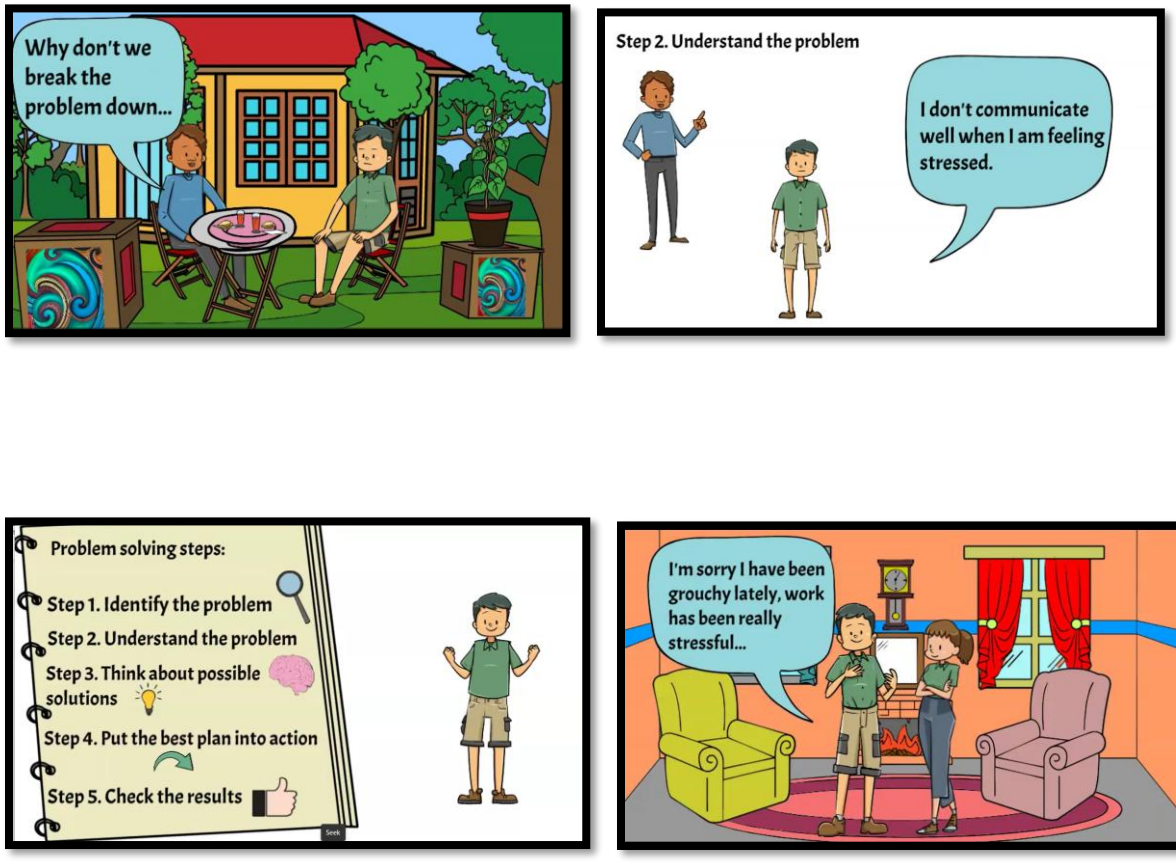
Problem-Solving Video

The “Problem-solving” video follows Alex, a male protagonist who confides in his close friend Mark about his distress stemming from work stress and relationship challenges. In response, Mark shares advice by introducing five steps of problem-solving: Identify the problem, understand the problem, brainstorm solutions, implement the best action, and review the results (Wagner et al., 2014).

Inspired by this guidance, Alex applies these steps to his own situation, recognising that his work stress is impacting his mood and, in turn, straining his relationship. This realisation motivates him to take proactive steps, including having an open conversation with his wife about his recent irritability and the influence of work stress on their dynamic. He resolves to improve his communication skills and better manage his stress.

During their discussion, his wife expresses appreciation for his honesty. Alex then suggests they go out and enjoy some quality time together. The video concludes with a message highlighting that Alex has learned effective ways to manage his stress, leading to an improved relationship with his wife through better communication. The final scene emphasises that approaching problems with an open mind and a willingness to seek solutions can turn challenges into opportunities for growth and learning. Below in Figure 15 are screenshots taken from the Problem-Solving video.

Figure 15 *Images from the Problem-Solving Video*

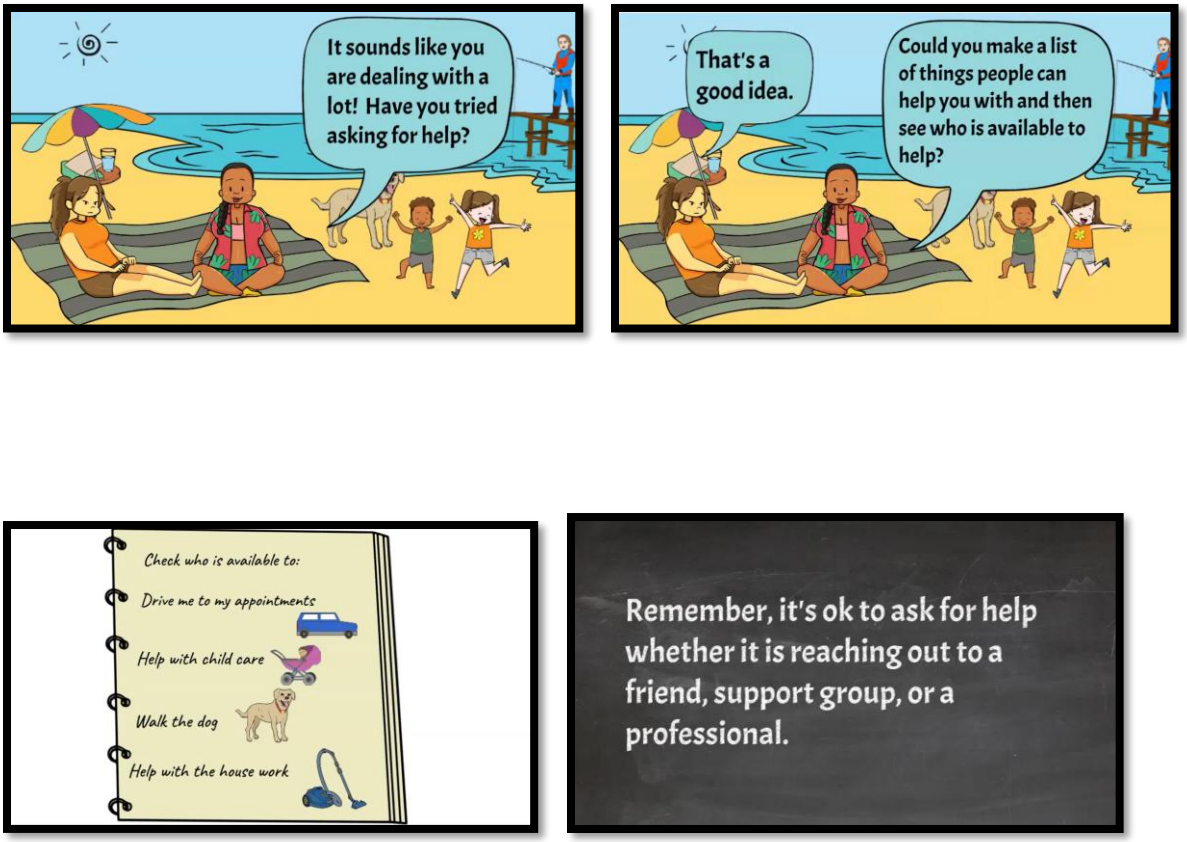


Asking for Help Video

The "Asking for Help" video tells the story of Anna, a woman struggling with a chronic illness. While at the beach with her friend Maya, Anna opens up about her struggles to manage daily life and the overwhelming stress it brings. Maya suggests that Anna consider asking for help, but Anna hesitates, fearing she might burden others. Encouragingly, Maya advises her to make a list of areas where she needs support and to reach out to friends who care. She also offers her own assistance and recommends seeking out support groups or professionals. The video concludes with a reminder that it's perfectly okay to seek help, whether from friends, professionals, or support groups. It ends with a take-home message: "If you're struggling, don't

hesitate to reach out, take that first step today." Figure 16 below features stills from the Asking for Help video.

Figure 16 *Images from the Asking for Help Video*



Savouring Video

The "Savouring" video introduces a coping strategy that encourages individuals to intentionally focus on positive experiences and emotions. The story unfolds as a family enjoys a day at the beach. The mother suggests a game where they each describe something they can see, hear, smell, taste, or touch and what they appreciate about it. This exercise not only anchors them in the present moment but also enhances their appreciation for the environment surrounding them. The mother appreciates the warmth of the sun and the coolness of the breeze against her skin, savouring the scent of the salty air. Meanwhile, the father savours the rhythmic sound of the

waves and the way sunlight shines through them. The video concludes with an invitation to viewers, encouraging them to practice this mindful approach to cultivate gratitude for the simple joys in life. The images below in Figure 17 are taken from the Savouring video.

Figure 17 *Images from the Savouring video*

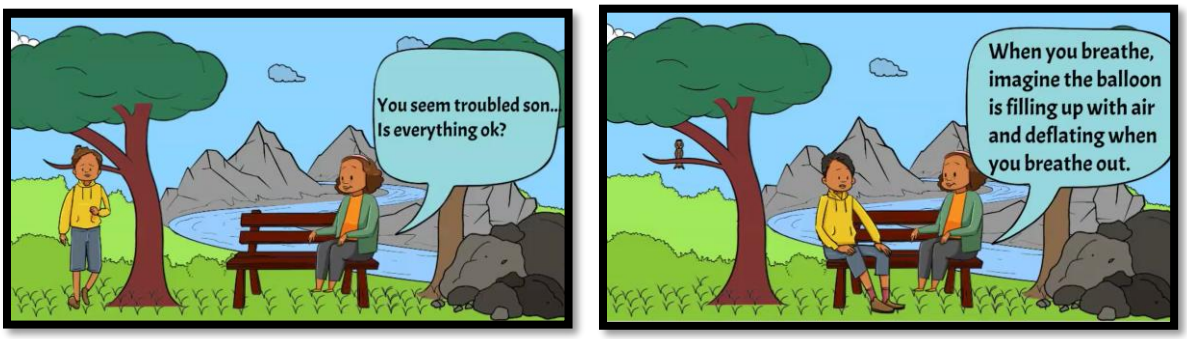


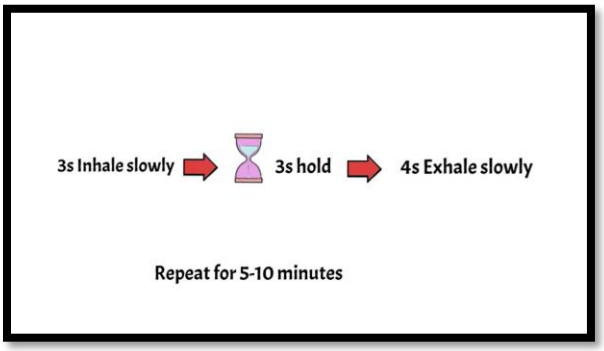
Deep Breathing Video

The "Deep Breathing" video tells the story of a teenage boy named Tama, who feels overwhelmed by the pressures of daily life. Set in a quaint mountain town in New Zealand, Tama encounters his aunty sitting on a park bench. Confiding in her about his struggles with anxiety, his aunty listens compassionately. In response, she offers to guide him through a breathing exercise. She encourages him to visualise a balloon in his stomach, inflating as he inhales and deflating as he exhales. She guides Tama through the technique where Tama inhales slowly for three seconds, holds his breath for three seconds, and then exhales for four seconds, repeating

this for five to ten minutes. She reassures him that once he feels comfortable, he can gradually extend his inhalation to four seconds, hold for four, and exhale for six. With a newfound sense of calm, Tama expresses his gratitude. The video concludes with a message to the audience, reminding them that, like Tama, they too can practice deep breathing to manage stress effectively. The images below in Figure 18 are stills taken from the Deep Beathing video.

Figure 18 *Images from the Deep Breathing video*





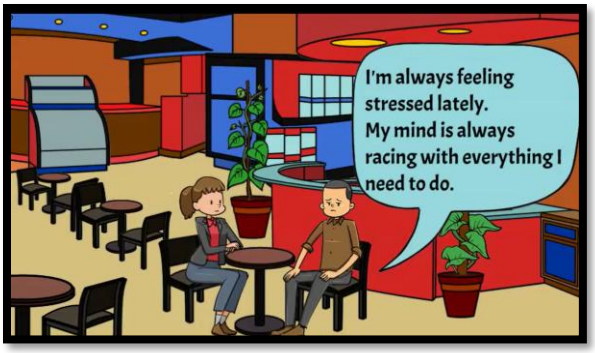
Mindfulness Video

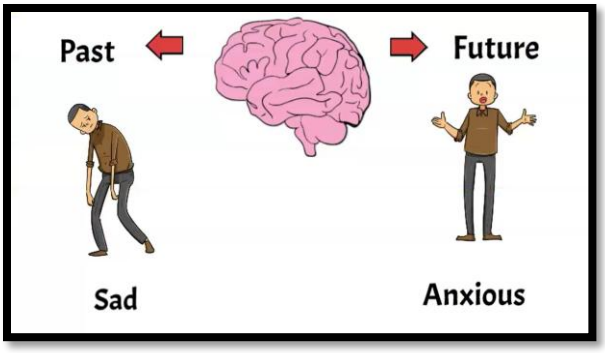
This video replaces the previous "Acceptance of Emotion" video following feedback from participants in Study Two, who indicated that the concepts were too complex for a brief psychoeducational format. Instead, the new focus on "Mindfulness" presents a simpler idea that is easier to understand in a concise, self-guided video.

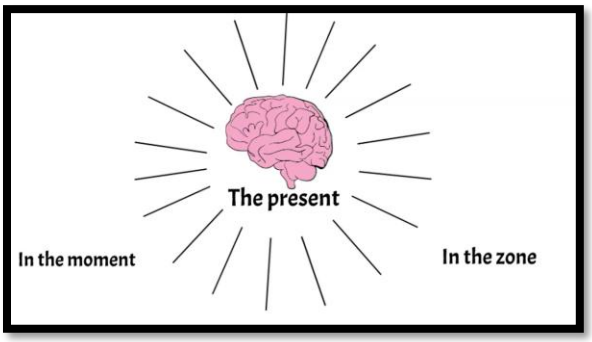
The narrative follows Tom, a busy professional overwhelmed by the demands of work, family, and personal responsibilities. He confides in his colleague Sarah about his feelings of stress and anxiety, explaining how his mind races with everything he needs to accomplish. Sarah shares that she once felt the same way but has found relief through mindfulness practices, which have helped her feel more relaxed and less stressed.

When Tom enquires about mindfulness, Sarah explains that thinking about the future often leads to stress and anxiety as people think about the potential (negative) ‘what-ifs’, while dwelling on the past can evoke sadness, as people tend to focus on regrets or mistakes. She emphasises that being present allows us to release regrets about the past and anxieties about the future. Sarah introduces simple mindfulness practices, like mindful walking and meditation, highlighting that mindfulness can be practiced anytime by simply paying attention to the present. The video concludes with a take-home message for viewers: “We can’t change the past, and the future hasn’t happened yet - but we can be in the now, and that’s where we have the most control. Figure 19 below features screenshots taken from the Mindfulness video.

Figure 19 *Images from the Mindfulness Video*









Participants and recruitment

Participants in this study were recruited from the general public, encompassing individuals with varying backgrounds, experiences, and levels of knowledge. Feedback from members of the general public can provide valuable insights into how the videos are perceived by individuals who may not have specialised knowledge or experience in the subject matter (Levac et al., 2019). Furthermore, the general public may have varying levels of health literacy and familiarity with psychological coping strategies. Iteratively evaluating and refining the videos with members of the general public helped to identify and address potential issues or shortcomings in the content.

Participants were recruited through Prolific, an online research platform where individuals voluntarily register to participate in research. The inclusion criteria required

participants to be at least 18 years of age, fluent in English, and either a resident or citizen of New Zealand. The study was made available to Prolific users who met these eligibility criteria. Before deciding whether to participate, eligible individuals were able to view the Participant Information Page and Information Sheet, which outlined the purpose of the study and what participation involved (Appendix Eight). Participants who chose to take part then provided written informed consent before commencing the study (Appendix Six).

Participant demographics

There was a total of fifteen participants in this study. The demographic details of the participants in the study reveal a diverse group in terms of age, ethnicity, education, and gender. Participants ranged in age from 27 to 70 years, with a mean age of 39.6. The group consisted of four individuals identifying as NZ European, three as Indian, two as NZ European/Māori, two as Filipino, two as Chinese, and two as European. In terms of education, the participants included two individuals with secondary school qualifications, nine with undergraduate qualifications and four with postgraduate university qualifications. The gender distribution was relatively balanced, with eight male participants and seven female participants.

Data collection method

Online semi-structured interviews were employed to pilot test the video content. During these interviews, participants were presented with the SGPVs via screen sharing through Zoom. After viewing each individual video, participants were asked a brief set of video-specific questions to capture immediate reactions, including clarity of the message, engagement with the narrative, and perceived usefulness. Consistent with Study Two, participants provided feedback on each individual video to inform the ongoing refinement of the SGPVs and to evaluate their

acceptability and perceived usefulness. The emphasis was on improving the intervention rather than comparing or ranking the individual coping strategies or videos. Participant feedback informed revisions to the content, presentation, and cultural relevance of the videos before the final quantitative evaluation.

Following the viewing of all six videos, participants were then asked a broader set of semi-structured questions that explored overall acceptability, perceived usefulness, and the suitability of the videos for display in a general practice waiting room setting. This structure mirrored the interview approach used in Study Two with cancer patients and healthcare workers, allowing for consistency across studies. The same interview guide was used (see Appendix Seven), with one modification: the question "Would you like to see these videos in an oncology waiting room setting?" was revised to "Would you like to see these videos in a general practice waiting room setting?"

The semi-structured format enabled the researcher to explore participants' immediate and overall responses to the videos while allowing flexibility for participants to elaborate on their perspectives. Participants were encouraged to provide detailed feedback, share their interpretations of the content, and suggest refinements to enhance relevance, clarity, and acceptability. This approach facilitated a nuanced understanding of participant experiences and generated qualitative data to inform the iterative refinement of the SGPVs.

Data Analysis

Participant feedback was analysed using thematic analysis**,** consistent with the analytic approach employed in Study Two (see pages 126–128). Thematic analysis was chosen to identify

and interpret meaningful patterns across participants' accounts, allowing for an in depth exploration of perceptions regarding the acceptability, usefulness, and clarity of the SGPVs.

Individual interviews were audio-recorded and transcribed using Otter.ai transcription software. The researcher reviewed each transcript while listening to the corresponding audio recording to check and correct transcription errors before analysis. Analysis followed the six-phase framework outlined by Braun and Clarke (2023). The researcher first became familiar with the data by reading and re-reading interview transcripts. Initial codes were then generated to capture salient features of participants' feedback relevant to the research aims. These codes were subsequently reviewed and organised into broader themes that reflected shared patterns across the dataset. Themes were refined through an iterative process that involved revisiting the data to ensure coherence, consistency, and clear distinctions between themes.

The final themes captured participants' experiences of the videos, including perceived strengths, areas of confusion, and suggestions for improvement. Rather than quantifying the frequency of specific comments, emphasis was placed on the meaning, salience, and consistency of ideas across participants, in line with a reflexive thematic analysis approach.

Integration of Feedback

The themes generated through thematic analysis directly informed the refinement of the video content. Participant feedback was used to identify areas where additional clarity, contextualisation, or adjustment to narrative elements was needed to improve acceptability and usefulness.

Proposed refinements were discussed with the same expert panel involved in Study Two, including two clinical psychologists and a Māori clinical psychologist. This collaborative and iterative process ensured that revisions were theoretically grounded, clinically appropriate, and culturally responsive. Not all suggestions were implemented; decisions regarding changes were guided by thematic relevance, feasibility, and expert consensus. This process ensured that the final versions of the SGPVs reflected stakeholder perspectives while maintaining conceptual integrity and practical applicability.

Results

Table 7 presents the demographic characteristics and participant identifiers for the 15 participants included in Study Three. Participant identifiers (P01–P15) are used throughout this chapter to contextualise quotations while maintaining participant anonymity. The results presented below describe the key themes developed through the thematic analysis of participants' feedback on the SGPVs.

Table 7 *Participant characteristics and identifiers for Study Three*

Participant	Age	Gender	Ethnicity	Highest education
P01	31	Male	NZ European	Postgraduate
P02	30	Male	Indian	Postgraduate
P03	52	Male	NZ European	Undergraduate
P04	30	Female	Filipino	Undergraduate
P05	31	Male	Chinese	Undergraduate

Participant	Age	Gender	Ethnicity	Highest education
P06	65	Male	NZ European	Undergraduate
P07	51	Female	Chinese	Undergraduate
P08	25	Male	Indian	Postgraduate
P09	34	Female	Filipino	Undergraduate
P10	36	Female	European	Postgraduate
GP11	35	Female	NZ European	Undergraduate
P12	34	Female	NZ European/Māori	Secondary school
P13	44	Male	Indian	Undergraduate
P14	70	Female	English	Undergraduate
P15	27	Male	NZ European/Māori	Secondary school

Interview Themes

Relatability

Participant feedback highlighted the importance of *relatability*. Many participants were able to identify with the protagonist and her experiences. For example, one participant commented, "*Oh, I've totally been Sarah*" (P11)), while another explained that "she is pretty much me. In my head, if I saw this, I would definitely be nodding and kind of say to myself, 'Okay, this is definitely something that is for me'" (P13). These responses suggest that viewers saw their own experiences reflected in the character's journey, enabling them to engage more deeply with the educational messages.

Several participants also drew direct parallels between their own lives and the coping strategies presented in the SGPVs. One participant explained that the Behavioural Activation video

reflected their own experience of depression, stating: "That is quite relatable to me... when I'm overwhelmed with work, even I stop doing the things that I do when I'm feeling happy." (P02)

Similarly, another participant described how the video closely mirrored their own recent experiences: "To be honest, I could relate myself to that video... Sarah got help from a friend and same with me... my counsellor asked me the same questions - what do I like to do?... after doing that, I felt much better." (P13)

Participants also related the videos to activities they already found helpful in everyday life. For example, one participant explained that although they could not personally identify with prolonged low mood, they recognised the underlying principle that continuing valued activities promotes wellbeing (P06). Another participant, who was currently experiencing depression, reflected that they had stopped spending time in nature and commented that the video's encouragement to return to previously enjoyable activities "really sparks ideas in you" (P10).

Many participants also identified with the *Asking for Help* video, particularly its portrayal of the hesitation people experience before seeking support. Participants described recognising these feelings within themselves and appreciated that the narrative normalised reaching out for help. One participant reflected that they had previously believed they were "strong" enough to cope alone, before eventually accessing counselling and recognising its benefits (P13).

Although relatability emerged as a prominent theme, participants also recognised that not every video would resonate equally with every individual. One participant explained that while they personally could not relate because they had not experienced significant mental health difficulties, they could readily see how the videos would be meaningful for others facing similar

challenges: "I can't really relate to it myself... but I can definitely imagine someone that could relate to it." (P15)

Similarly, another participant observed that while the Behavioural Activation message was valuable, encouraging people to simply become more active could risk appearing overly simplistic for individuals experiencing severe depression or major life adversity. They suggested that messages should acknowledge that people may first need to take "small goals" or "one small step" before larger changes become achievable (P06).

Overall, *relatability* emerged as a key element influencing participants' engagement with the SGPVs. Participants were more likely to engage with the videos when they recognised aspects of their own experiences within the characters, narratives, or coping strategies. At the same time, the feedback highlighted that relatability is inherently subjective and influenced by individuals' personal experiences and circumstances, reinforcing the importance of developing narratives that acknowledge a diversity of lived experiences.

Cultural representation

Many participants expressed a strong connection to scenes depicting quintessential Kiwi experiences, such as family outings to the beach, yoga at the gym, and gardening. One participant emphasised, “Yeah, sunny beaches and people love their families... It was really nice, and people are active in New Zealand” (P14). This perspective was shared by others who noted familiar imagery of beach relaxation reinforced the videos connection to New Zealand. The natural landscapes, including beaches, mountains, and rivers, were also highlighted as significant elements that resonated with viewers, with comments like, “Oh yeah, that was good. That was

nice to be in the mountains of New Zealand" (P15). Participants also appreciated Māori symbols such as the koru[9] and other Māori artwork that was in the background setting of the videos.

The use of colloquialisms was also appreciated. Phrases like "missus" and "bro" added cultural relevance, with one participant commenting, "It has an element of humour in it... it's quite Kiwi" (P07). However, one participant cautioned that the heavy use of local slang might confuse audiences unfamiliar with these terms, highlighting the challenge of balancing cultural specificity with broader accessibility (P06).

A significant insight emerged regarding the cultural tendency among Kiwis, particularly men, to internalise emotions. One participant observed, "Kiwis, especially men, usually keep things to themselves," (P05). This comment highlights emotional barriers that may prevent open discussions about mental health, suggesting an opportunity for further exploration where the videos could address this aspect more explicitly.

Despite the positive feedback, some participants raised concerns about certain Americanised elements that felt out of place. Examples such as the spelling of words like "prioritize" and "realize" were pointed out, leading one participant to feel that the content aligned more with American culture than New Zealand. Additionally, there were comments regarding the depiction of spaces, like the coffee shop in the Mindfulness video, which some felt did not accurately reflect the image of typical local cafés in New Zealand. This desire for authenticity was reiterated by remarks noting that certain scenes "don't really feel very Kiwi" or "doesn't jump out as New Zealand" (P11).

[9] Koru - A Māori spiral symbol representing new life and growth.

Overall, the SGPVs resonated positively with many participants. By addressing the nuances in participant feedback, the videos can better serve their purpose of providing coping strategies for psychological distress while fostering a genuine connection to New Zealand's identity.

Engagement

Participant feedback revealed a spectrum of *engagement* levels, with some expressing dissatisfaction. One individual remarked, “I don't find it very engaging myself” (P07) emphasising that the absence of real-life characters diminished the overall impact. Another participant likened the format to “watching a slide in a way like a PowerPoint slide,” (P05) noting a lack of movement and stating that it didn’t grab their attention, rating the video a mere “three out of 10” for engagement. The static nature of the imagery was cited as a factor in diminishing interest. Despite this critique, some participants appreciated the video’s simplicity, with one noting, “it was kind of pretty passive... Yes, I think it was engaging in terms of the simple animation” (P01).

Participants noted that the incorporation of humour in the Problem-solving Video captured their attention, with one stating, “The use of humour in the beginning was good” (P07). This light-hearted approach made the content feel more relatable and enjoyable, as many shared similar perspectives about the comedic elements. For example, many participants found the line, “get a new wife,” particularly funny, illustrating the audience’s preference for a relaxed and fun approach to serious topics. One participant described the humorous elements as effective "icebreakers" that helped "lighten the mood" rather than making the videos feel like "instructional boring stuff" (P04).

While the inclusion of background music was said to enhance the engagement of the content, participants advised that the music should align with the emotional tone of the videos. For example, some participants noted that in certain videos, the music was overly upbeat and detracted from the intended mood (P04, P05). Participants also recommended incorporating localised audio narration to further improve engagement (P07, P02, P10).

Overall, while the theme of engagement was reflected in various aspects of the video, participant responses highlighted improvements such as using more active animation to enhance viewer engagement, music that matches the emotional tone of the videos, and localised audio narration of the videos.

Comprehension

The theme of *comprehension* was constructed from participant feedback. Participants consistently noted that the videos effectively conveyed their messages through simple and digestible content. The language used in the videos was generally deemed appropriate for the target audience, with one participant mentioning that it was suitable for a “10th grade level” (P08). However, they also acknowledged that certain segments were overly wordy, which could hinder comprehension.

The simplicity of the content was a recurring theme, with participants noting that it “wasn't over complicated” (P12), facilitating quicker understanding compared to more complex written materials. Additionally, several participants highlighted the practical implications of the content, particularly regarding mindfulness and coping strategies. One viewer remarked, “It’s a good practical way of explaining the mindfulness thing if you had a stressful day” (P02), indicating that the videos successfully simplified complex concepts for everyday application.

The visuals used in the videos were also thought to enhance comprehension. One participant commented on visual learning, stating, “A lot of people are visual learners... really well presented” (P14).

Furthermore, participants emphasised the effectiveness of breaking down complex concepts into easily digestible content. Comments included, “Breaking that down step by step in a very friendly, easy-to-watch video” (P13). Participants found that the information was “easy to understand” (P01) making it straightforward to apply in their own lives. However, there was a recognition that while the ideas were clear, “It's easier to understand but harder to implement” (P02) suggesting that translating understanding into practice remains a challenge for some viewers.

Overall, the feedback highlights that the videos successfully fostered comprehension, ultimately providing participants with valuable insights and coping strategies for psychological distress.

Usefulness

The feedback from participants consistently highlighted the *usefulness* of SGPVs, emphasising their practical applications and positive impact on mental health and well-being. Many participants found the videos particularly beneficial for providing actionable coping strategies that can easily be incorporated into daily life. Techniques such as breathing exercises, mindfulness practices, and behavioural activation were noted for their effectiveness in managing psychological distress. One participant remarked how useful it was to understand alternatives to meditation, such as mindful walking, stating, "I always find myself like meditating, but I find

that I don't really do it unless I'm in the perfect environments. So I tend to not do too much. But that's more just something you can apply anywhere at any time" (P10).

Additionally, the videos encouraged viewers to reflect on their needs and identify sources of support, breaking down mental health challenges into manageable steps. Participants appreciated the practicality of creating checklists for tasks or pinpointing who to ask for help, with one stating, “The first step of writing a list of your... needs is quite valuable” (P01). Many participants felt the videos were useful in normalising asking for help, as one individual reflected, “It’s okay to ask for help... We’re not made to do it all by yourself” (P14), highlighted the videos ability to foster a culture of openness that is crucial for mental health.

The videos also addressed communication strategies within relationships, which participants found practical for reflecting on their behaviours and enhancing their communication skills. However, while the feedback was mostly positive, one participant voiced concerns that the videos might overwhelm viewers without providing clear resolutions (P06). they pointed out that although the Problem-solving video prompted reflection, this video could benefit from a more structured path for resolving identified issues and more explicit guidance on solving issues.

In general, participants who had not experienced psychological distress generally found the SGPVs to be less beneficial. However interestingly, many of these individuals still found the mindfulness video to be valuable, despite not personally experiencing psychological distress. Overall, by offering practical strategies, most participants thought these videos could serve as valuable tools for promoting mental health and well-being.

Suggested topics

General feedback from participants included *suggested topics.* When asked about video topics, most participants expressed satisfaction with the content covered. However, one participant emphasised the importance of addressing sensitive and often stigmatised topics. For example, they highlighted the significance of providing resources for marginalised communities, stating, “So from my perspective, the main value in this... we’re talking about topics that people feel uncomfortable to bring up... how to address that and resources to find that would be very useful” (P09). This suggests that videos could serve as a vital resource for individuals seeking information without the fear of judgment or stigma. Additionally, while mindfulness was acknowledged as a valuable topic, they suggested prioritising more challenging subjects. “Mindfulness... is useful... but I feel like it shouldn’t be allowed on your priority because there are 30 or more topics where they have the doctor time or the patient areas where patients were exposed.” They suggested stigmatised topics such as transgender issues and domestic abuse. This highlights the potential of the videos to provide information about issues that are harder to discuss in a discreet and accessible manner.

Furthermore, another participant mentioned they would find practical strategies for focus and attention for individuals with ADHD helpful. They said, “...something about paying attention and focus... quick little snippets of information... how you can get back into a focused mindset, because it'll be really useful” (P02).

In summary, while most participants were satisfied with the content covered, one participant requesting a video on practical coping strategies for ADHD, and two participants highlighted the importance of creating video content that addresses sensitive and stigmatised topics, that can serve as resources for marginalised communities.

Visual Elements

General feedback from participants highlighted the importance of *visual elements.* One participant noted, “If you can make it more appealing visually, because I think we visualise something, they get attracted to it, they get engaged to it” (P13). This highlights the importance of visual elements in capturing and maintaining the audience's attention. They emphasised, “Because your words are all good. I can understand those words and like what purpose is, but if the background of the resolution what I see is more appealing, then it will keep me engaged.” This feedback suggests that while the content is strong, improving the visuals could significantly enhance viewer engagement.

One participant also pointed out that, “I should not feel bored” (P02), particularly when the video is displayed in settings like waiting areas, where viewers may spend extended periods of time. Ensuring that the content is not only informative but also visually stimulating can help mitigate feelings of boredom during these waiting periods.

Additionally, participants offered constructive criticism regarding the transitions between slides. One noted, “The transitions between the slides could have been different, better” (P15), suggesting that smoother and less jarring transitions would enhance the viewing experience. While the feedback did not call for overly professional transitions, it highlighted a preference for those that are “less jarring,” to enhance the flow throughout the video. Overall, enhancing the visual quality, ensuring engaging transitions, and maintaining viewer interest are essential steps toward creating more engaging SGPVs.

The video's active animation and hand movements while writing out words played a role in maintaining engagement. Some participants preferred the stimulating nature of the visuals with movement rather than the static visuals, with one saying, "the active animation helps" (P07). Another participant commented that the animations were "cute" and "fun" to watch (P13).

Participants appreciated imagery that evoked personal memories, such as characters like the wise old woman, which fostered a sense of warmth and familiarity. Comments like, "Kind of old ladies on benches with twinkling eyes, it just reminds me of my Nan" (P11), illustrate how personal connections can enhance the viewing experience. One participant even commented on the calming effect of the visuals, stating, "I really liked that one. It made me feel calm just watching it" (P10).

Other suggestions for enhancing visual elements included replacing the blackboard background with a more neutral colour, such as a greenboard or whiteboard, and changing the text colour from blue to white. Participants felt that the black and blue combination contributed to a drearier atmosphere in the videos (P15).

Use of Storytelling

General participant feedback emphasised the effectiveness of the *use of storytelling* as a means to teach coping strategies within the SGPVs. One participant remarked, "I liked it. It was a story form of things that are relevant" (P09), highlighting how the narrative structure made the content more relatable and engaging. The use of stories was identified as a key element in grabbing the audience's attention, with one participant noting, "That's what grabs attention" (P04). This suggests that narratives can draw viewers in, encouraging them to invest emotionally in the content and facilitating a deeper understanding of the coping strategies being discussed.

Similarly, another participant stated, “I think stories are the best way to get your point across,” (P13), reinforcing the idea that storytelling can be a powerful tool for communication. By framing concepts within stories, the videos can present complex ideas in a way that captures attention and resonates with viewers on a personal level. In summary, leveraging storytelling within the SGPVs was perceived by participants as an engaging format for delivering coping strategies for psychological distress.

Delivery context

Participant feedback supported the idea of delivering SGPVs in a GP waiting room setting. One participant enthusiastically stated, “I would love to see something like that in a waiting room” (P10), highlighting the potential for these videos to be delivered in GP waiting room setting. The absence of engaging content in such settings was noted, with one participant mentioning, “My GP doesn't have a TV or anything,” which leads to patients “just sitting scrolling their phones” (P01). This suggests showing SGPVs in a GP waiting room setting may provide a more stimulating environment. As another participant remarked, “I would definitely be... stimulated in a waiting room” (P04), suggesting that the videos could serve as a welcome distraction from the typical atmosphere of a medical office. This idea was reiterated in comments about the current ambiance, where patients might be “staring blankly into space” (P01).

Participants agreed that the presence of these videos would not detract from the waiting room experience. One stated, “Putting a TV in there... it's not going to detract from anything” (P06), while another asserted, “I don't think there's going to be anything negative from trying this out” (P07). Importantly, the videos were perceived as non-disruptive, with comments indicating that they would be “nothing harmful” and “nothing that would insult me” (P15). Another

participant expressed, “If there was something playing on a screen... they’re gonna get something from it” (P04), emphasising that even brief exposure to the videos could offer valuable insights.

In summary, integrating SGPVs into GP waiting rooms was widely supported by participants as a means to enhance the patient experience, providing engaging and informative content that can transform idle waiting periods into opportunities for learning and distraction.

Discussion

The findings from Study Three provided insights into the acceptability, usefulness, and potential areas for further refinement of the revised SGPVs within a GP waiting room setting among members of the general public. This discussion explores the major themes developed through the thematic analysis of participant feedback and the suggestions made to improve the video content. The key themes included *relatability, portrayal of New Zealand, engagement, comprehension, usefulness, improving video quality, storytelling,* and *the delivery of SGPVs in a GP waiting room setting*.

Relatability was developed as a central theme through the thematic analysis, with participants expressing varying levels of connection to the characters and narratives. Research indicates that viewers are drawn to characters they can identify with as this connection often enhances their engagement with the narrative (Tchernev, 2022). A message is more likely to be seen as relevant to if it corresponds to an individual's particular life circumstances or experiences (Kreuter & Wray, 2003). When viewers can relate with characters and the plot on a personal level, the story becomes more meaningful (Kohn, 2024). Many participants in this current study were able to relate to the characters in the stories, as they recognised elements of their own struggles within the narratives.

Participants reported that they found the videos particularly useful when the narratives reflected their own experiences. Green and Brock (2000) also found that relatable narratives enhance the perceived usefulness of content. Their research shows that narratives are more

persuasive when audiences can identify with the characters and situations, highlighting the role of personal relevance in information processing. While some participants didn't feel that the video content related to them, they acknowledged the potential benefits for others, especially those facing mental health challenges.

One individual expressed scepticism regarding the applicability of the advice for all individuals in challenging situations. According to Kreuter and Wray (2003), there is a continuum of message specificity, ranging from entirely generic messages to highly individualised messages that are perfectly tailored. Most messaging strategies fall somewhere along this spectrum. While the SGPVs may not universally resonate with every individual's specific circumstances, they are designed to relate to more general psychological experiences that many face. However, in striving to create content that appeals to a wide audience, it is important to recognise that not everyone will relate to every aspect, necessitating a careful balance between general applicability and individual relevance when generating content.

Interestingly, those who didn't connect with the coping strategies for psychological distress found the "Mindfulness" video particularly helpful. They acknowledged that, although they had encountered the concept of mindfulness before, the video's straightforward explanation made it easier for them to integrate mindfulness into their lives, even without facing specific mental health challenges. Mindfulness encourages individuals to focus on the present moment, fostering a greater appreciation for daily experiences and a deeper engagement with life (Brown & Ryan, 2003). Brown and Ryan (2003) suggest that those who practice mindfulness report higher levels of overall life satisfaction and happiness, indicating that its benefits extend beyond merely addressing psychological distress. This highlights that videos teaching mindfulness

strategies can be valuable for individuals, even when they are not experiencing psychological difficulties.

The thematic analysis highlighted *cultural representation* as a key theme across participants' feedback. In general, participants appreciated the incorporation of cultural references and settings that reflected New Zealand as the local context. However, the American Doodly software used to create the videos often featured imagery that did not authentically represent New Zealand. While activities like going to the beach are common among many New Zealand families, some participants felt the certain scenes were not reminiscent of New Zealand. Participants appreciated the inclusion of imagery that resonated with New Zealand's identity, such as mountains, beaches, rivers, and Māori symbols like the Koru.

Research highlights that New Zealand's natural beauty and environment are central to how people perceive New Zealand. The landscape is often described as embodying notions of space, freedom, clean air and water, and wild natural beauty (*Tūrangawaewae : identity & belonging in Aotearoa New Zealand*, 2017). Moreover, cultural Māori symbols, such as the koru, serve as symbols of national pride and carry significant meaning for New Zealanders (Webb, 2019). Although the limitations of the American software affected how well the imagery resonated with participants, the incorporation of natural elements and familiar activities, like beach outings, successfully connected with New Zealand experiences.

The use of culturally specific language, like "missus" or "bro," were useful in the *portrayal of New Zealand*. This aligns with the idea that effective use of slang strengthens the sense of place, making characters feel more believable and fostering emotional connections with the audience (Roth-Gordon, 2020). Slang serves as a linguistic bridge, creating familiarity and shared experiences, which enhances relatability. Its distinctive nature also aids in information

retention, making content more memorable (Roth-Gordon, 2020). Overall, the integration of local vernacular can pull viewers into the narrative, fostering a deeper engagement with the characters and their environment.

Engagement was developed as a significant theme through the thematic analysis, with participants expressing a diverse range of reactions to the video content. Like Study Two, participants appreciated the use of humour in the videos and found this to be an engaging element. Some felt that certain videos lacked engagement due to their static presentation and limited movement. Comments suggested that incorporating "real people" could enhance viewer engagement, highlighting a preference for the authenticity that live-action videos can provide. (Dahodwala et al., 2018)

This feedback aligns with research suggesting that different video formats possess distinct strengths and weaknesses. For instance, whiteboard animation has been shown to be particularly effective for explaining complex ideas, as it simplifies information presentation and enhances retention (Mayer, 2005; Moe-Byrne et al., 2022; Türkay, 2016). Furthermore, whiteboard animation tends to be more cost-effective than live-action videos, which require expensive equipment and larger crews. Additionally, animated videos tend to age better since they are not limited by the physical appearance of real people (Dahodwala et al., 2018; Moe-Byrne et al., 2022). However, live-action videos that use real patients or professional actors can capture realism and authenticity (Dahodwala et al., 2018), which some participants in this study expressed as a desired element for enhancing engagement.

Other suggestions to improve engagement included adding audio narration to compliment the visuals. Previous research has found that the acceptance and engagement of health educational videos could be enhanced by adding the use of localised voice overs (Adam et al.,

2021). Participants also suggested that the use of the blackboard felt gloomy and could be enhanced by using a whiteboard or greenboard background. This is also in alignment with the findings from Adam et al. (2021) who found that participants had preferences for bright colours as opposed to darker colours that were perceived as "dull" or "gloomy". Incorporating these suggestions for brighter visuals and audio narration could enhance the overall appeal and effectiveness of the SGPV.

In terms of *usefulness,* participants frequently reported that the strategies were easy to apply. The content was perceived as easily integrated into daily routines, offering quick and effective methods for managing stress and enhancing mental health. Furthermore, many participants expressed appreciation for how the SGPVs can facilitate open dialogues about everyday challenges, thereby reducing stigma. There was a consensus that these videos could initiate conversations about mental health and inspire supportive actions among friends. Previous research has highlighted the effectiveness of media interventions in combating mental health stigma (Amsalem et al., 2021; Conceição et al., 2022). The normalisation of mental health discussions reflected in participant feedback aligns with evidence from these studies, which demonstrate that psychoeducation can significantly diminish stigma.

As the participants pointed out, this could have implications for New Zealand men. New Zealand faces some of the most alarming mental health statistics globally, particularly among men, who are disproportionately affected (Chiang et al., 2021). In New Zealand, men are 2.5 times more likely to die by suicide than women (Chiang et al., 2021). This distressing trend is largely attributed to men's hesitance to articulate their struggles or seek help. Societal stereotypes often dictate that men should exhibit strength and toughness, leading to a reluctance to express vulnerability or seek emotional support (McKenzie et al., 2022). Consequently, mental health

remains a topic that many men avoid discussing. Participants in this research felt the SGPVs could have a positive impact on New Zealand men who may traditionally find it difficult to express their feelings. Other research has highlighted the potential of video-based interventions to provide impactful support for mental health, especially in contexts where traditional resources may be lacking (Esmaeilimotlagh et al., 2018; Yang et al., 2023).

When asked about video topics, most participants expressed satisfaction with the content covered. However, a few participants pointed out the importance of addressing sensitive and stigmatised issues. They stressed the value of discussing uncomfortable subjects that significantly impact marginalised communities, such as transgender issues and domestic abuse. Participants argued that these topics should be prioritised due to their importance and the stigma surrounding them. They also noted that a self-guided format allows viewers to learn anonymously, free from the fear of judgment. This reinforces the potential of the SGPVs not only to reduce stigma related to mental health issues but also to provide a private and confidential avenue for psychoeducation.

Participant feedback highlighted the importance of *comprehension* across the videos. Participants consistently reported that the use of visual elements significantly enhanced their understanding of complex concepts. This finding aligns with existing literature that emphasises the superiority of visual information in processing and recalling content (Dewan, 2015; Moe-Byrne et al., 2022). The dual coding theory supports this by positing that combining visual and verbal information improves memory retrieval (Schnotz & Horz, 2010). Many participants in this study articulated that visuals not only made learning materials more engaging but also improved their ability to understand and apply the concepts presented. Similar to the findings from Study

Two, the results from this study suggest that participants benefitted from this approach, highlighting the efficacy of visual aids in educational material.

The findings from this research highlight the effectiveness of *the use of storytelling* in conveying messages. Participants emphasised that the narrative approach made the content more relatable and engaging, noting that stories are an excellent way to communicate points, suggesting that they help clarify complex ideas. Overall, storytelling was viewed as a powerful communication tool that resonated with viewers. Past research has shown that narrative communication is often more effective than informational communication in persuading individuals to adopt positive health changes. For instance, a study comparing a narrative-based educational video to an informational pamphlet revealed that participants exposed to the video reported significantly higher perceptions of tapering effectiveness and self-efficacy regarding opioid use reduction (Feng et al., 2021). This highlights the potential of using a narrative approach in health communication.

Furthermore, the research by Keum and Ogrodniczuk (2023) demonstrated the impact of first-person storytelling videos in addressing self-stigma associated with seeking help among men. In this study, men who viewed a storytelling video showed a significant reduction in self-stigma and a more favourable attitude towards seeking psychological help compared to those who received a brochure or no intervention. This suggests that storytelling can serve as a tool to challenge traditional masculinity norms and encourage individuals to seek support for mental health issues.

The feedback from participants strongly supports the idea of delivering SGPVs in a GP waiting-room setting. Many expressed enthusiasm for this initiative, noting a lack of engaging content in these spaces. Participants believed that SGPVs could provide a stimulating distraction

from the typically dull atmosphere of medical offices, with comments indicating they would enhance the waiting experience without being disruptive. Overall, delivering SGPVs in a GP waiting room was seen as a positive addition that could be beneficial to patients.

The feedback aligns well with findings from Oermann (2003), which investigated the impact of educational interventions on patient satisfaction. In Oermann's study, patients who received educational content reported significantly higher satisfaction levels compared to those who experienced usual care. This reinforces the notion that providing educational material (such as SGPVs) can enhance the overall patient experience. The participants' enthusiasm for the SGPVs initiative in this study suggests that such content could serve as a valuable tool to not only distract patients from the typically mundane atmosphere of medical offices but also to increase their knowledge and understanding of mental-health related topics. By combining insights from the current study and Oermann's study, it is evident that implementing these videos could lead to improved patient satisfaction.

Implications of the research

The findings of this study hold several implications for the development and refinement of SGPVs for individuals facing psychological distress in GP waiting room settings. By analysing participant feedback and suggestions across the videos, the study sheds light on key areas for improvement and enhancement of the content.

By integrating participant feedback, thematic insights, and best practices in educational design, the videos can evolve to meet the preferences of a general audience in GP waiting rooms. The collaborative and iterative approach to content development, informed by user feedback and engagement, was key to creating educational resources that are acceptable to individuals facing mental health challenges (Vaughn & Jacquez, 2020)

Strengths and Limitation

This study has several strengths and limitations. The strengths include gathering feedback from the general public which helped in considering a diverse range of perspectives. Furthermore, the iterative testing process allowed for continuous refinement of the video content based on participant feedback, enhancing the relevance and effectiveness of the materials.

However, the study also has limitations. The small sample size likely limits the representativeness of the feedback, as it was recruited from an online research platform, potentially failing to capture the full diversity of public perspectives. Furthermore, the focus on a specific demographic within New Zealand limits the generalisability of the findings to broader populations. The reliance on online platforms for participant recruitment may also introduce selection bias, as those who volunteer may differ significantly from the general public.

Conclusion

In conclusion, the feedback gathered from participants regarding the SGPVs has provided valuable insights for video refinement and improvement. Overall, participants were accepting of the strategies presented in the videos. Most participants expressed a strong sense of relatability to the characters and scenarios presented in the videos, highlighting the universal nature of psychological challenges and coping strategies. The videos were generally well-received for their engaging storytelling and practical tips for managing stress and seeking help.

The usefulness of the videos was evident in participants' reflections on the practicality of the coping techniques presented, with participants recognising the value of these tools in managing stress and improving well-being. The videos were thought to be useful for initiating conversations about mental health and seeking support. Participants appreciated elements such as the use of visuals, storytelling, and relatable scenarios. While some videos were deemed more

engaging than others, overall, it was thought they would be effective in opening conversations about mental health and coping strategies. Participants were also accepting of the concept of delivering SGPVs in a general waiting room setting, believing that these videos would engage individuals while they wait. By aligning the content with participant preferences and needs, the videos can better serve as educational tools for individuals facing psychological distress.

Chapter 9 Study Four: Survey Evaluating the Acceptability of the SGPVs

Introduction

This chapter presents Study Four, a quantitative survey designed to evaluate stakeholder acceptance of the SGPVs that were developed in Study Two and refined through the iterative feedback of Study Three. The study investigates the general population's acceptance and interest in viewing these SGPVs in a General Practice waiting room setting. The chapter details the methodological approach, the results, and concludes with a discussion of the findings.

Research Aims, Questions, and Hypotheses

Aim 1

To evaluate the acceptability of self-guided psychoeducational videos (SGPVs) and participants' interest in viewing these videos in a general practice (GP) waiting room setting.

Research Question 1

What are participants' perceptions of the acceptability of SGPVs and their interest in watching these videos in a GP waiting room?

Hypothesis 1

Participants will report high levels of acceptability of SGPVs and express interest in watching them in a GP waiting room setting.

Aim 2

To examine whether acceptability of, and interest in, SGPVs varies across demographic groups.

Research Question 2a

How does perceived acceptability of SGPVs vary across demographic groups (e.g., age, gender, education level)?

Hypothesis 2a

Women, younger participants, and individuals with lower levels of education will demonstrate higher levels of acceptability of SGPVs compared to men, older participants, and those with higher education levels.

Research Question 2b

Do interest levels in watching SGPVs in a GP waiting room differ across demographic groups?

Hypothesis 2b

Women, younger participants, and individuals with lower levels of education will demonstrate greater interest in watching SGPVs compared to men, older participants, and those with higher education levels.

Aim 3

To explore the relationship between health literacy and the acceptability of, and interest in, SGPVs.

Research Question 3a

Is there an association between health literacy levels and the acceptability of SGPVs?

Hypothesis 3a

Lower health literacy levels will be associated with higher acceptability of SGPVs.

Research Question 3b

Is there an association between health literacy levels and interest in watching SGPVs in a GP waiting room?

Hypothesis 3b

Lower health literacy levels will be associated with greater interest in watching SGPVs in a GP waiting room setting.

Aim 4

To examine the relationship between stress levels and the acceptability of, and interest in, SGPVs.

Research Question 4a

Is there an association between stress levels and the acceptability of SGPVs?

Hypothesis 4a

Higher stress levels will be associated with greater acceptability of SGPVs.

Research Question 4b

Is there an association between stress levels and interest in watching SGPVs in a GP waiting room?

Hypothesis 4b

Higher stress levels will be associated with greater interest in watching SGPVs in a GP waiting room setting.

Method

Research Procedure

Ethics

Ethical approval for the study was granted by the Massey University Human Ethics Committee (Reference No. 4000029352). All participants provided informed consent prior to participation, ensuring they understood the study's purpose, procedures, and any potential risks involved.

Participant recruitment

Participants were recruited through Prolific, an online research platform that connects researchers with individuals willing to participate in studies. A detailed description of the study, including eligibility criteria, was posted on Prolific. Individuals who met the criteria voluntarily opted to participate in the research. Participants received compensation for their time via the Prolific platform. Inclusion criteria were as follows: participants had to be at least 18 years old, fluent in English, and either residents or citizens of New Zealand.

Participant demographics

Demographic information was collected to provide an overview of the participant population. This data enabled subgroup analyses to examine variations in perceptions of acceptability and interest in watching SGPVs based on these demographic factors.

Table 8 presents the demographic information of the study participants' ethnicity, educational levels, age, and gender. The sample size was compromised of 169 individuals, offering a diverse representation of ethnicities, with the majority identifying as NZ European. Educational

attainment varies across participants, reflecting a range of qualifications from secondary school to postgraduate degrees, most participants held undergraduate qualifications. Additionally, the age statistics reveal a mean age of 36.4 years, ranging from 18 to 78 years. Lastly, the gender distribution highlights a relatively equal representation of males and females.

Table 8 *Demographic information*

Ethnicity Distribution

Ethnicity	Frequency	Percent
NZ European	110	65.0
Filipino	6	3.6
European	6	3.6
Other	8	4.7
Māori	14	8.2
Samoan	3	1.8
Chinese	11	6.5
Indian	4	2.4
British	3	1.8
African	4	2.4
Total	**169**	**100.0**

Education Level Distribution

Education Level	Frequency	Percent
Secondary School	20	11.8

Education Level	Frequency	Percent
Undergraduate Qualification	92	54.4
Post Graduate Qualification	44	26.0
Trade Qualification	8	4.7
Other	5	3.0
Total	**169**	**100.0**

Age Statistics

Statistic	Value
N	169
Mean	36.41
Range	60
Minimum	18
Maximum	78

Gender Distribution

Gender	Frequency	Percent
Male	77	45.6
Female	90	53.3
Non-binary	2	1.2
Total	**169**	**100.0**

Measures

The Perceived Stress Scale (PSS)

The PSS (Cohen et al., 1983) is a widely used psychological instrument and is considered to be the gold standard instrument for measuring stress perception (Monroe, 2008). The PSS is a self-report questionnaire that is used to assess the degree in which an individual finds their life to be unpredictable, uncontrollable and/or overwhelming. This measure has been validated in various populations, ethnic groups and age ranges in various contexts indicating that the measure is appropriate for use in the general population (Harris et al., 2023).

The original PSS was 14-items; there has since been an abridged 4 item and 10-item version all with strong psychometric properties. This study used the 10-item version. In general, the psychometric properties of the 10-item PSS are superior to those of the 14-item PSS (Lee, 2012). Studies have reported a Cronbach's alpha value of 0.91 for the 10-item scale, suggesting excellent reliability (Khindri & Yadav, 2024). Furthermore, research has demonstrated strong test-retest reliability, confirming its stability over time (Riaz et al., 2024). The construct validity of the PSS is supported by its strong correlations with other measures of stress, anxiety, and mental health (Nielsen et al., 2016).

The PSS includes questions such as*:* "In the last month, how often have you been upset because of something that happened unexpectedly?" "In the last month, how often have you felt that you were unable to control the important things in your life?" "In the last month, how often have you felt nervous and stressed?"

For each question, participants selected from the following alternatives: 0 (never), 1 (almost never), 2 (sometimes), 3 (fairly often), and 4 (very often). To calculate the score on the

Perceived Stress Scale (PSS), participants scores were reversed for questions 4, 5, 7, and 8. The scoring adjustment for these questions was as follows: a score of 0 was converted to 4, a score of 1 to 3, a score of 2 remained 2, a score of 3 was adjusted to 1, and a score of 4 was changed to 0. After reversing the scores for the specified items, participants' scores were summed across all items to obtain a total score. This total score ranged from 0 to 40, with higher scores indicating greater levels of perceived stress (Townsend & Medvedev, 2022). The interpretation of the total score was categorised as follows: scores from 0 to 13 indicated low stress, scores from 14 to 26 indicated moderate stress, and scores from 27 to 40 indicated high perceived stress (Townsend & Medvedev, 2022).

Theoretical Framework of Acceptability (TFA) Questionnaire

The Theoretical Framework of Acceptability (TFA) was developed by Sekhon, Cartwright, and Francis (Sekhon et al., 2017). The TFA was designed to provide a structured approach for evaluating the acceptability of healthcare interventions, and encompasses seven constructs: *affective attitude, burden, ethicality, intervention coherence, opportunity costs, perceived effectiveness, and self-efficacy.* This framework facilitates the assessment of acceptability from the perspectives of both intervention recipients and providers, allowing for a comprehensive evaluation of cognitive and emotional responses (Sekhon et al., 2017).

The questionnaire was created using established methodologies for participant-reported outcome measures, drawing on theoretical insights, previous research, and stakeholder input. It is adaptable to various healthcare interventions and has been rigorously tested for both content and discriminant validity (Sekhon et al., 2017). A comprehensive validation study highlighted the framework's concurrent validity and its applicability to diverse health interventions (Sekhon et

al., 2017). This validation process ensures that the constructs of the TFA accurately reflect the dimensions of acceptability as intended. The TFA has consistently shown high internal consistency across its constructs. For example, studies have indicated satisfactory Cronbach's alpha coefficients (typically above 0.7), supporting the scale's reliability when utilised in different contexts (Rieger et al., 2020; Sekhon et al., 2017).

The TFA has been applied in the domain of psychological interventions, for example, Hornuvo et al. (2022) examined the acceptability of a violence against women (VAW) intervention in Ghana, demonstrating how constructs such as ethicality and burden are central to understanding community responses to health interventions. This study emphasises the framework's adaptability to various cultural and contextual considerations. Sekhon and Straten (2021) applied the TFA to identify the prospective acceptability of two HIV prevention strategies among pregnant and breastfeeding women. This application highlights how the constructs can guide the development and evaluation of interventions tailored to unique populations, considering factors such as self-efficacy and ethical considerations that impact behavioural change. Overall, the TFA is a valuable theoretical model with merit in both understanding and enhancing the acceptability of health interventions across various settings. By addressing the individual constructs of the framework, researchers can identify barriers and facilitators to acceptance, ultimately contributing to the successful implementation and sustainability of health interventions.

By employing this questionnaire, this study aimed to explore the acceptability of SGPVs. The items within this questionnaire are adaptable to align with the nuances of the specific intervention being studied (Sekhon et al., 2017). Adaptations were made to the questionnaire items to ensure they accurately reflect the characteristics and context of SGPVs. Furthermore,

these items received validation from clinical psychologists who supervised the research. For example, the original generic questionnaire items included: "Did you like or dislike [intervention]?", "How much effort did it take to engage with [intervention]?", "Are there moral or ethical consequences to engaging with [intervention]?", and "Has the [intervention] improved [behaviour/condition/clinical outcome]?" These were adapted to: "Did you like or dislike the strategies in the videos?", "Do you think it will require much effort to engage with the strategies suggested in the videos?", "Are there moral or ethical consequences to engaging with the strategies suggested in the videos?", and "It is clear to me how the strategies in the videos will help people."

In scoring the TFA, items assessing *burden* and *opportunity costs* are reverse scored to ensure that a higher score consistently indicates higher acceptability. To generate a single acceptability score, researchers can choose between two methods: (a) calculating the total mean score of the seven items from the TFA or (b) using the score for the *General Acceptability* item. It is important to note that these two scoring methods are likely to be positively correlated, although not perfectly, since method (a) assumes equal weighting for each TFA construct (Sekhon et al., 2017). In this research, the researcher opted for method (a) where the total mean score of all the items (including the *General Acceptability* item) was used to calculate the inferential statistic analyses. Responses are measured on a 5-point Likert scale, where lower numbers indicate strong disagreement or dislike, and higher numbers indicate strong agreement or positive evaluations. For example, participants were asked whether they liked the strategies in the SGPVs (Affective Burden), with response options: 1 (strongly dislike), 2 (dislike), 3 (neutral), 4 (like), and 5 (strongly like). Items assessing burden and opportunity costs were

reverse scored so that, in all cases, higher scores reflected greater acceptability (Sekhon et al., 2017).

In this study, the individual constructs of the Theoretical Framework of Acceptability (TFA) were reported to gain a nuanced understanding of participants' perspectives regarding the acceptability of the SGPVs which includes the TFA's seven constructs*: affective attitude, burden, ethicality, intervention coherence, opportunity costs, perceived effectiveness, and self-efficacy*. Each captures distinct dimensions of acceptability that can influence how participants perceive and engage with the intervention. This can inform intervention modifications, stakeholder engagement strategies, and future research directions. It aligns with the TFA's emphasis on understanding the multi-faceted nature of acceptability (Sekhon et al., 2017).

Interest in watching SGPVs in a GP waiting room setting

To evaluate participants' interest in watching SGPVs, they responded to the statement, "I would be interested in watching similar videos while I wait for my health appointment at the GP," using a 5-point Likert scale. The response options ranged from 1 (strongly disagree) to 5 (strongly agree). This question was administered after participants completed the questions based on the TFA.

Three-item Brief Health Literacy Screener (BHLS)

One method for screening health literacy involves assessing for an individual's self-reported difficulties in understanding information or completing reading tasks encountered in healthcare settings. The 3-item Brief Health Literacy Screener (BHLS) developed by Chew et al. has demonstrated robust psychometric properties, making it a valuable tool for assessing health literacy levels in various populations (Chew et al., 2008). The three-item screener has demonstrated substantial convergent validity. It correlates with other established measures of

health literacy, such as the Short Test of Functional Health Literacy in Adults (S-TOFHLA) and the Rapid Estimate of Adult Literacy in Medicine (REALM). Studies indicate that the screener can accurately differentiate individuals with high and low health literacy levels (Chew et al., 2008). In the study by Wallston et al. (2014), the Cronbach's alpha for the BHLS was 0.80 among hospital patients and 0.76 among clinic patients, indicating high internal consistency reliability.

Health literacy was assessed using three validated screening questions: "How often do you have someone (such as a family member, friend, hospital or clinic worker, or caregiver) help you read hospital materials?" (Help Reading); "How often do you have problems learning about your medical condition because of difficulty understanding written information?" (Problems Reading); and "How confident are you filling out forms by yourself?" (Confident with Forms). Responses were recorded on a 5-point Likert scale ranging from 0 (all of the time) to 4 (none of the time). The item assessing confidence with forms was reverse-scored. Item scores were summed to produce a total health literacy score ranging from 0 to 12, with higher scores indicating higher levels of health literacy (Wallston et al., 2014).

Data Collection procedure

Data were collected using an online survey administered through Qualtrics. Participants accessed the survey via a secure link, which provided information about the study's aims, procedures, and potential risks. After reading the Participant Information Sheet, participants provided informed consent before proceeding with the survey.

The survey commenced with demographic questions, followed by the Brief Health Literacy Screening Tool (BHLS). Participants then completed the Perceived Stress Scale (PSS)

to assess their current levels of perceived stress prior to viewing the psychoeducational content. Following this, participants were shown three representative SGPVs selected from the six videos developed in this research. The videos were selected using block randomisation and rotated across participants to ensure that each video was viewed an equal number of times.

Participants subsequently completed a series of questions from the Theoretical Framework of Acceptability (TFA) questionnaire to assess the acceptability of the SGPVs. Finally, participants were asked about their interest in viewing SGPVs within a general practice (GP) waiting room setting. The survey was designed to take approximately 15–25 minutes to complete, with participants taking an average of 17 minutes.

Although participants viewed only three of the six SGPVs, these videos were presented as representative examples of the broader psychoeducational intervention rather than as individual interventions to be evaluated independently. The purpose of the study was therefore to examine the overall acceptability and perceived usefulness of the SGPVs as a suite of psychoeducational resources for healthcare waiting rooms, rather than to compare or rank individual videos or coping strategies.

Data Analysis

Upon completion of data collection, responses from 169 participants were compiled and analysed using SPSS statistical software. Descriptive statistics were used to summarise participant characteristics and key study variables, including acceptability of the SGPVs and interest in viewing these videos in a GP waiting room setting. Non-parametric inferential analyses were then conducted to examine group differences and associations between acceptability, interest, demographic variables, health literacy, and perceived stress.

Prior to analysis, the dataset underwent data cleaning procedures, including checks for missing values and verification of data entry accuracy. Responses containing missing data on key variables were removed from the dataset prior to analysis. Assumptions of normality were assessed using the Shapiro–Wilk test ($\alpha = .05$) and visual inspection of histograms. Results indicated significant deviations from normality (Shapiro–Wilk $p < .05$), which was supported by the distributional patterns observed in the histograms. Consequently, non-parametric statistical methods were selected for subsequent analyses. These methods do not assume normal distribution and are appropriate when parametric assumptions are violated (Whitley & Ball, 2002).

Descriptive Statistics

Descriptive statistics were computed for demographic data, health literacy levels, and stress levels. Measures such as means, percentages, and standard deviations were calculated to summarise the acceptability of the SGPVs and participants' interest in viewing these resources in a GP waiting room setting.

Inferential Statistics

Inferential statistical analyses were conducted to test the study hypotheses regarding differences in acceptability and interest in the SGPVs across demographic groups, and to examine associations between acceptability, interest, health literacy, and stress levels.

To test hypotheses related to demographic differences, Mann-Whitney U tests were conducted to examine whether perceptions of acceptability and interest differed by age, gender, and education level. This non-parametric test was selected due to non-normal data distributions and its suitability for comparing independent groups (Whitley & Ball, 2002). Education was categorised into two groups secondary or other education, and university or trade education to

reflect meaningful differences in formal training that may influence health information engagement, consistent with prior research (Caponi & Plesca, 2007). Age was dichotomised into under 50 and 50 years and over to capture potential generational or life-stage differences in attitudes toward health education technologies (Testad et al., 2022; Whitley et al., 2016). Gender was classified as male and female in line with standard demographic reporting practices (Rich-Edwards et al., 2018).

To examine hypotheses related to stress, Mann-Whitney U tests were also used to compare acceptability and interest scores between participants reporting low stress and those reporting moderate to high stress, as measured by the PSS. This dichotomous grouping was informed by preliminary analyses indicating similar response patterns for the moderate and high stress groups, as well as by prior literature suggesting that individuals experiencing elevated distress may be more inclined to engage with psychoeducational resources (Goodyear, 2023). Collapsing the stress categories therefore improved interpretability and statistical power while remaining theoretically grounded.

Finally, to test hypotheses regarding associations between continuous variables, Spearman's rank-order correlations were conducted to assess relationships between acceptability, interest in watching SGPVs, health literacy, and stress levels. Spearman's correlation was chosen as it does not assume normality and is appropriate for ordinal or non-normally distributed data (Whitley & Ball, 2002).

All inferential analyses were conducted using a significance threshold of $p < .05$. Results are presented in the following section and interpreted in relation to the stated hypotheses.

Results

Acceptability of Self-Guided Psychoeducational Videos

It was hypothesised that participants would find the SGPVs acceptable. The findings supported this hypothesis, with participants reporting high levels of acceptability across all constructs of the Theoretical Framework of Acceptability (TFA) (Table 9). Overall, 94% of participants rated the SGPVs as acceptable, with a mean overall acceptability score of 4.0**,** indicating a generally positive perception of the intervention.

Participants responded particularly positively to the videos' perceived effectiveness**,** intervention coherence**,** and affective attitude**.** Specifically, 93% believed the coping strategies would help people cope better, 92% indicated that it was clear how the strategies would help, and 92% reported liking the strategies presented in the videos. Most participants also reported that engaging with the strategies would require little effort (76%) and would not interfere with other priorities (78%).

Although responses were generally favourable, two findings warrant further consideration. Approximately one-fifth of participants (20%) perceived that engaging with the strategies would require considerable effort, while 11% believed that there may be moral or ethical consequences associated with using the coping strategies presented. These findings are explored further in the Discussion.

Table 9 *Participant responses across the Theoretical Framework of Acceptability (TFA) constructs*

TFA Construct	Mean	Key finding
Affective attitude	4.02	92% liked the strategies
Burden	3.60	76% reported little effort required; 20% reported considerable effort
Ethicality	3.88	72% perceived no ethical concerns; 11% perceived ethical concerns
Perceived effectiveness	4.08	93% believed the strategies would help people cope better
Intervention coherence	4.14	92% understood how the strategies would help
Self-efficacy	3.88	80% felt confident using the strategies
Opportunity costs	3.84	78% reported the strategies would not interfere with priorities
Overall acceptability	4.31	94% found the SGPVs acceptable

Interest in Watching SGPVs in a GP Waiting Room Setting

It was hypothesised that participants would express interest in watching SGPVs while waiting for a health appointment at a GP clinic. The findings supported this hypothesis, with participants reporting a generally positive level of interest (Table 10). Overall, 70% of participants indicated that they would be interested in watching similar videos in a GP waiting room, while 17% expressed no opinion and 14% indicated that they would not be interested. The mean interest rating was 3.70**,** suggesting a generally favourable attitude towards delivering SGPVs within a GP waiting room setting.

Table 10 *Interest in watching SGPVs in a GP waiting room*

Variable	Mean	Agree	Neutral	Disagree
Interest in watching SGPVs	3.70	70%	17%	14%

Demographic Differences

The study hypothesised that women, younger individuals, and those with lower levels of education would demonstrate higher levels of acceptability and interest toward SGPVs. To examine these potential differences, Mann–Whitney *U* tests were conducted. Contrary to expectations, no significant differences in acceptability were found between males and females ($U = 3425.00$, $z = -0.129$, $p = .897$) or across education levels (categorised as secondary school/other education versus university/trade education; $U = 1682.00$, $z = -0.525$, $p = .599$). However, consistent with the hypothesis, younger participants (under 50) demonstrated significantly higher acceptability (*Mdn* = 4.00, interquartile range [IQR] = 0.41) than older participants (over 50; *Mdn* = 3.88, IQR = 0.63), $U = 1212.50$, $z = -2.150$, $p = .032$.

For interest in watching SGPVs, no significant differences were observed based on gender ($U = 3214.50$, $z = -0.865$, $p = .387$) or education level ($U = 1754.50$, $z = -0.217$, $p = .828$). Consistent with the hypothesis, younger participants reported significantly greater interest (*Mdn* = 4.00, IQR = 0.25) than older participants (*Mdn* = 3.00, IQR = 2.00), $U = 984.00$, $z = -3.435$, $p < .001$. Median and interquartile range values for all group comparisons are presented in Table 11.

Table 11 *Mann-Whitney U Test Results Comparing Demographic and Stress Variables on Acceptability and Interest in SGPVs*

Variable Grouping	Outcome Variable	Group 1 *Mdn* (IQR)	Group 2 *Mdn* (IQR)	*U* Statistic	z Value	p Value	Interpretation
Gender (Male/Female)	Acceptability	Male: 4.00 (0.69)	Female: 4.00 (0.41)	3425.00	-0.129	.897	No significant difference in acceptability and interest between genders.
	Interest	Male: 4.00 (1.00)	Female: 4.00 (1.00)	3214.50	-0.865	.387	
Education level (Secondary/Other vs. University/Trade)	Acceptability	Secondary/Other: 4.00 (0.69)	University/Trade: 4.00 (0.50)	1682.00	-0.525	.599	No significant difference in acceptability or interest based on education level
	Interest	Secondary/Other: 4.00 (1.00)	University/Trade: 4.00 (1.00)	1754.50	- 0.217	.828	
Age (Under 50 vs. Over 50)	Acceptability	Under 50: 4.00 (0.41)	Over 50: 3.88 (0.63	1212.50	-2.150	.032*	Younger participants showed higher acceptability and higher interest.
	Interest	Under 50: 4.00 (0.25)	Over 50: 3.00 (2.00)	984.00	-3.435	.001*	
Stress (low vs moderate/ high)	Acceptability	Low: 4.00 (0.47)	Moderate/High: 4.00 (0.50)	2230.00	-1.301	.193	No significant difference in acceptability between the low stress group and moderate/ high stress group.
	Interest	Low: 4.00 (1.00)	Moderate/High: 4.00 (1.00)	2047.00	-2.125	.034*	Interest differed significantly by stress group, although median and IQR values were identical.

Note. * indicates $p < 0.05$. *Mdn* = median; IQR = interquartile range.

Association Between Health Literacy and Acceptability and Interest in SGPVs

It was hypothesised that individuals with lower health literacy would demonstrate higher acceptability and greater interest in SGPVs. To examine these associations, Spearman's rank correlation analysis was conducted. As shown in Table 12, contrary to expectations, no significant relationship was found between health literacy scores and acceptability, $r_s = -.002$, $p = .979$. However, consistent with the second hypothesis, a weak but statistically significant negative correlation emerged between health literacy scores and interest in watching the SGPVs, $r_s = -.155$, $p = .044$. This suggests that participants with higher health literacy reported slightly lower interest in engaging with the videos.

Table 12 *Correlation Matrix Examining Relationships Between Health Literacy, Distress Levels, and Participants' Acceptability and Interest in Self-Guided Educational Videos (SGPVs.*

Variable 1	Variable 2	Correlation Coefficient (r)	Significance (p)	Interpretation
Health Literacy	Acceptability	-0.002	0.979	No Correlation
Health Literacy	Interest	-0.155	0.044*	Significant Correlation
Stress Levels	Acceptability	-0.022	0.779	No Correlation
Stress Levels	Interest	0.139	0.072	No Correlation

Note: * indicates $p < 0.05$.

Association Between Stress Levels and Acceptability and Interest in SGPVs

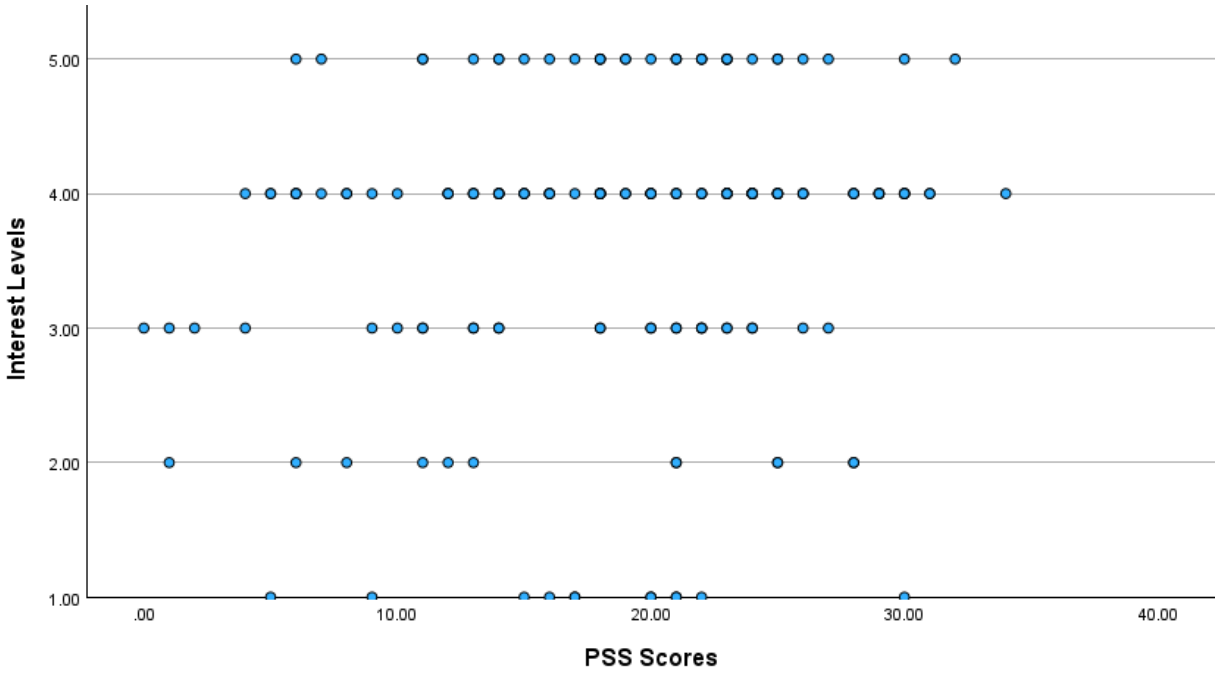
It was hypothesised that higher stress levels would be associated with greater acceptability of, and interest in, the SGPVs. To explore group differences, Mann–Whitney *U*

tests were conducted. As shown in Table 11, no significant difference in acceptability was found between participants with low stress (*Mdn* = 4.00, IQR = 0.47) and those with moderate or high stress (*Mdn* = 4.00, IQR = 0.50), $U = 2230.00$, $z = -1.301$, $p = .193$. A significant difference was observed for interest, $U = 2047.00$, $z = -2.125$, $p = .034$; however, both the low-stress and moderate/high-stress groups had the same median and interquartile range (*Mdn* = 4.00, IQR = 1.00), indicating that the statistically significant rank-based difference was not reflected in these measures of central tendency and dispersion.

To further examine these relationships, correlational analyses were conducted. As summarised in Table 12, no significant association was found between perceived stress scores and interest in watching the videos, $r = .139$, $p = .072$, or between stress scores and acceptability, $r = -.022$, $p = .779$.

Visual inspection of the scatter plot (Figure 20) indicated that interest in watching the videos remained generally high across a wide range of stress levels, with only minor fluctuations. There was no clear linear pattern suggesting increasing or decreasing interest at higher or lower stress levels. Overall, the descriptive, correlational, and visual findings suggest that stress was not strongly or consistently associated with interest in the SGPVs within this sample.

Figure 20 *Scatter Plot of Interest Levels by PSS Scores*



Discussion

Overall, participants reported high acceptability of the SGPVs and generally favourable perceptions of the coping strategies presented. Interest in viewing similar videos in a GP waiting room was also high. Age emerged as the only demographic factor associated with differences in responses, with younger participants reporting greater acceptability and interest in the videos. In contrast, no significant differences were observed based on gender or education level.

Participants reporting higher stress levels expressed greater interest in watching the videos, suggesting that moderate to high stress levels may increase openness to low-intensity psychoeducational resources. However, stress levels were not associated with overall acceptability ratings, and correlation analyses did not reveal a significant relationship between stress and interest. Health literacy showed a different pattern: participants with higher health literacy reported lower interest in the videos, although health literacy did not influence acceptability. Collectively, the results indicate that acceptability of SGPVs is relatively consistent across demographic groups, whereas interest in engaging with the videos is more closely related to individual factors such as age, stress, and health literacy.

One notable finding of this study was the absence of significant differences in acceptability between male and female participants, contradicting the hypothesis that women would be more accepting of SGPVs. This observation contrasts with previous research indicating that women are generally more likely to seek professional help for mental health difficulties compared to men (Addis & Mahalik, 2003; Mackenzie et al., 2006; Sagar-Ouriaghli et al., 2019). Typically, this help-seeking behaviour is understood within the context of social norms that encourage women to be emotionally expressive and to seek social support, whereas men are

often socialised to suppress emotions and maintain stoicism. However, research by Oliffe et al. (2010) suggests that men, despite traditional barriers to help-seeking, may be receptive to alternative forms of mental health support that allow them to maintain a sense of agency and autonomy.

Interestingly, the findings from this study suggest that men are equally accepting and interested in SGPVs. This indicates that men are open to engaging with these kinds of mental health resources. Supporting this notion, a previous study by Kim et al. (2014) found that males were more likely to be receptive to receiving information about depression through a technology-based medium in an emergency department setting. Furthermore, research by Cole and Ingram (2019) suggests that perceptions of masculinity influence help-seeking behaviours, where traditional masculine norms can deter men from seeking help. However, in scenarios where self-help interventions are easily available, such as through digital media, men may be more likely to engage with these resources, indicating a possible preference for self-guided approaches over traditional face-to-face services.

Studies show that digital self-help resources can serve as effective entry points into the broader mental health care system for men who may otherwise avoid traditional therapy. Hammer et al. (2012) highlights that self-stigma can act as a significant barrier to professional mental health services, indicating a reluctance to seek help in more traditional contexts. However, when the same individuals are presented with opportunities for anonymous engagement through self-help tools, they may find it easier to access mental health information and support without the fear of judgment associated with in-person visits. This suggests that men may be more inclined to receive help through formats that allow for anonymity and reduced stigma. Cadaret and Speight (2018) reinforce these findings, indicating that African American

men, for example, encounter stigma that can be mitigated by accessing help through non-traditional platforms. Their insights reinforce the notion that self-help resources may align more closely with the values and preferences of men, particularly when navigating the complexities of identity, stigma, and help-seeking behaviours.

The hypothesis that younger individuals would be more accepting of the SGPVs and more interested in watching them in a GP waiting room was supported. This finding is consistent with previous research that highlights age-related differences in mental health perceptions (SarikoÇ & Unay, 2023; X. Wang et al., 2024). Younger generations are generally more open to discussing mental health and seeking out resources, potentially due to increased exposure to mental health education and advocacy compared to older individuals, who may still hold traditional views regarding mental health (Hagen et al., 2020; Park et al., 2024).

Furthermore, for older individuals, they may be less inclined to engage with psychoeducational material delivered in a self-guided video format if it does not align with their preferred ways of receiving health information or if they perceive such resources as less applicable to their current needs. Previous research suggests that perceptions of usefulness and relevance play a central role in engagement with health education materials, particularly among older populations (Gitlow, 2014; Kokorelias et al., 2022).

Interestingly, the analysis showed no significant differences in acceptability or interest based on education levels. Participants with varying educational backgrounds exhibited similar levels of acceptability and interest. This suggests that the acceptability of SGPVs may transcend educational attainment, indicating a broad recognition of their value regardless of formal education. This contrasts with previous findings that individuals with lower education levels tend to be more receptive to narrative-style educational videos (Slater & Rouner, 2006). The current

study's results highlight the potential universal appeal of self-guided psychoeducational videos across diverse populations.

While it was hypothesised that those with lower health literacy would find the SGPVs more acceptable, the results did not support this. However, the hypothesis that those with lower health literacy would be more interested in watching SGPVs in a GP waiting room was supported. It was found that individuals with higher health literacy are less interested in watching the SGPVs. This inverse relationship between health literacy and interest in the videos implies that individuals with lower health literacy might find the content of the animated videos more interesting compared to those with higher health literacy levels.

Individuals with lower health literacy may benefit more from visual and simplified educational materials like animated videos and narrative formats, as these formats are designed to convey information in a clear and straightforward manner, making complex concepts more easily understandable (Feeley et al., 2022; Slater & Rouner, 2006). In contrast, individuals with higher health literacy might prefer more detailed and nuanced resources that provide in-depth information and analysis, which the animated videos may not fully cater to (Kutcher et al., 2016; Wu et al., 2024).

Supporting this premise, Moran et al. (2016) conducted a pilot test that evaluated the acceptability and efficacy of narrative and non-narrative health education materials among low health literacy populations. Their study concluded that narrative health education videos were effective and appropriate for this demographic, illustrating that simplistically designed and relatable content can enhance educational outcomes for individuals with limited health literacy. This reinforces the concept that visual storytelling is a powerful tool for conveying important health information to those who may struggle with traditional text-heavy materials. Similarly,

studies by Housten et al. (2019) and Tait et al. (2012) have demonstrated that well-designed animations can help effectively convey risk information and the benefits of treatment to patients with low health literacy.

The hypothesis that those with higher levels of stress would exhibit higher acceptability of SGPVs was not supported, as the study found no significant relationship between stress and acceptability. However, it was found that those with moderate and high levels of stress were more interested in watching SGPVs in a GP waiting room setting than those with low levels of stress. This suggests that those with moderate and high levels of stress may be more receptive to learning about coping strategies, highlighting the potential for SGPVs to serve as accessible resources for those experiencing stress (Chen et al., 2020; Jeong et al., 2023).

The notion that individuals with higher stress may be more receptive to help resources such as SGPVs is supported by existing literature. For example, Hoeft et al. (2017) emphasised that individuals experiencing stress often seek psychological resources that offer immediate relief or strategies to manage their situations. Heightened stress levels may motivate individuals towards behaviours that lead to engagement with interventions designed to offer relief or understanding (Lannin et al., 2016). The literature on psychoeducation also suggests that when individuals perceive personal relevance in the content, their engagement and retention improve significantly (Burrows & McArdle, 2019). Therefore, the interest in SGPVs among stressed individuals might stem from a recognition of their struggles.

However, despite the observed difference in interest levels in watching SGPVs between participants in the low stress group and those in the moderate/high stress group, this study did not find a significant relationship between overall stress levels and interest in the SGPVs. The significant difference observed between the low stress and moderate/high stress groups may not

necessarily reflect a true underlying relationship, given that interest levels appear consistently high across all stress levels. The correlation analysis and scatter plot did not show a significant linear or non-linear association between stress and interest and did not reveal clear threshold effects. Therefore, the group difference could be influenced by sample variability or the way the groups were categorised. This suggests that the observed difference might be coincidental or specific to this sample, and further research with larger or more diverse samples is needed to determine whether the group differences are meaningful or simply a result of chance.

Findings related to the ethicality suggest that while the SGPVs were largely viewed as acceptable, however a small proportion of participants perceived potential ethical or moral considerations associated with engaging in the strategies. Importantly, the study did not collect qualitative data that directly explored the nature of these concerns, and therefore no conclusions can be drawn about the specific ethical issues participants may have perceived. As such, these findings should be interpreted cautiously.

Within the Theoretical Framework of Acceptability, ethicality refers to the extent to which an intervention aligns with an individual's value system (Sekhon et al., 2017). Perceptions of ethicality can therefore be shaped by a range of factors, including personal beliefs, cultural worldviews, and prior experiences with mental health care. The presence of some uncertainty or disagreement on this construct may reflect broader diversity in how individuals conceptualise mental health, coping, and responsibility for well-being, rather than objections to the specific content of the videos themselves.

In the New Zealand context, differing health worldviews may be particularly relevant. Western biomedical models of health, which are more commonly associated with Pākehā[10] approaches, tend to conceptualise mental distress as an individual and often clinical issue, prioritising professional intervention and symptom reduction (Elers, 2014). In contrast, Māori models of health, such as whānau ora[11], emphasise holistic well-being, collective responsibility, and the interconnectedness of physical, emotional, spiritual, and social dimensions of health (Rochford, 2004). These differing perspectives may shape how individuals evaluate the appropriateness or ethical fit of self-guided psychoeducational strategies.

While this study cannot determine whether cultural worldview directly influenced ethicality ratings, existing literature suggests that alignment with cultural values can influence engagement with mental health interventions (Shepherd et al., 2015). For Māori in particular, interventions that acknowledge collective values, relational wellbeing, and cultural identity have been shown to enhance relevance and acceptability. Given that Māori experience disproportionate mental health inequities in Aotearoa New Zealand, there is a strong rationale for ensuring psychoeducational resources are culturally responsive and inclusive (Reid et al., 2019).

The SGPVs in this study were developed with input from a Māori cultural advisor to support cultural appropriateness and resonance. However, the extent to which the videos align with the values of other cultural groups was not directly examined. Without further qualitative exploration, it remains unclear whether ethicality concerns reflected cultural mismatch,

[10] **Pākehā** is the Māori term commonly used to refer to New Zealanders of European descent or non-Māori New Zealanders.

[11] **Whānau ora** is a Māori approach to health and well-being that emphasises the collective health of whānau (extended family), recognising that physical, mental, spiritual, cultural, and social well-being are interconnected.

individual beliefs about mental health, uncertainty about self-guided strategies, or other factors such as stigma or previous experiences with mental health support.

Mental health stigma may also play a role in shaping perceptions of ethicality. In some cultural and social contexts, engaging with mental health resources can be associated with shame or concerns about appearing weak or vulnerable (Cabassa & Baumann, 2013; Tristiana et al., 2018). Such beliefs may influence how individuals interpret the appropriateness of engaging with psychoeducational content, even when it is presented in a neutral or supportive manner.

Overall, while a minority of participants indicated ethical concerns, the majority did not, and overall acceptability remained high. These findings suggest that ethicality is an important but nuanced dimension of acceptability that may warrant deeper qualitative investigation in future research to better understand how values, culture, and beliefs shape engagement with self-guided psychoeducational interventions.

Additionally, a notable portion of participants believed it would require considerable effort to engage with the strategies in the videos, indicating significant perceived barriers to engagement. Time constraints may play a role, as individuals might feel burdened by daily responsibilities and lack the time to implement the strategies from the videos (Burrows & McArdle, 2019). Additionally, varying levels of motivation and readiness for change can affect perceptions of effort; those less motivated may view the required engagement as more daunting (Jardine et al., 2022). Finally, individuals experiencing lower levels of psychological distress may perceive SGPVs as requiring more effort, as they might find the strategies less relevant to their needs leading to a view of engagement with SGPVs as unnecessary or overly demanding. Such attitudes can diminish motivation, as individuals may not value the strategies they perceive as not applicable to them. Previous research indicates that perceptions of personal relevance are

closely linked to engagement with and acceptance of healthcare interventions (Knowles et al., 2023; MacDonald et al., 2024). Understanding these concerns regarding the effort required to engage with the SGPVs is important for tailoring interventions to enhance acceptability and mitigate barriers.

Complementing these findings, qualitative insights from the pilot studies from chapter four and five revealed that while most participants found the content relatable and straightforward, some questioned the applicability of the strategies for individuals facing severe life challenges. For instance, one participant perceived the strategy to engage in behavioural activation as potentially simplistic or dismissive of the complexities of their situation as an amputee. This points to the subjective nature of perceived relevance and the importance of tailoring content to diverse experiences.

Furthermore, while most of the feedback was positive, some participants voiced concerns that the videos might overwhelm viewers without providing clear resolutions. For example, one participant pointed out that although the Problem-solving video prompted reflection, without a clear and actionable resolution tailored to their individual circumstances, viewers may perceive engagement with the SGPVs as more effortful and less effective. Some participants noted that while these reflections are valuable, they could leave individuals uncertain about how to move forward or resolve their specific challenges. Without such guidance, viewers might feel overwhelmed or unsure about how to translate insights into concrete actions, which can increase the perceived effort and reduce motivation to engage further. In summary, the absence of clear resolutions or practical tools tailored to diverse life circumstances can make the process seem daunting, discouraging sustained engagement and limiting the overall effectiveness of the intervention.

Implications

The ability to access psychoeducational content in an accessible environment, such as a GP waiting room, allows individuals to explore mental health topics at their own pace, potentially reducing stigma and encouraging help-seeking behaviours (Campion & Glover, 2016). Research indicates that psychoeducation often serves to bridge the gap in mental health resources (Salmon et al., 2023; van Straten et al., 2015). For individuals facing stress or emotional distress, SGPVs could provide a self-directed means of gaining insight and developing coping strategies. This may be particularly relevant in situations where traditional therapy might not be as readily accessible or individuals prefer not to seek out in person services (Biskas et al., 2023). Integrating SGPVs into settings where stressed individuals naturally seek support - such as primary care clinics could facilitate early engagement and promote a proactive approach to stress management. The higher acceptability and interest among those under 50 suggest that digital psychoeducational resources resonate well with this demographic. This highlights an opportunity to tailor and promote such interventions as part of broader mental health literacy initiatives targeted at this demographic.

The finding that men are equally accepting of and interested in SGPVs highlights the potential of self-guided digital resources to serve as an effective entry point for individuals who may otherwise avoid traditional mental health services due to stigma or social norms associated with masculinity. Importantly, SGPVs allow users to engage with mental health content autonomously, giving them control over when, how, and whether they engage with the material. This sense of autonomy may be particularly salient for men, for whom independence and self-reliance are often culturally reinforced, and may reduce perceived threats to identity or self-esteem associated with help-seeking. Combined with their accessible, private, and non-

judgemental nature, SGPVs may help mitigate common barriers to engagement, such as stigma and fear of evaluation. As such, SGPVs align with broader efforts to increase mental health support uptake among men and other groups less likely to engage in face-to-face services, contributing to more inclusive, flexible, and accessible mental health care pathways.

Strengths and limitations

A notable strength of this study is its sample size of 169 participants, which provided sufficient statistical power to detect differences in the data set. However, despite the overall sample size, the population was predominantly comprised of university-educated individuals of New Zealand European descent, resulting in a relatively homogenous group. This limits the generalisability of the findings to other cultural populations, particularly Māori.

The reliance on online recruitment may also limit applicability, particularly for individuals lacking access to digital resources or who are less technologically able. Additionally, the subjective nature of self-reported measures for stress, health literacy, and acceptability could introduce bias, potentially affecting the accuracy of the findings. Furthermore, participants commented on the videos as a whole, which obscures insights into individual videos and their specific acceptability. Lastly, the videos were watched in an online setting rather than in a real-world context, such as an actual GP waiting room, which may influence how participants perceive and engage with the content compared to a more natural environment.

Future Research Directions

Future studies should explore other demographic factors such as culture, socioeconomic status, and geographic location (rural versus urban). For example, individuals in rural areas, who often have limited access to mental health resources and support services, may have greater interest in and acceptance of SGPVs as a convenient and accessible alternative. Similarly, people

with lower income levels, who may have fewer resources and less access to traditional mental health services, could also be more receptive to these videos as an affordable and readily available option. Given New Zealand's bicultural nature, it is particularly important for future research to examine acceptance and interest among Māori populations, ensuring that interventions are culturally appropriate. Additionally, future research could explore whether SGPVs have positive impacts on mental health outcomes, such as reductions in stress, anxiety, or depression symptoms, to establish their effectiveness as a mental health intervention. Future research should also test the videos in actual GP waiting room settings, with participants watching these videos during their visits, to evaluate their real-world acceptability and interest among participants.

Although the study found that participants with high or moderate stress levels were more interested in the videos than those with low stress, the lack of a significant relationship between stress and interest levels suggests that this difference could be due to chance. Given that the current data did not indicate a clear relationship between stress levels and interest in SGPVs, future studies could aim to confirm these findings in larger samples with varying levels of health literacy. Additionally, research could explore other factors that may influence interest in the videos, such as individual coping styles, prior experiences with mental health resources, digital literacy, and personal beliefs about psychoeducation. These variables could serve as potential moderators or predictors, helping to identify subgroups that are more receptive to SGPVs which could inform the development of such resources.

Future research should investigate potential barriers to engaging with SGPVs, particularly focusing on cultural and contextual factors that may influence acceptance and use among diverse populations with varying perspectives on mental health and coping strategies.

Additionally, research should examine how perceptions of effort interfere with engagement with the SGPVs. Exploring these factors will be important regarding the development of strategies to mitigate barriers and improve the accessibility and engagement of SGPVs.

Conclusion

In conclusion, this study highlights the acceptance of SGPVs as viable mental health resources in GP settings for the general population. The findings indicate a high level of acceptability and interest among participants. The overall positive reception points to a significant opportunity for integrating digital mental health interventions such as SGPVs into everyday healthcare settings. These insights highlight the potential of SGPVs to bridge gaps in mental health support.

Future research should further explore how various demographic and psychological factors influence engagement with psychoeducational resources. Ultimately, as mental health continues to evolve in the digital age, the integration of accessible, self-guided resources like SGPVs may play a role in enhancing mental health literacy and reducing barriers to care.

Chapter 10 : Overall Discussion

Introduction

This chapter synthesises the core findings from Studies One through Four, integrating results to identify overarching patterns and convergent findings across the thesis. It then compares and contrasts these findings with the existing literature, highlighting areas of alignment, extension, and divergence. The discussion situates the integrated results within the broader theoretical and methodological landscape, clarifying the study's contributions, implications, and directions for future research.

Principal findings

Study One

The scoping review provided insights into the stakeholder perceptions of animated videos as patient education tools. The identified themes highlight the importance of stakeholder acceptability, design features, and the perceived impact and usefulness of the videos. The review found that stakeholders are accepting of video animations as patient education tools and there may be varying factors that impact acceptability such as age, gender and education level. Design was one theme that arose, where preferences for humour, short video length, thoughtful use of colour, and a narrative approach were found; incorporating these design features can help to engage audiences.

Study Two

In this study, feedback from stakeholders highlighted the acceptability and usefulness of SGPVs in addressing psychological distress. Participants appreciated the relatable content and

practical nature of the videos. However, they also made suggestions for the video narratives to better reflect the unique experiences of cancer patients. The importance of familial (whānau) support was a recurring theme, as was the appreciation for the use of visuals to explain concepts and humour. Interestingly, some participants noted that the SGPVs might be better suited for general audiences in GP settings rather than specifically for oncology. This suggests a broader relevance of the videos in addressing psychological distress, while indicating a need for more targeted content for cancer patients.

Study Three

This study reinforced the findings from Study Two, showing that participants found the SGPVs relatable and useful. The narrative approach and practical coping strategies resonated with participants, who perceived the videos as providing practical tools for managing stress and supporting psychological well-being. While some videos were considered more engaging than others, participants generally viewed the SGPVs as having the potential to encourage reflection and facilitate conversations about mental health if implemented within GP waiting room settings. These findings suggest that participants were accepting of the SGPVs and perceived them as a potentially useful psychoeducational resource for individuals experiencing psychological distress. However, further research is required to evaluate how the videos are received and used within real-world GP waiting room environments.

Study Four

The final study examined the acceptability of SGPVs among the general population for potential use in GP waiting room settings, finding high levels of acceptability and interest among participants. These findings suggest that participants perceived the SGPVs as an acceptable format for delivering psychoeducational coping strategies within this context. The positive

response highlights the potential for integrating digital mental health interventions into primary healthcare waiting rooms. Although interest was higher among younger individuals and those with lower health literacy, participants across the sample generally responded positively to the SGPVs. These findings suggest that SGPVs may represent a promising, accessible, and relatively low-cost psychoeducational resource for healthcare settings; however, further research is required to evaluate their implementation, engagement, and effectiveness in real-world GP waiting room environments.

Integrating the Studies' Findings

The findings from Studies Two and Three align closely with those of the systematic scoping review examining stakeholder perceptions of animated educational videos in healthcare. Collectively, these studies demonstrate strong convergence between the existing literature and stakeholder feedback, particularly regarding the factors that influence the acceptability, usefulness, and engagement of animated psychoeducational videos. Across the research programme, stakeholder feedback consistently highlighted the importance of design features, cultural relevance, relatability, comprehension, and practical usefulness in shaping engagement with the SGPVs.

Participants in this research, including cancer patients, healthcare workers and participants from the general population highlighted the perceived usefulness of the strategies depicted in the videos. This feedback included an emphasis on the practical application of the videos and their ability to educate viewers about mental health related topics. These findings are consistent with the findings from the scoping review where stakeholders found the animated videos useful due to their practical utility. Feedback from participants regarding the potential of

the SGPVs to raise awareness about mental health issues further supports the scoping review's assertion that animated videos can serve as effective educational tools.

Additionally, the use of storytelling emerged as a key theme in study three, resonating with the scoping reviews findings regarding stakeholder preferences for narrative approaches. Participants in the pilot studies noted that storytelling made the content more relatable and engaging. This aligns with the review's suggestion that relatable characters and narratives can foster personal connections to the material, ultimately increasing engagement and the likelihood of adopting healthier behaviours.

The theme of relatability emerged in both the pilot studies and the scoping review of this research, highlighting participants' perceptions of their ability to connect with the content of the video animations. In the scoping review, stakeholders noted that they found the animations more engaging when the characters were personalised to reflect diverse patient demographics, which enhanced their identification with the content. Additionally, some stakeholders expressed a preference for content that directly relates to their current circumstances. While some felt that the video animations lacked new information and didn't fully address their needs, they recognised that the content could still be beneficial for other patients with limited understanding of their health conditions.

Similarly, participants in the pilot studies from this research reported feeling a connection to the characters when they saw their own identities represented or when the stories resonated with their personal experiences. Although some individuals did not find the content relatable for themselves, they acknowledged that others facing similar challenges might relate more with the videos and find them helpful. This perspective is further connected to findings from study four, where participants experiencing higher stress showed increased interest in watching SGPVs in

waiting room settings. For these individuals, the strategies and narratives addressing psychological distress in the videos may have been particularly resonant.

Regarding the design features of the videos, stakeholders in the scoping review had preferences for humour, short video length, and a thoughtful use of colour. Stakeholders favoured voice-overs that featured local accents, as these enhanced their identification with and engagement in the content. Additionally, the use of familiar, everyday language was recognised as a factor that boosted the videos' trustworthiness. When it came to video pacing, opinions varied: some stakeholders found the videos too slow, while others felt they were too fast.

These preferences mirrored those identified in the pilot studies of this research where participants appreciated humour, preferred shorter videos, and responded positively to bright colours, while cautioning against darker hues that could make the content feel dreary. Furthermore, participants suggested incorporating audio narration with a New Zealand accent and appreciated the use of local slang. By focusing on these user preferences, the SGPVs were more likely to engage viewers, supporting the UCD principle of prioritising user needs in the development process (Vial et al., 2022). Overall, these findings are consistent with the insights from the scoping review.

Comprehension was a theme that arose in both the pilot studies and the scoping review. Comprehension pertains to how easily participants can understand the educational material conveyed in the video animations. The scoping review highlighted the effectiveness of educational animations, particularly for individuals with low health literacy. Factors such as the use of simple, everyday language and engaging visuals were identified as helpful in enhancing comprehension for this group. In the pilot studies, participants noted that visual elements significantly improved their understanding of the concepts explained in the videos, benefiting

diverse learning styles. Additionally, findings from study four revealed that individuals with low health literacy showed a greater interest in watching SGPVs in waiting room settings. However, there were no significant differences in acceptability between those with high and low health literacy. Overall, these findings emphasise the importance of tailoring educational content to enhance understanding and engagement across varying literacy levels.

Feedback on the suitability of the videos for waiting room settings aligns with the insights from the scoping review. Participants from studies two, three, and four expressed positive views on using SGPVs in healthcare waiting rooms to deliver psychoeducational content. This observation supports the scoping review's findings on the theme of dissemination, where stakeholders expressed a preference for watching video animations in health centres or clinics.

The scoping review identified several factors that may influence acceptability levels, including education, age, gender, and cultural relevance. For example, participants with lower education levels were generally more accepting of animated videos as patient education tools compared to those with higher education, suggesting a potential differential impact based on educational background. Additionally, younger individuals were found to be more receptive to animated videos as educational tools, and women also expressed a greater acceptance of health education content in this format. Acceptability was further enhanced when video animations were localised for specific audiences, such as incorporating cultural representations of characters that viewers could relate to.

In contrast, findings from study four found no significant differences in acceptability between men and women or across varying educational backgrounds. However, individuals under 50 years old demonstrated a greater level of acceptance and showed more interest in

watching the videos in waiting room settings. Additionally, participants in the pilot studies, particularly those from the Māori Cancer Support Group (MCSG), expressed positive feedback when they saw their cultural identity reflected in the characters, highlighting the importance of cultural representation in educational content.

Collectively, the current studies illustrate the promise of SGPVs as tools for teaching coping strategies for psychological distress. As the digital landscape of mental health care continues to evolve, SGPVs present an opportunity to provide accessible, self-guided resources that promote psychological well-being. Connecting the findings across the studies reveals a nuanced understanding of the acceptability of SGPVs and their potential to be delivered in healthcare waiting room settings. The following discussion examines key patterns identified across the studies and compares these findings with the existing literature

Cultural Responsiveness and Bicultural Alignment

The findings from this research indicated that culturally relevant content significantly enhanced the relatability of the videos. By integrating local landscapes, narratives, and character representation, the videos became more appealing and engaging to participants. This illustrates how user-centred design (UCD) can facilitate the creation of culturally responsive resources that resonate with diverse audiences (Young et al., 2024).

The pilot testing of the SGPVs revealed nuanced feedback regarding considerations to the design of the videos. Many participants appreciated the natural landscapes depicted, such as beaches and mountains, which resonated with their experiences of New Zealand. However, others felt that the use of Doodly animation software resulted in an Americanised aesthetic that detracted from the cultural authenticity of the content. This feedback emphasises the importance of ensuring that psychoeducational resources are culturally relevant and reflective to the target

audience (Bennett et al., 2016; Li & Ni, 2015; Mewes et al., 2021). The perception of cultural disconnect among some participants may be due to the limitations in using generic animation tools such as Doodly that do not account for local nuances that are relevant to New Zealand. The visuals created through Doodly lacked the specificity of New Zealand's flora, fauna, and cultural symbols. For instance, participants suggested that incorporating native ferns and other indigenous plants could enhance the videos' relatability and sense of familiarity with the images.

Furthermore, representation of Māori culture through accurately depicted characters and narratives is needed in order to reflect New Zealand's bicultural nation. Participants expressed appreciation for the use of darker skin tones; however, some participants noted that the characters in the videos did not specifically represent Māori. Nonetheless, the MCSG participants expressed strong appreciation for the SGPVs and commented they could see themselves reflected in the imagery used in the videos. They recognised the potential of SGPVs to enhance awareness of mental health issues such as anxiety and coping strategies to manage psychological health and were positive about watching SGPVs in a healthcare waiting room setting.

The integration of SGPVs into healthcare waiting rooms represents an innovative approach to addressing psychological health within a physical healthcare setting. By placing these resources in environments where individuals already seek care, Māori participants expressed that the SGPVs could help to normalise conversations around mental health, reducing stigma and encouraging patients to seek out help. This aligns with existing literature emphasising the importance of culturally relevant resources in promoting mental health literacy within Indigenous communities, which often face unique barriers to accessing traditional mental health

services (Rihari, 2022; Te manu kai i te mātauranga : indigenous psychology in Aotearoa/New Zealand, 2016).

This also creates an opportunity for individuals to engage with mental health resources while they wait for physical health services, thereby fostering a more integrated view of health. This integrated approach to health aligns with the Whare Tapa Whā model, which emphasises the interconnectedness of physical, mental, family, and spiritual well-being (Bennett et al., 2016; Durie, 1985; Little et al., 2013). By acknowledging that mental health is a critical component of overall health, the SGPVs align with the holistic philosophy that is central to Māori health perspectives. This model encourages a comprehensive understanding of well-being, where psychological health is not seen in isolation but as interconnected with physical health, familial support, and spirituality (Durie, 1985; Little et al., 2013). In terms of mental and emotional health (te taha hinengaro), Māori recognise that the mind, thoughts, and feelings cannot be separated from physical health (te taha tinana). There is a recognition that both are as important as one another, and they are intrinsically connected (Little et al., 2013). Thus, the implementation of SGPVs in healthcare settings not only addresses psychological health needs but also reinforces the broader cultural values that prioritise a holistic approach to health and well-being.

Central to the Māori focus group's feedback was the role of whānau in Māori culture. According to research, one of the barriers that Māori face in accessing psychological resources is the individualistic focus of mental health care (Rihari, 2022). As Māori consider whānau integral to their overall wellbeing, incorporating whānau is imperative to creating culturally competent mental health resources (Bennett et al., 2016; Durie, 1985; Rihari, 2022). The feedback from Māori participants in this study indicates that integrating whānau-centred approaches into SGPVs could enhance their effectiveness, particularly for Māori. This feedback aligns with

existing research that Māori attitudes towards mental health treatment are deeply intertwined with cultural beliefs and values, which significantly influence their engagement with mental health services. According to Elers (2014) Understanding tikanga Māori (customs) is essential in mental health interventions designed for Māori, as these elements can significantly impact patient outcomes.

Participants (including those from the MCSG) valued the narrative-based format of the SGPVs recognising their potential to make complex mental health concepts more comprehensive and relatable. Narratives are particularly effective in conveying information, as they allow viewers to connect with the material on an emotional level, which can significantly enhance understanding and retention of coping strategies (Culler & Culler, 2011). This connection is especially important for populations with strong traditions of storytelling, such as the Māori, where oral histories and narratives play a central role in cultural transmission (Standing & Kahu, 2021).

Storytelling has long been a means of communication within Māori culture, serving not only to entertain but also to educate and preserve cultural values (Lee, 2009; Standing & Kahu, 2021). By employing a narrative format, the SGPVs tap into this tradition, making the content more likely to resonate with Māori audiences. Stories can contextualise mental health challenges within familiar cultural frameworks, illustrating the lived experiences of individuals and whānau in a way that academic or clinical language often cannot. This approach allows viewers to see themselves reflected in the narratives, which can foster a sense of validation and understanding (Standing & Kahu, 2021).

Future iterations of these videos could expand their focus on storytelling by incorporating diverse narratives that represent a wide range of Māori experiences which could include stories

that integrate traditional Māori practices in managing mental health. By doing so, the SGPVs could resonate with Māori viewers but also empower Māori to draw from their own cultural heritage as they navigate their mental health journeys. Ultimately, leveraging the power of storytelling in this way could lead to a more impactful and culturally relevant mental health resource that resonates with Māori (Standing & Kahu, 2021).

It is important to note that the quantitative survey data from Study Four included only 14 Māori participants out of a total sample of 169, which prevented the ability to examine differences in acceptability by ethnicity or draw robust statistical conclusions regarding Māori participants specifically. Consequently, the present research cannot determine whether the acceptability of the SGPVs differed between Māori and non-Māori participants. However, qualitative findings from Study Two provide preliminary evidence that the Māori clinical psychologist cultural advisor and members of the Māori Cancer Support Group viewed the SGPVs positively and considered them relevant and appropriate for Māori audiences. These qualitative findings suggest that the SGPVs were well received by Māori participants involved in the co-design process, although further quantitative research with larger and more representative Māori samples is needed to determine the broader acceptability of the intervention.

In summary, Māori attitudes towards mental health treatment cannot be separated from their cultural heritage and beliefs. Acknowledging and incorporating these cultural perspectives into mental health interventions is crucial for improving engagement and outcomes among Māori populations. Initiatives that promote family involvement, respect traditional practices, and understand the sociocultural context are necessary for creating effective mental health services for Māori.

A larger sample of Māori in future studies would allow for a more comprehensive understanding of the SGPVs acceptance among Māori. Such research should aim to engage a diverse representation of Māori individuals, considering factors like age and gender to better capture the varied experiences within the Māori community. By expanding the scope of research in this way, future studies can contribute to the development of more culturally responsive mental health resources that truly meet the needs of Māori communities, ultimately enhancing mental health outcomes and literacy.

Visuals and Comprehension

To the researchers' knowledge, this is the first study exploring the acceptability of using animations as psychoeducational tools within mental health contexts. Feedback from participants across the pilot studies included an appreciation for the visuals in the videos, which aided comprehension of the concepts being explained. Visuals are useful tools for catering to diverse learning styles, as articulated by participants who highlighted that visual learners process information through images rather than text. Participants appreciated visuals such as depicting the stomach's collapse during breathing exercises, an abstract concept made tangible through animation.

Previous studies have found animations to be effective as educational tools in health care and other disciplines, significantly impacting the learning process by promoting engagement, comprehension, and retention (Berney & Bétrancourt, 2016). The ability of animations to depict complex processes and abstract concepts visually provides learners with an enhanced understanding that static images or text alone may not facilitate. Mayer et al. (2005) illustrate how animations can serve to clarify and visualise processes that are often challenging for learners to grasp. For instance, when teaching complex subjects like meteorology, animations

can effectively depict the movement of air around pressure systems, a phenomenon that cannot be observed directly in the real world. Furthermore, Mnguni and Moyo (2021) emphasise that the use of animations can enhance students' visualisation skills, which aids the learning process. Similarly, Curley et al. (2018) highlight that pharmacy students perceived visual aids as beneficial in their learning process, noting that these aids enhanced engagement and made learning more interesting. Additionally, well-designed animations can prevent cognitive overload and direct learner attention towards key elements of a process, thereby enhancing learning outcomes (Ayres & Paas, 2007).

By catering to diverse learning styles, animations effectively clarify complex concepts and processes that might otherwise be difficult to grasp through text alone. As evidenced by participant insights and supporting literature, incorporating engaging visuals into educational content can lead to improved learning outcomes and a more dynamic approach to health education.

While existing research highlights the effectiveness of animated videos as health education tools across various disciplines, there remains a paucity of studies specifically exploring their use in mental health education. The feedback from participants in this study suggests that animated videos are not only engaging but also facilitate understanding of complex mental health concepts, thereby presenting a promising avenue for psychoeducational interventions. Given the positive reception and the potential for animations to cater to diverse learning styles, further research is warranted to systematically evaluate their impact on mental health outcomes. Such investigations could contribute valuable insights into innovative strategies for mental health promotion and awareness, ultimately enhancing public education and support.

Animation vs. Real-Life Portrayals

Another consideration regarding the visuals used in the SGPVs was the feedback on the use of cartoon characters. This was a factor that both enhanced and detracted from participant engagement. While many viewers appreciated the fun and appealing nature of animated characters, others expressed a desire for real-life characters. This feedback highlights a trade-off between the advantages of animation such as ease of production, reduced costs, and the ability to create visually engaging content without the need for professional actors, versus the potential for real-life portrayals to enhance connections with the audience.

The appeal of cartoon characters can be attributed to their ability to simplify complex concepts and present them in an approachable manner. Animation can break down complex topics into easily digestible concepts, making them ideal as educational tools. The bright colours, novel designs, and playful animations can create a sense of playfulness that may alleviate anxiety around serious topics (Azmi et al., 2023; Feeley et al., 2022; Moe-Byrne et al., 2022; Praveen & Srinivasan, 2022; Türkay, 2016). This may be particularly important in the context of psychoeducation, where the subject matter can often feel daunting or intimidating.

However, the desire for real-life interactions suggests that some participants might find greater relatability and engagement when they see people who resemble themselves or their communities. When viewers encounter narratives featuring real people, they often find a deeper sense of relatability, which is a key aspect of narrative theory (Hinyard & Kreuter, 2007; Kohn, 2024). This is especially pertinent for individuals facing challenges like mental health issues. Real-life portrayals may resonate more than animated characters, as they reflect genuine struggles and triumphs that viewers may experience themselves. This authenticity fosters

empathy, allowing audiences to feel understood and validated in their own journeys, which is a fundamental principle in narrative theory regarding audience connection (Tchernev, 2022).

Additionally, seeing individuals who resemble themselves can significantly enhance this connection, highlighting the narrative theory concept of identification. Identification matters, as it creates a mirror for viewers to see their own identities and experiences reflected in the narratives (Rennick-Egglestone et al., 2019). This identification can lead to a stronger emotional investment in the story, as viewers are more likely to engage with material that resonates with their own lives (Adam et al., 2019). This connection can motivate viewers to reflect on their own experiences, leading to greater awareness and even healing (Rennick-Egglestone et al., 2019). In contrast, while animated characters can convey important themes, the depth of emotional connection often found in real-life narratives can create a more impactful and relatable experience.

To address this, future iterations of the videos could consider an approach that combines animation with real-life footage. For example, animated characters could introduce key concepts and strategies, engaging viewers through visual simplicity and narrative structure, while real individuals could share personal stories or testimonials that ground the content in lived experience and enhance relatability. Furthermore, this hybrid approach could also improve the educational value of the videos. Animated characters could illustrate theoretical concepts in a simplified manner, while real-life stories could explore the emotional and practical implications of those concepts. This combined approach could facilitate a more comprehensive understanding of mental health topics.

Emerging artificial intelligence (AI) technologies may further enhance the development of psychoeducational resources by supporting the creation of animations, voiceovers, translations, subtitles, and culturally tailored visual elements. Importantly, participants in the qualitative studies consistently expressed positive perceptions of the overall concept of the SGPVs and the practical coping strategies they presented. However, many participants also suggested that the videos could be more visually engaging, with greater movement and more dynamic animations, noting that for some, the whiteboard animation style felt static or resembled a PowerPoint presentation. Recent advances in AI technology have made it increasingly feasible to produce enhanced visual content with more expressive characters and fluid movement than traditional whiteboard animation software. Such technology therefore has the potential to address one of the key areas identified for improvement in the present research while retaining the educational strengths and evidence-based coping strategies that participants valued. In addition, AI-assisted production can reduce development time and costs, enabling psychoeducational resources to be updated rapidly as new evidence emerges and adapted for different healthcare settings, languages, cultures, and clinical populations. This technology may improve both the scalability and accessibility of psychoeducational interventions (WHO, 2021; Lekadir et al., 2025).

However, the social and clinical acceptability of AI-generated psychoeducational content needs to be considered. Although AI offers considerable advantages in improving the visual quality of psychoeducational resources, these benefits must be balanced against the need for accuracy, trustworthiness, and clinical integrity. Mental health interventions must communicate evidence-based information that is clinically appropriate, culturally responsive, and psychologically safe. Consequently, AI should not be viewed as replacing researchers, clinicians,

or individuals with lived experience, but rather as a tool that supports them in creating more engaging and accessible psychoeducational resources. Human oversight remains important to ensure that AI-generated content reflects current evidence, avoids misinformation and cultural bias, and maintains the authenticity that participants in the present research identified as important (WHO, 2021; Lekadir et al., 2025).

Furthermore, if AI is used to generate more realistic or "real-life" characters rather than animated figures, it will be important to determine whether patients perceive these characters as authentic, relatable, and trustworthy. Although AI-generated human characters may offer a practical alternative to using actors, their acceptability remains largely unknown, particularly within the context of mental health psychoeducation where authenticity and emotional connection may influence engagement. Consequently, future research should investigate not only whether AI can efficiently generate psychoeducational content, but also how patients, healthcare professionals, and the wider community perceive the credibility, authenticity, trustworthiness, and acceptability of AI-assisted interventions and AI-generated human characters.

The Power of Narrative Storytelling

Despite the mixed feedback regarding visual representation, one consistency that emerged from both pilot studies during the development phase of the videos was participants appreciated the narrative story-based format of the videos. The power of storytelling as a pedagogical tool is well-documented in existing literature, which emphasises its effectiveness in conveying complex information in an engaging, comprehensible and relatable manner (Conner et al., 2023; Haeok Lee et al., 2016). Narratives can enhance engagement, allowing viewers to personally relate and apply the strategies presented to their own lives (Moran et al., 2016).

Many participants found they could relate to the videos because they could see their own stories reflected in the characters and scenarios depicted in the narratives. This ability to identify with the stories conveyed enhanced participants' engagement and acceptability of the videos. As previously mentioned, the integration of psychological concepts into relatable stories not only enhances comprehension but also promotes emotional connection, making the content more memorable (Hinyard & Kreuter, 2007; Moran et al., 2016; Rennick-Egglestone et al., 2019). When viewers see characters facing similar challenges and successfully implementing coping strategies, it can inspire hope and resilience, reinforcing the idea that they are not alone in their struggles (Rennick-Egglestone et al., 2019).

Research has shown that when individuals connect emotionally with a narrative, they are more likely to retain information. For example, George et al. (2013) examined the efficacy, engagement, and acceptability of narrative compared with non-narrative health education films among individuals with varying levels of health literacy. In their randomised trial, participants viewed either a narrative or non-narrative educational film. Although both formats were well received and improved knowledge, the narrative film resulted in significantly greater knowledge retention and engagement. Importantly, George et al. also reported that participants rated the narrative film as slightly more acceptable than the non-narrative film. These findings suggest that narrative approaches may enhance both engagement and perceived acceptability of health education materials, although the present research did not directly compare narrative and non-narrative formats.

To the researchers' knowledge, this is the first study to apply a storytelling format within short animated psychoeducational videos specifically aimed at teaching coping strategies for psychological distress and delivered in a healthcare waiting room setting. This research provides

preliminary evidence that stakeholders are both accepting of and interested in this narrative-based approach in this context, supporting its feasibility and potential for wider application.

The findings from the present research, together with previous studies demonstrating the educational benefits of narrative formats, suggest that storytelling represents a promising approach for psychoeducational video development. By incorporating diverse and culturally relevant narratives, these resources can resonate with a broader audience (Conner et al., 2024). This approach not only acknowledges the varied experiences of different populations but also helps to validate their feelings and struggles. For example, stories that reflect the lived experiences of individuals from various backgrounds can foster a sense of belonging and understanding, which is particularly important in mental health contexts (Conner et al., 2024).

Additionally, storytelling can be a useful tool for those with varied learning abilities and styles. For individuals who struggle with traditional educational methods or who find clinical language intimidating, narratives can serve as a bridge, presenting information in a more digestible format. This can be particularly beneficial for marginalised groups who may have less access to mental health resources and education (Kreuter et al., 2007; Standing & Kahu, 2021).

In summary, the overall appreciation for narrative storytelling highlights its potential as a vital component of SGPVs. By continuing to integrate storytelling into future interventions, psychoeducation can be informative, engaging, relatable, and emotionally resonant which may enhance the uptake of such resources in supporting mental health.

Incorporating Humour

In the current research, participants across the pilot studies enjoyed specific comedic elements in the Problem-solving Video, such as the line “get a new wife”. The acknowledgment

from participants that “kiwis love humour” reflects an understanding of cultural nuances that can make psychoeducational videos more impactful. The notion of cultural experience influencing engagement aligns with findings from He and Zou (2023), who propose that cultural context shapes psychological engagement levels significantly. This reinforces the notion that humour, when reflective of cultural attitudes, can significantly enhance engagement in educational content. Roche et al. (2015) note that in Māori culture, humour is not only prevalent but also serves as a means of promoting well-being. In New Zealand, humour functions as a tool for diminishing hierarchy and fostering equality (Plester & Kim, 2021), further illustrating that humour can break down barriers and foster a sense of community.

Research also suggests that humour can serve as an effective coping mechanism that allows individuals to reframe stressful situations, thereby reducing their perceived threat. Studies have indicated that a light-hearted approach to serious topics enhances relatability and enjoyment, ultimately improving engagement with the material. For example, Canestrari et al. (2021) reported that healthcare workers who employed humour-based coping strategies perceived their work-related stress as less severe compared to those who did not. This highlights the significant role of humour in managing stress and suggests that using humour can make challenging scenarios feel more manageable. However, while humour can increase engagement, it can also result in a reduced perception of serious issues (Meyer & Venette, 2017). This indicates that, although humour can be beneficial, ineffective humour may have the opposite effect, leading audiences to overlook the gravity of the content (Suka & Shimazaki, 2023).

Participants from the MCSG emphasised humour's role in fostering a sense of connection and upliftment amid the gravity of cancer treatment. Humour was viewed as a way to soften difficult content, reduce emotional heaviness, and create moments of relief within a challenging

health context. These perspectives align with research suggesting that humour can enhance emotional well-being and reduce feelings of isolation among individuals living with cancer. For example, research by Christie and Moore (2005) found a positive link between humour and comfort levels in cancer patients. Humour was often employed as a relaxation tool and coping strategy that contributed to overall wellness. The findings indicated that various forms of humour reduced anxiety and discomfort, facilitating open discussions about patients' concerns and fears. Additionally, the research highlighted humour's beneficial effects on the immune system, with quantitative experimental studies consistently showing improvements in pain thresholds and increased activity of natural killer cells.

Findings from this research and the literature reviewed suggests that utilising humour in psychoeducational videos can enhance user engagement and emotional well-being, particularly in contexts involving psychological distress and serious health challenges. Future research could further explore the specific types of humour that resonate best with diverse audiences.

Usefulness of the SGPVs

Feedback from the pilot studies explored participants' perceptions of usefulness regarding the SGPVs. The pilot study of the SGPVs indicated participants preferred strategies that are simple and easy to implement. Furthermore, participants preferred methods that allow for immediate application, often referred to as "quick wins." For instance, participants praised simple techniques like breathing exercises that can be both employed on-the-spot and incorporated into daily routines. This emphasis on easily implemented interventions not only facilitates immediate relief but also serves as an important entry point for individuals who may find more traditional or complex forms of psychoeducation daunting (Berger et al., 2022).

Interestingly, while some participants acknowledged the value of more complex strategies, such as the acceptance of emotion strategy derived from Acceptance and Commitment Therapy (ACT), some participants found this concept challenging to grasp. In contrast, they found the mindfulness video on simple strategies like mindful walking to be particularly helpful. This demonstrates that while both strategies relate to mindfulness, the simplified instruction to pay attention to the present moment through mindful walking made the concept more comprehensible and accessible.

Research indicates that individuals often gravitate toward simpler self-help methods rather than pursuing formal treatment options, highlighting the need for psychoeducational interventions to prioritise ease of comprehension and application. For example, Karyotaki et al. (2017) found that self-guided internet-based cognitive behavioural therapy (CBT) may serve as a viable alternative for individuals hesitant to seek out in-person therapeutic contact. Such self-help forms offer low-cost access to treatment, thereby appealing to those who may prefer simplified, self-directed approaches to managing their mental health needs.

In the realm of strategy and user interaction, research by Foster and Oberlander (2010) indicates that users preferred simple and easy-to-recognise strategies over more complex, data-driven approaches. This highlights the importance of user-centred design, where simpler approaches enhance satisfaction and understanding, ultimately leading to better engagement.

Additionally, many participants noted that SGPVs could play a significant role in raising awareness about mental health issues. For instance, a member of the MCSG mentioned that the videos could help patients recognise and manage anxiety symptoms, sharing that she previously lacked knowledge about anxiety and would have found such videos extremely beneficial. Furthermore, participants from the healthcare workers group also appreciated how the Problem-

Solving video illustrated the ripple effects of stress on personal relationships, prompting discussions about how stress impacts not only individuals with cancer but also their loved ones.

This perspective indicates that SGPVs have the potential to function as educational tools that promote mental health awareness, aiding individuals in managing their own mental health challenges, and enhancing mental health literacy, particularly in the context of raising awareness about mental health issues and encouraging self-management strategies. The capacity of SGPVs to enhance understanding of mental health issues is supported by existing literature that emphasises the importance of psychoeducation in improving mental health literacy. For example, a study found that psychoeducation can enhance mental health literacy regarding psychological disorders associated with type two diabetes. Low mental health literacy among diabetic patients is linked to inadequate self-care and poor glycaemic control; therefore, improving mental health literacy can foster better self-care behaviours that contribute to overall wellbeing (Karimpour Vazifehkhorani et al., 2018). Another study found mental health-related podcasts can enhance mental health literacy among listeners. Participants with lower levels of education and mental health literacy reported the greatest benefits from these podcasts (Caoilte et al., 2023).

Collectively, these findings advocate for SGPVs to focus on straightforward, effective coping strategies, ensuring not just that they are accessible but also that they resonate with the needs of users, thereby improving overall user engagement and acceptability. Furthermore, these findings highlight SGPVs potential to enhance mental health literacy.

Tailoring Content for Cancer Patients

Feedback from the focus groups and interviews with cancer patients and healthcare workers indicated the need for psychoeducational videos that are specifically tailored to cancer patients. Participants emphasised that the videos should reflect the unique challenges and lived

experiences of individuals undergoing cancer treatment. This includes a focus on low-energy coping strategies and the promotion of realistic expectations, which may help prevent feelings of guilt or inadequacy that can arise when individuals feel pressure to function at pre-diagnosis levels. Importantly, these findings return attention to the original intent of this research: to develop psychoeducational content suitable for delivery in oncology waiting room settings. Re-engaging with this original aim highlights the need for further refinement of the videos to ensure they are contextually grounded in cancer-specific experiences if they are to be effectively implemented within oncology services.

Research supports the idea that contextually relevant psychoeducation that is grounded in cancer patients lived experiences and recognises the physical and emotional toll of treatment. According to Pascoe and Norman (2011) in psychoeducation, it is important to use contextually relevant resources which involves tailoring information and strategies to the specific needs, cultural background, and experiences of the individuals or groups being educated. Furthermore, contextually relevant educational resources can improve patient engagement and outcomes. For example, Thompson and Young-Saleme (2015) noted that tailored educational materials in paediatric oncology enhance patient education and intervention outcomes. They found that personalised resources improve knowledge retention, demonstrating the effectiveness of customised psychoeducational interventions for patients, thereby illustrating the positive impact of personalised content.

Furthermore, participants suggested that the narratives in the videos could acknowledge health struggles while still maintaining a broader relevance. This could help the SGPVs to resonate with cancer patients along with other individuals who are facing various health challenges. Participants from study two (cancer patients and oncology healthcare workers) also

noted that the SGPVs in their current form could be well suited to settings such as GP waiting rooms. In such settings, patients may be struggling with a range of health concerns as well as generalised distress. The universal nature of the videos in their current form could be applicable to a wide range of stressors and offer coping strategies to help manage their distress. This perspective aligns with existing literature that suggests psychoeducational resources can facilitate mental health awareness across various contexts, particularly in primary care settings (Houghton & Saxon, 2007; Kellett et al., 2007).

Overall, the findings highlight the need for psychoeducational resources that are specifically tailored to the unique experiences of cancer patients. Participants emphasised the importance of integrating patient narratives and focusing on contextually relevant coping strategies to effectively address the specific challenges faced by those undergoing cancer treatment. However, they also noted that the videos, in their current form, would be well suited for settings such as GP waiting rooms, where patients may be struggling with various health concerns and generalised distress.

By ensuring that these psychoeducational videos acknowledge the unique struggles of cancer patients, they can serve as effective tools for promoting mental health awareness and resilience. If the SGPVs are to be utilised in an oncology context, future iterations of the videos should further tailor the content to meet the specific needs of cancer patients, incorporating themes that resonate with their experiences.

Waiting Room Settings as Ideal Environments for SGPVs

The pilot study findings emphasised the potential of delivering the SGPVs in waiting room settings, in both oncology and GP environments. Participants commented that the waiting room environment is an ideal setting to engage with patients who are ‘a captive audience’ who

are often willing to engage with information while waiting for appointments. They shared their experiences of engaging with content in these environments and noted that they often watch screens while in waiting rooms. This feedback indicates that patients are already accustomed to engaging with video content in these environments, making waiting rooms an ideal setting for psychoeducation. This aligns with existing research that emphasises the opportunity of utilising waiting periods as opportunities for patient education, and that engaging content can enhance the waiting experience (Gignon et al., 2012; Penry Williams et al., 2019; Sherwin et al., 2013).

In regard to GP settings, participants pointed out a need for engaging content. Many expressed dissatisfaction with the absence of stimulating resources, leading to idle time spent scrolling on phones or waiting in silence. This lack of engagement can contribute to a negative waiting experience, highlighting the potential of psychoeducational resources to enhance patient satisfaction (Sherwin et al., 2013). Participants viewed the delivery of SGPVs in a waiting room as a way to turn unproductive waiting periods into opportunities for learning and distraction.

In oncology settings, where patients may experience heightened psychological distress, the delivery of SGPVs could promote coping strategies to enhance their emotional well-being. Waiting rooms can serve as a space to address the unique anxieties and uncertainties that cancer patients face, providing them with coping strategies and psychoeducation to help navigate their treatment journey. This aligns with Fitches' (2008) findings on stepped care, which advocate for a tiered approach to mental health support where resources are provided based on the severity of patients' needs. By delivering SGPVs in waiting areas, patients can be provided with an initial layer of support that helps manage their distress before they even enter their appointments. Engaging with supportive content during these waiting periods can help patients feel less isolated

in their experiences and effectively bridge the gap between basic psychoeducation and more intensive psychological support if needed.

Furthermore, the use of SGPVs in waiting rooms can also serve to educate family members and caregivers who accompany patients, broadening the impact of the content beyond the individual patient. This approach aligns with Māori cultural values that emphasise whānau involvement in health and well-being (Rochford, 2004). By incorporating strategies that resonate with both patients and their support networks, SGPVs can help provide patients with an understanding of mental health challenges and coping mechanisms.

Impact of Health Literacy on Acceptance

The quantitative survey data also revealed interesting trends regarding health literacy and interest in watching the videos in GP waiting room settings. The results indicated that as health literacy increases, interest in watching the videos in a GP waiting room setting decreases. This indicates that those with lower levels of health literacy are more likely to be interested in watching SGPVs.

The videos developed in this research were intentionally designed to resonate with individuals who have low health literacy. To achieve this, during the development process of the videos, complex concepts were simplified to enhance understanding. This included using simple language in the videos to enhance clarity and accessibility. Technical jargon and clinical terms were minimised, opting instead for common, everyday language that is easier to comprehend. This approach was intended to enable viewers to engage with the material without feeling overwhelmed or confused by unfamiliar terminology.

Additionally, the concepts presented in the videos were broken down into straightforward explanations. The visual animations complemented the written content, reinforcing key messages and making them more memorable. As previously noted, animations can be particularly beneficial in simplifying complex concepts, as they provide dynamic visual representations that can clarify and illustrate ideas in a way that text alone may not achieve (Türkay, 2016). By employing these strategies, the researcher aimed to create psychoeducational videos that individuals with low health literacy could easily absorb and apply the information effectively.

Health literacy is closely connected to mental health literacy, which refers specifically to an individual's ability to understand mental health issues, recognise the need for help, and seek appropriate resources (Kutcher et al., 2016). Research indicates that individuals with low health literacy often exhibit poorer mental health literacy (Wolf et al., 2010). This can manifest in various ways, such as difficulty in understanding mental health symptoms, challenges in recognising when to seek help, and a lack of knowledge about available mental health resources (Kutcher et al., 2016). As a result, those with low health literacy may struggle to navigate the complexities of mental health, leading to increased vulnerability to mental health issues and decreased likelihood of seeking support.

Conversely, individuals with high health literacy tend to be more adept at seeking out resources and information related to their health, including mental health. They are more likely to actively engage with educational materials, utilise healthcare services, and advocate for their own needs. This proactive approach enables them to make informed decisions about their mental health care, ultimately leading to better outcomes. They are also more equipped to understand and interpret health information, allowing them to discern credible sources from misinformation (Berkman et al., 2010).

The disparity in health literacy levels can create significant barriers for those with low health literacy, making it challenging for them to access the support they need (Berkman et al., 2011). This reinforces the importance of designing educational interventions, such as the SGPVs in this research, that are tailored to meet the needs of individuals with varying health literacy levels. By simplifying language, clarifying concepts, and providing relatable examples, these resources can help bridge the gap, enhancing both health and mental health literacy across diverse populations.

The finding that individuals with high health literacy levels were less interested in watching the videos in a GP setting has implications for the design and implementation of psychoeducational interventions. While the primary focus of the videos was to resonate with those who have low health literacy, the diminished interest among individuals with higher health literacy raises important considerations for how educational content is presented.

One possible explanation for this finding is that individuals with high health literacy may already possess a sufficient understanding of mental health issues and the resources available to them. As a result, they might perceive less need for supplemental educational materials, such as the SGPVs. This indicates that while the videos may effectively engage those with lower health literacy, they may not capture the attention of more knowledgeable individuals who are accustomed to seeking out information independently. Consequently, this suggests a potential disconnect between the content provided and the needs or preferences of higher health literacy populations.

Moreover, this finding highlights the necessity of tailoring interventions not only to lower health literacy audiences but also to those with higher literacy levels. If the goal is to provide mental health resources for all patients, including those with varying health literacy levels, it may

be beneficial to offer a diverse range of educational materials that appeal to different audiences. To engage this group, the content could be designed with a focus on advanced topics, emerging research, or in-depth coping strategies that go beyond the basics. This could involve offering supplementary materials such as brochures that allow for deeper exploration of mental health topics. This would provide a variety of resources that not only addresses the needs of those seeking basic information but also could engage those with a higher level of understanding. This approach was reflected in participant feedback during the pilot studies, where one participant mentioned she would like to know more information and suggested that supplementing the videos with a brochure containing additional details would be helpful. Additionally, psychologists from the focus group also mentioned that it could be beneficial to include on the videos information about where viewers can find more resources or further information if they wish to explore topics in greater depth.

To summarise, the findings from this research point to the potential of delivering SGPVs in waiting room settings. By utilising waiting periods as opportunities for patient education, SGPVs can enhance patient experiences and provide them with coping strategies to manage psychological distress. Additionally, this research found that individuals with high health literacy demonstrated less interest in SGPVs within a GP setting. As those with lower health literacy often experience poorer mental health outcomes, it is crucial to prioritise this population, which this study has successfully addressed. However, while the videos effectively engaged individuals with low health literacy, the reduced interest among those with higher literacy levels suggests a possible disconnect between the content provided and their needs. To address this, it may be beneficial to offer a diverse range of educational materials that cater to different audiences; by doing so, psychoeducational interventions can effectively serve all patients.

SGPVs and Reducing Stigma in Mental Health

The findings from Study Two and Study Three revealed that SGPVs can encourage individuals to discuss mental health topics and seek support. Participants highlighted the effectiveness of these videos in providing discreet access to information on stigmatised issues. Participants felt that the SGPVs could normalise seeking help, as reflected in participant feedback such as identifying the videos' capacity to foster a culture of openness. Many expressed concerns about imposing on others or feeling undeserving of support; this reluctance to seek help emphasises the need for increased awareness and strategies to encourage individuals to reach out for support.

According to previous research, psychoeducation can play a role in reducing stigma around mental health and encouraging individuals to seek necessary services (Kumari et al., 2023; Morgan et al., 2018; Waqas et al., 2020). While psychological distress is prevalent in society, a significant number of those affected do not receive appropriate care. This lack of treatment is often rooted in stigma, misinformation, and a lack of understanding about mental health issues (Shim et al., 2022).

Stigmatisation of mental illnesses is widespread and leads to numerous negative consequences for individuals with mental health issues, such as lost opportunities, feelings of demoralisation, anger, isolation, and hesitance to engage with mental health services. While there have been many initiatives aimed at reducing stigma, which have achieved some level of success, progress has been slow and inconsistent, leaving mental illness stigma deeply ingrained in society (Lucksted et al., 2017).

Recent research has identified two forms of stigma related to mental health: public stigma and self-stigma. Public stigma encompasses negative attitudes towards individuals with mental

health issues, often shaped by societal perceptions. In contrast, self-stigma involves an individual's negative self-perception related to their mental health challenges, which can diminish self-esteem and discourage them from seeking help (Marks et al., 2024). Research indicates that stigma and low mental health literacy are substantial barriers to seeking help (Kutcher et al., 2016; Tristiana et al., 2018). Many individuals harbour feelings of shame and fear societal stigma, which discourages them from reaching out for support (Gulliver et al., 2010). Psychoeducational resources can help to counter these challenges (Kumari et al., 2023; Morgan et al., 2018).

SGPVs may help reduce self-stigma by presenting relatable narratives. When individuals see others discussing their mental health experiences openly, it fosters a sense of community and normalises the conversation around mental health (Seidman et al., 2022). The findings from Clément et al. (2014) suggest that by providing destigmatising support, psychoeducational initiatives can help vulnerable populations engage more freely with mental health services. The authors emphasised the need for interventions that normalise help-seeking behaviour, particularly through storytelling and shared experiences, which can make mental health challenges feel less isolating and stigmatised.

Additionally, SGPVs may enhance mental health literacy. As viewers become more informed about mental health issues, they are likely to develop a more compassionate perspective towards themselves and others (Carvalho et al., 2022). This improved literacy can lead to a reduction in stigma at both individual and societal levels, facilitating a more supportive environment for those in need (Lannin et al., 2016).

Moreover, these videos may serve as a form of support for those who may be hesitant to seek in-person services. For individuals who feel uncomfortable visiting a mental health

professional or who experience anxiety about discussing their struggles, psychoeducational videos offer an alternative way to engage with mental health topics. They can learn about symptoms, coping strategies, and available treatments in a safe, judgment-free environment (Alonso et al., 2019; Yang et al., 2021).

Taken together, the findings from this research suggest that SGPVs have the potential to contribute to stigma reduction within healthcare settings. Across Studies Two and Three, participants described the videos as helping to normalise help-seeking, providing discreet access to mental health information, and creating opportunities for reflection without the pressure of direct disclosure. Participants also perceived these potential benefits as being particularly relevant to waiting room settings, where individuals are already engaged with health services but may feel reluctant to raise mental health concerns. These findings suggest that delivering SGPVs within routine healthcare environments may provide an opportunity to subtly challenge both public and self-stigma by presenting coping strategies and emotional experiences as common, understandable, and legitimate. Participants suggested that this could emerge through relatable narratives and the visibility of mental health support alongside physical healthcare. However, the present research did not directly evaluate whether exposure to the SGPVs reduced stigma, or influenced subsequent help-seeking behaviours. Consequently, while the findings extend existing literature by suggesting that short, self-guided psychoeducational videos may represent a low-barrier and scalable approach to delivering psychoeducational content within healthcare settings, further research conducted in real-world healthcare environments is required to determine whether these interventions contribute to stigma reduction, improvements in mental health literacy, and increased help-seeking.

Men and SGPVs -Addressing men's mental health needs

Participants in this research perceived that the SGPVs could have a positive impact on New Zealand men who may traditionally find it difficult to express their feelings. These perceptions align with existing research highlighting the potential of psychoeducational interventions to provide valuable support in contexts where traditional resources may be lacking (Opozda et al., 2024). By promoting awareness and normalising conversations around mental health, SGPVs may encourage some men to seek support when needed.

The high acceptance rate of SGPVs among both men and women in this study may have positive implications for men's mental health, particularly considering the significant barriers that men often face in seeking help for mental health issues. Research has consistently demonstrated that men are less likely than women to access mental health support, leading to untreated conditions, high suicide rates, and the exacerbation of mental health issues (Walther et al.).

The reluctance of men to seek help for mental health issues is deeply rooted in cultural and societal norms. Traditional masculinity ideologies dictate that men should embody traits such as stoicism, self-reliance, and emotional restraint, which often discourages them from expressing vulnerability or seeking assistance. This socialisation process can lead men to mask their symptoms with behaviours that align more closely with accepted masculine norms, such as aggression or risk-taking (Fields & Cochran, 2011; Levant & Richmond, 2008).

This dynamic is further complicated by the stigma surrounding mental health. Men often experience shame and self-stigma when confronting mental health issues, leading to feelings of

inadequacy (Cheung et al., 2004; O'Neil, 2013). Such societal pressures not only hinder help-seeking behaviours but also contribute to higher rates of suicide among men. Additional barriers include logistical issues such as long waiting times, costs associated with therapy, and scheduling conflicts due to work or family responsibilities (Opozda et al., 2024; Yousaf et al., 2015)

Furthermore, men often experience externalising symptoms that may not be recognised in standard clinical assessments, such as anger, substance abuse, and physical symptoms like headaches. These symptoms can obscure underlying mental health issues and make it difficult for healthcare providers to identify and address men's mental health needs effectively (Fisher et al., 2021; Zajac et al., 2022). Addressing these barriers is needed to improve mental health outcomes for men. Consequently, SGPVs may serve as a bridge by providing men with the tools to explore their mental health in a non-threatening environment, which may lead them to seek further help when needed.

The high acceptance rate of SGPVs in this research highlight an opportunity for engaging men who typically avoid traditional mental health services. Digital mental health interventions, such as SGPVs, offer a unique solution that aligns with men's preferences for convenience, privacy, and control over their mental health management (Opozda et al., 2024). Studies have shown that when men perceive digital mental health interventions as beneficial and tailored to their needs, they are more likely to use them (Proudfoot et al., 2010; Wang et al., 2016). Furthermore, the anonymity associated with digital interventions can also help mitigate the stigma men face when seeking help. For many men, the prospect of attending a therapy session or admitting to mental health struggles can be daunting due to societal expectations (McKenzie et al., 2022). SGPVs provide an alternative that allows men to explore coping strategies and mental health education without the immediate pressure of face-to-face interactions.

Given that many men regularly visit GP offices for various reasons, delivering SGPVs in this setting provides a unique opportunity to introduce mental health resources in a non-intrusive and accessible manner. The findings from this research indicate that there is equal interest among men and women in watching SGPVs while waiting for their appointments, indicating a receptivity among men to engage with psychoeducation in this context.

Displaying SGPVs in waiting rooms may help to normalise discussions around mental health and may contribute to reducing the stigma associated with seeking help. The presence of relatable and informative psychoeducational videos may provide a gentle introduction to mental health topics. This method of delivery may allow men to engage with coping strategies and educational content without the immediate pressure of self-disclosure that often accompanies traditional therapy settings. However, further research conducted in real-world waiting room settings is required to determine whether these outcomes occur in practice.

According to research, the effectiveness of digital interventions for men is related to how well they are tailored to meet the specific needs and preferences of this population with research indicating that men desire interventions that are relevant to them (Smail-Crevier et al., 2019). Tailoring interventions based on individual characteristics such as age, background, and specific mental health challenges can significantly enhance their acceptability and efficacy (Noar et al., 2009). As such, co-creation approaches that engage men in the design and evaluation of digital psychoeducational interventions are important. This collaboration ensures that the resulting resources are relevant and resonate with men's unique experiences (Slattery et al., 2020). By actively involving men in the development process as was done in this research, researchers can create interventions that address their specific mental health needs and preferences.

However, when designing digital psychoeducation interventions for men, it is important to consider men are a complex and diverse group, with differing experiences shaped by factors such as ethnicity, socioeconomic status, sexual orientation, and disability. The burden of mental unwellness often disproportionately affects men from marginalised backgrounds, who may experience additional barriers to accessing mental health care (Griffith, 2012). Future research could examine how these various aspects of identity influence men's expectations, experiences, and desires related to mental health support. By acknowledging and addressing these nuances, mental health interventions such as SGPVs can be developed to resonate with a broader range of men, including those who are often overlooked in traditional mental health research and interventions.

Overall, the high acceptance of SGPVs in this research highlights the potential for digital interventions such as SGPVs to bridge the gap in men's mental health care. By aligning with men's preferences for convenience, privacy, and control over their mental health, these resources can facilitate greater engagement among a demographic that has historically shied away from seeking help.

Furthermore, displaying SGPVs in GP waiting rooms may enhance this opportunity by providing a non-intrusive and accessible way for men to engage with mental health resources while they are already in a healthcare setting. This approach may help to normalise discussions around mental health and may contribute to reducing stigma surrounding help-seeking. Future implementation research is required to determine whether these perceived benefits translate into measurable changes in engagement, stigma, or help-seeking behaviours.

Age-related differences in the acceptance of digital psychoeducation

The high acceptability of the SGPVs observed in this research may reflect a broader cultural shift towards engagement with digital forms of mental health education. Participants under the age of 50 demonstrated significantly greater interest in watching the videos and higher acceptability scores than those aged 50 years and over, suggesting generational differences in familiarity with digital technology and media consumption. This finding is consistent with previous research indicating that younger adults are generally more receptive to digital mental health interventions (Borghouts et al., 2023; Malloy et al., 2023). Collectively, these findings suggest that digital psychoeducational resources may complement traditional face-to-face mental health services as demand for accessible mental health support continues to increase (Holmes et al., 2020; Salmon et al., 2023).

The greater engagement of younger adults with digital mental health resources may also reflect broader changes in societal attitudes towards mental health. As younger generations increasingly utilise technology to access mental health information and support, digital interventions have the potential to normalise help-seeking, reduce stigma, and encourage proactive self-management of psychological well-being (Perich & Andriessen, 2023; Schneider et al., 2023). Furthermore, the COVID-19 pandemic accelerated awareness of mental health concerns and increased the use of digital resources across many aspects of healthcare (Czeisler et al., 2020; Rackoff et al., 2022). While younger adults readily adopted these technologies, previous research suggests that older adults often benefit from additional support, including technical guidance and social encouragement, to engage confidently with digital mental health resources (Sorkin et al., 2021).

Importantly, the findings from the present research indicate a relative difference in acceptability rather than a distinction between acceptance and rejection**.** Although participants aged 50 years and over reported significantly lower acceptability and interest than younger participants in the quantitative survey, the qualitative pilot studies demonstrated that older participants were nonetheless generally accepting and positive about the SGPVs. Qualitative feedback highlighted that many participants over 50 perceived the videos as helpful in normalising conversations about mental health, encouraging help-seeking, and providing practical strategies for managing stress, anxiety, and depression. In Study Three, four participants from the general population were aged over 50 years (52–75 years), while in Study Two the majority of members of the Māori Cancer Support Group were over 50 years, with ages ranging to 83 years (mean age = 65 years). Taken together, these findings suggest that older adults are not resistant to self-guided psychoeducational videos. Rather, while their acceptability ratings were modestly lower than those of younger participants, they remained receptive to the intervention when the content was perceived as relevant, respectful, and supportive. This demonstrates the value of integrating quantitative and qualitative findings, with the qualitative data providing important context for interpreting the quantitative age differences.

However, these findings should interpreted within the context of the broad age categories used in the quantitative analyses. Participants were categorised as either under 50 years or 50 years and over. Although this grouping allowed comparisons, the older age category encompassed a wide range of ages and life stages. Due to the relatively small number of participants aged 65 years and over, it was not statistically feasible to create narrower age groups while maintaining adequate statistical power. Consequently, the "50 years and over" group likely included individuals with varying different levels of digital literacy, familiarity with technology,

and previous exposure to digital health resources. For example, the experiences of a participant in their early fifties may differ considerably from those of someone in their seventies or eighties. As such, the observed age differences should be interpreted cautiously, as they may mask important variation within older adults.

This interpretation is consistent with previous literature. Mackenzie et al. (2006) reported that lower utilisation of mental health services among older adults is not primarily explained by negative attitudes towards help-seeking. Indeed, more than 80% of adults aged 55 years and older reported positive attitudes towards seeking professional help, and over 70% held favourable beliefs regarding treatment effectiveness. These findings align with the qualitative findings of the present research, where many older participants expressed appreciation for the SGPVs and described them as helpful resources for increasing awareness of mental health and providing practical coping strategies. Together, these findings suggest that lower quantitative acceptability scores may reflect differences in familiarity with digital interventions rather than reluctance to seek psychological support.

Instead, lower acceptance of digital psychoeducational resources among older adults may stem from barriers associated with engaging with digital technology. Limited exposure to digital tools, lower levels of digital literacy, and reduced confidence in using technology may influence willingness to engage with innovative mental health resources, despite generally positive attitudes towards seeking help. Additionally, it is possible that some older adults may feel less comfortable engaging with mental health-related content within a physical healthcare waiting room. One possible explanation is that concerns about privacy, stigma, or being observed by others while engaging with mental health information may reduce willingness to interact with

such resources in a public setting, particularly among generations in which mental health difficulties have historically been associated with greater stigma. Although this possibility was not directly examined in the present research, it represents an important avenue for future investigation.

Overall, the findings suggest that acceptance of digital mental health resources is increasing across society; however, age-related differences in engagement remain. Rather than indicating resistance among older adults, the findings suggest that barriers to engagement may be related to digital literacy, familiarity with technology, and the context in which interventions are delivered. Without appropriate support, these barriers may contribute to existing healthcare inequalities (Mackenzie et al., 2008; Sawrikar & Mote, 2022). Consequently, initiatives that improve digital literacy and increase familiarity with digital mental health resources, particularly among older and underserved populations, may enhance equitable access to these interventions (Skałacka & Pajestka, 2021). The challenge for future implementation is therefore not whether older adults should be offered digital psychoeducational interventions, but how these resources can be designed and delivered in ways that maximise accessibility, acceptability, and engagement across the lifespan.

Implications of findings

The findings from this research highlighted the involvement of diverse stakeholders, including cancer patients, healthcare workers, and the general population, in the development of SGPVs. Their feedback was instrumental in shaping the design and content of the videos and improving their acceptability and usefulness. This aligns with UCD principles that stress the importance of incorporating user insights throughout the design process (Vial et al., 2022). The

iterative nature of feedback collection throughout the study facilitated continuous refinement of the SGPVs. This also aligns with UCD's emphasis on testing and revising based on user input, ultimately leading to a more effective psychoeducational tool.

Furthermore, findings from this research indicate that SGPVs hold significant promise as a low-intensity intervention for individuals experiencing less severe psychological distress. This potential aligns well with the principles of the stepped care model, which advocates for providing mental health support that corresponds to the severity of an individual's symptoms (Berger et al., 2022). By offering accessible and engaging resources, SGPVs can effectively serve as an initial step in addressing mental health needs, particularly for those who may not require or seek more intensive therapeutic interventions.

The stepped care model emphasises a tiered approach to mental health treatment, where individuals receive the least intensive intervention that is likely to be effective for their level of distress. This model is particularly relevant in the context of rising mental health issues, as it helps to allocate resources efficiently and ensures that individuals at varying levels of need receive appropriate support (van Straten et al., 2015). The findings from this research suggest that SGPVs are acceptable among key stakeholders and hold promise as an effective entry point for individuals' experiencing psychological distress, offering psychoeducation and coping strategies that can be easily integrated into daily life.

Participants in pilot studies reported that the SGPVs were relatable, engaging, and provided practical strategies that could be readily applied to manage their mental health. This aligns with the stepped care model's goal of ensuring that interventions are not only effective but also accessible and user-friendly (Kozlov et al., 2021). By presenting psychoeducational content in a format that is visually appealing and easy to understand, SGPVs can help convey coping

strategies for psychological distress, making them more approachable for individuals who might otherwise feel overwhelmed by traditional therapeutic resources.

Another significant implication of these findings is the potential for SGPVs to normalise help-seeking behaviours. Participants in the pilot studies noted that engaging with the SGPVs could foster a culture of openness surrounding mental health discussions, which is needed to reduce stigma and increase the likelihood that individuals will seek help when needed. By integrating SGPVs into waiting rooms, healthcare settings can become an environment where mental health discussions are normalised and encouraged.

The integration of SGPVs into healthcare settings aligns with the stepped care model's vision of bridging gaps in mental health care (Kolaas et al., 2023). SGPVs may be particularly beneficial in environments where access to traditional mental health services is limited. For individuals living in rural or underserved areas, SGPVs offer a scalable solution that can reach a broader audience, providing support for those who may otherwise fall through the cracks of the healthcare system.

Furthermore, the ability of SGPVs to provide discreet access to information on mental health topics allows individuals to engage with the material at their own pace, reducing the pressure often associated with seeking help in more traditional settings. This self-guided approach empowers individuals to explore their mental health concerns in a non-threatening manner, fostering a sense of autonomy and agency in their own care.

The findings also highlight the role of SGPVs in enhancing mental health literacy, which can improve self-management of psychological distress (Kutcher et al., 2016). Participants expressed that the SGPVs helped them recognise and understand their symptoms, as well as

learn coping strategies. Improving mental health literacy through psychoeducation can lead to better identification of distress and more informed decisions about when to seek further help. As individuals become more adept at recognising their own mental health needs, they may be more likely to engage in appropriate interventions, whether that be further psychoeducation, peer support, or more intensive therapeutic options when necessary (Ito-Jaeger et al., 2022).

Additionally, the culturally responsive design considerations highlighted in the pilot studies in this research suggest that SGPVs can be tailored to meet the needs of diverse populations, thereby enhancing their effectiveness as a low-intensity intervention. By ensuring that the content resonates with various cultural backgrounds, SGPVs can widen their reach and impact, promoting mental health literacy and support among underserved communities.

Overall, the implications of these findings highlight the potential of SGPVs as a valuable low-intensity intervention within the stepped care model. As mental health challenges continue to rise globally, integrating SGPVs into healthcare settings offers a promising approach to enhance mental health literacy, normalise help-seeking behaviours, and bridge gaps in care. Furthermore, by prioritising the needs, preferences, and cultural contexts of users, the findings from this research reinforce the significance of user-centred design in developing SGPVs as effective mental health resources.

Strengths and limitations

The research presented in this doctoral thesis exhibits several notable strengths and limitations. A significant strength is the rigorous methodological approach employed in the scoping review, which included systematic searches across multiple databases using predefined inclusion and exclusion criteria, as well as a dual decision-making process for study inclusion. This structured methodology effectively minimised bias and enhanced the credibility of the

findings. Additionally, the studies span a wide array of health settings and countries, capturing diverse patient populations across various ethnicities, ages, genders, income levels, and education levels, which increases the generalisability of the results. A further strength lies in the way the findings from the scoping review were used iteratively to inform the development of the SGPVs.

Another key strength lies in the iterative feedback process utilised in the qualitative pilot studies, where input from healthcare workers, cancer patients, and the general public contributed to a diversity of perspectives. The involvement of Māori participants and a Māori cultural advisor in the development of the video content ensured cultural relevance. This user-centred design process, where participants provided feedback on the videos to improve their content, was valuable in enhancing the acceptance of the SGPVs. Another notable strength was the mixed-methods approach, which combined qualitative pilot studies during the development phase of the videos with a quantitative survey to gather statistical data.

However, the research also has several limitations. The heterogeneity of the studies included in the scoping review such as differences in study designs, outcomes, health conditions, and target audiences, precluded the possibility of conducting a meta-analysis, thereby limiting the aggregation of results. In Study Three, the limited number of cancer patients recruited, particularly with only two participants (in addition to the patients from the Māori Cancer Support Group) restricts the generalisability of the findings to broader cancer populations, and the predominance of female participants further limits applicability to male cancer populations.

Concerns regarding generalisability also arise from the recruitment methods used in studies three and four, as reliance on online platforms may limit sample representativeness, potentially excluding individuals without access to digital resources or those who are less

technologically able. In Study Four, the recruitment of only 14 Māori participants restricted the ability to draw meaningful statistical conclusions regarding the acceptability and interest in the SGPVs among Māori. Similarly, although participants aged 50 years and over demonstrated lower acceptability and interest than younger participants, interpretation of this finding is limited by the relatively small number of participants aged 65 years and over. Consequently, participants were grouped into those aged under 50 years and those aged 50 years and over, which may have obscured meaningful variation within the older adult population. Moreover, the studies were not conducted in a naturalistic setting, such as a healthcare waiting room, making it difficult to ascertain whether participants would exhibit interest in and acceptance of the videos in a real-world context.

In summary, while the research demonstrates considerable strengths, including methodological rigor, a mixed-methods approach, and a user-centred design process, the identified limitations emphasise the need for caution in interpreting the findings and suggest avenues for future research.

Future research

The present programme of research was designed as a proof-of-concept evaluation of self-guided psychoeducational videos (SGPVs) as a low-intensity psychoeducational intervention for healthcare waiting rooms. Although Studies Two and Three sought feedback on individual videos to support iterative refinement, the objective was not to identify a preferred coping strategy or rank the videos. Instead, stakeholder feedback was used to optimise the intervention as a whole. Similarly, Study Four evaluated the overall acceptability and usefulness of the SGPVs as a collection of psychoeducational resources rather than as individual interventions.

Consequently, conclusions cannot be drawn regarding the relative acceptability or effectiveness of individual videos or coping strategies.

Future research could build on these findings by investigating whether particular demographic characteristics, health conditions, or mental health presentations are associated with preferences for specific psychoeducational strategies. For example, individuals experiencing anxiety may find diaphragmatic breathing or mindfulness strategies more relevant, whereas those experiencing symptoms of depression may show greater preference for behavioural activation strategies. Individuals experiencing chronic stress or caregiver burden may find problem-solving strategies especially useful, while those living with chronic illness may place greater value on videos promoting help-seeking behaviours and social support.

While the present research demonstrated that SGPVs are acceptable and engaging psychoeducational resources, future research should evaluate their effectiveness using more rigorous study designs, such as randomised controlled trials. This could include investigating whether exposure to SGPVs improves mental health literacy, coping self-efficacy, psychological distress, help-seeking behaviours, and quality of life compared with usual care or alternative educational approaches. Longitudinal research would also be valuable to determine whether repeated exposure to SGPVs leads to sustained improvements in coping behaviours and psychological well-being over time.

Future research should also investigate the development of tailored SGPVs for specific populations. The present findings suggest that psychoeducational resources may benefit from being adapted to reflect the unique experiences of groups such as cancer patients, Māori, culturally diverse communities, men, individuals living with chronic illness, and people with

varying levels of health literacy. Co-designing SGPVs with members of these communities and collaborating with local artists, cultural advisors, and healthcare professionals would help ensure that the content, imagery, language, and narratives authentically reflect the communities they are intended to serve.

The present findings also highlight the importance of examining age-related differences in greater detail. Future research should recruit larger samples across the adult lifespan and examine developmental groups such as adolescents and young adults, middle-aged adults, and adults aged 65 years and over. This would provide a more nuanced understanding of how engagement with self-guided psychoeducational videos changes across the lifespan and help determine whether the differences observed in the present study reflect a gradual age-related trend or are primarily driven by the oldest age groups. Such findings could inform the development of age-appropriate psychoeducational resources and implementation strategies that maximise engagement across different stages of adulthood.

Future research should also investigate the factors that influence engagement with self-guided psychoeducational videos. Although the present research demonstrated high levels of acceptability, understanding why some individuals choose to engage with psychoeducational resources while others do not will be important for maximising their reach and effectiveness. This could include exploring barriers such as perceived relevance, digital literacy, previous experiences with mental health services, privacy concerns, stigma, and the effort required to engage with self-guided interventions. Future studies could also investigate whether the public nature of healthcare waiting rooms influences willingness to engage with mental health-related content, particularly among older adults or individuals concerned about stigma. Identifying these

barriers may inform strategies to increase engagement, improve accessibility, and maximise the uptake of SGPVs across diverse populations.

Finally, further research is required to examine the implementation of SGPVs within routine healthcare practice. This could include evaluating different methods of delivering psychoeducational videos, such as continuous waiting room displays, QR codes, patient portals, or recommendations from healthcare professionals. Future implementation research should also examine organisational factors influencing the successful integration of SGPVs into healthcare settings, including clinician acceptability, workflow integration, technological requirements, and cost-effectiveness. Evaluating the impact of SGPVs in real-world healthcare settings will provide valuable evidence regarding their practical application, sustainability, and potential role within stepped-care models of mental health service delivery.

Overall, the findings from this programme of research demonstrate that SGPVs are a promising low-intensity psychoeducational intervention for healthcare waiting rooms. Future research should now move beyond establishing acceptability towards refining, personalising, evaluating, and implementing these interventions across diverse healthcare settings and populations. Such work has the potential to contribute to the development of accessible, culturally responsive, evidence-based psychoeducational resources that promote mental health literacy, facilitate early intervention, and improve psychological well-being.

Overall Conclusion

This doctoral research investigated the development, acceptability, interest and potential application of SGPVs as a low-intensity mental health intervention within healthcare waiting

room settings. Grounded in stepped care principles, narrative theory, and user-centred design, the thesis addressed a critical gap in mental health service delivery by exploring how brief, accessible, and scalable psychoeducational resources can be integrated into routine healthcare environments to support psychological well-being.

Across four interrelated studies, the research demonstrated that SGPVs are broadly acceptable and interesting to diverse stakeholders, including cancer patients, healthcare workers, Māori participants, and members of the general population. The findings suggest that narrative-based, animated psychoeducational content can engage viewers and provide practical coping strategies for managing psychological distress. Importantly, the research identified healthcare waiting rooms - particularly GP waiting rooms - as a viable and underutilised setting for delivering mental health education, transforming passive waiting time into an opportunity for education and engagement. This approach can not only enhance patient experience but also normalises conversations about mental health, encouraging individuals to seek help. The positive reception of SGPVs among younger populations suggests a possible cultural shift towards greater acceptance of digital mental health resources, indicating an opportunity to bridge the gap in access to support for those who may traditionally avoid seeking help.

The findings further highlight the importance of tailored content that resonates with specific demographic and cultural contexts. Participants expressed a strong preference for relatable narratives, humour, and visually engaging designs, which facilitate both comprehension and engagement. The integration of culturally relevant elements emerged as a factor for enhancing the acceptability of these videos.

This thesis advances understanding of how narrative-based animated psychoeducational videos can be used to teach coping strategies for psychological distress. To the author's knowledge, it represents one of the first bodies of work to apply a storytelling framework within short animated psychoeducational videos that focus on coping skill development. By integrating narrative theory, entertainment-education principles, and evidence-based coping strategies, the research offers a novel conceptual and practical model for the design of psychoeducational video interventions.

Methodologically, the thesis contributes through its iterative, multi-study, mixed-methods design. The integration of a scoping review, qualitative pilot studies, and a large-scale quantitative survey enabled findings to be integrated across multiple stakeholder groups. Importantly, insights from the early qualitative studies were used to directly inform video refinement prior to quantitative evaluation. This approach demonstrates the value of user-centred design principles in the development of digital mental health interventions.

The research also makes a meaningful contribution to culturally responsive mental health by prioritising Māori perspectives in the development of the SGPVs through collaboration with a Māori clinical psychologist and engagement with a Māori cancer support group. This research provides preliminary evidence supporting the acceptability of narrative-based, animated psychoeducational videos for Māori audiences, while also identifying important directions for future Māori-led and culturally embedded intervention development.

Finally, this thesis contributes to the positioning of SGPVs as a scalable, low-cost, mental health intervention that can complement existing services rather than replace them. The work provides a strong empirical foundation for future implementation studies, co-designed adaptations, and integration into stepped care pathways within primary healthcare.

In summary, the implementation of SGPVs represents a promising avenue for promoting mental health education. By utilising these digital interventions, healthcare environments can integrate mental health education that can help viewers manage psychological distress. As society continues to struggle with mental health challenges, the development and implementation of resources like SGPVs offer a pathway toward more accessible and engaging psychoeducational interventions. In a changing environment increasingly influenced by technology, embracing digital interventions can help bridge the gap in mental health care, ensuring that individuals receive the support they require, regardless of their circumstances.

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Appendices

APPENDIX ONE: CONSENT FORM FOR CANCER PATIENTS AND ONCOLOGY HEALTHCARE PROFESSIONALS



Learn while you wait: Engaging minds in the waiting room

CONSENT FORM

Thank you for considering taking part in this research. If you have any questions arising from the Information Sheet, please ask the researcher before you decide whether to join in.

- I have read and understand the information outlined in the Information Sheet.

- I understand that if I decide at any time before the research data collection that I no longer wish to participate in this project, I can notify the researchers involved and withdraw.

- I understand it may not be possible to withdraw my data after taking part.

- I understand that the outcomes of this study will be published as part of a dissertation.

- I understand if I would like to receive a copy of the result from the study, I will email the lead researcher.

Participant's Statement:

I _____ agree that the research project named above has been explained to me to my satisfaction and I agree to take part in the study. I have read both the notes written above and the Information Sheet about the project, and understand what the research study involves.

Signed Date

APPENDIX TWO: PHASE ONE PATIENT INFORMATION SHEET



Information Sheet

Developing Psychoeducational Animated Videos for Cancer Patients and their Whānau

Researcher introduction

Kia ora! My name is Chantel.

I am undertaking this research project to fulfill the requirements of my Ph.D. in Psychology.

The Supervisors of this project are Dr Don Baken, Dr Kirsty Ross, and Dr Niki Murray.

What is this study about?

This research project is seeking to find out whether animated videos about general psychological coping strategies that are shown on a TV screen in an oncology wait room are useful and acceptable to cancer patients and their whānau. Learning coping strategies might be useful for those who do not have access to or do not want to see a counsellor or psychologist. Before the videos are shown in an oncology wait room, it is important to know whether the videos are seen as useful and acceptable. This study aims to collect feedback from cancer patients, their families, carers, and oncology health care professionals about their opinions of the videos and whether they would like to see these kinds of videos in an oncology wait room.

What does the study involve?

If you decide you would like to take part in this research project, your role as a participant will be to watch the psychological educational videos at the beginning of the focus group discussions and provide feedback through an online group discussion via Microsoft Teams. You can expect the group to be small, about 3-4 people consisting of other individuals who have had a diagnosis of cancer. The focus group will take around an hour and a half (to watch the videos and group discussion). The group discussion will be led by myself, and I will be asking questions about what you thought of the videos. There are no right or wrong answers, we are simply interested in your opinions. Your feedback will be used to further develop or change the video content before the videos are shown on a TV screen in an oncology wait room. The focus groups will be arranged at a convenient time for the people involved depending on people's preferences.

Before joining the online discussion, you will be asked to complete a participant information form indicating personal details such as your name, age, gender, ethnicity, cancer type, and whether you are receiving or finished treatment. We will ensure that all information provided will be kept confidential and secure and will be accessible to only me and my supervisor.

What will happen to the results?

We will sound-record each focus group. The recordings will then be transcribed, and participants will be allowed to review the transcripts to correct any errors in the transcribing process regarding what they have said during the discussions, you are only able to make changes to your own comments in this review process. Our analysis will involve merging all the transcripts from each group that we run and looking for the common themes in what people have said. The results will be used to improve the video content. Once we have done this, we intend to produce a short article of the findings that we will publish in a peer-reviewed academic journal. The findings will also be a part of my Ph.D. dissertation.

Participant Rights

As a participant you have to right to:

- Withdraw from the study up until 2 weeks after the transcripts have been sent for review
- Ask any questions or raise any concerns you may have

- Decline to answer any particular question
- Be given access to a summary of the findings from the study if you request
- The right to confidentiality
- Ask for the recorder to be turned off at any time during the interview

CONTACT DETAILS:

Please feel free to contact me or my supervisors if you have any questions about this project:

Researcher

Chantel Fewtrell: chantel.fewtrell@gmail.com (Registered Nurse and Psychology Ph.D. student).

Supervisors

Dr. Don Baken: D.M.Baken@massey.ac.nz (Senior Clinical Psychologist and Research Coordinator).

Dr. Kirsty Ross K.J.Ross@massey.ac.nz (Senior Clinical Psychologist & Senior Lecturer).

Dr. Niki Murray N.S.Murray@massey.ac.nz (Senior Lecturer in Communication).

Support Services

Māori Cancer coordinators provide advice and support to people receiving care and services at MidCentral Health.

Māori Cancer Co-ordinators:

Best Care (Whakapai Hauora) Charitable Trust - Palmerston North City area
Phone: (06) 353 6385.

Raukawa Whānau Ora - Horowhenua / Ōtaki area
Phone: (06) 368 8678

Rangitāne o Tamaki nui a Rua - Danneverke and Tararua area
Phone: (06) 374 6860

Te Wakahuia Manawatū Trust - Palmerston North and Manawatu
Phone: (06) 357 3400

The Cancer Society in Palmerston North supports people with cancer and their whānau in the Manawatu region.
Phone: (06) 356 5355

This project has been reviewed and approved by the Massey University Human Ethics Committee: Southern A, Application 22/26. If you have any concerns about the conduct of this research, please contact Dr Negar Partow, Chair, Massey University Human Ethics Committee: Southern A, telephone 04 801 5799 x 63363, email humanethicsoutha@massey.ac.nz

APPENDIX THREE: ONCOLOGY HEALTH CARE PROFESSIONAL INFORMATION SHEET



Information Sheet

Creating Educational Animated Videos for Cancer Patients and their Whānau

Researcher introduction

Kia ora! My name is Chantel.

I am undertaking this research project to fulfill the requirements of my Ph.D. in Psychology.

The Supervisors of this project are Dr Don Baken, Dr Kirsty Ross, and Dr Niki Murray.

What is this study about?

This research project is seeking to find out whether animated videos about psychological coping strategies that are shown on a TV screen in an oncology wait room are useful and acceptable to cancer patients and their whānau. Learning coping strategies might be useful for those who do not have access to or do not want to see a counsellor or psychologist. Before the videos are shown in an oncology wait room, it is important to know whether the videos are seen as useful and acceptable. This study aims to collect feedback from cancer patients, their families, carers,

and oncology health care professionals about their opinions of the videos and whether they would like to see these kinds of videos in an oncology wait room.

What does the study involve?

If you decide you would like to take part in this research project, your role as an oncology health care professional participant will be to watch the psychological educational videos at the beginning of the focus group discussions and provide feedback through an online group discussion via zoom. You can expect the group to be small, about 3-4 people consisting of other health care professionals and it will take around an hour and a half (to watch the videos and group discussion). The group discussion will be led by myself, and I will be asking questions about what you thought of the videos. There are no right or wrong answers, we are simply interested in your opinions. Your feedback will be used to further develop or change the video content before the videos are shown on a TV screen in an oncology wait room. The focus groups will be arranged at a convenient time for the people involved depending on people's preferences. If the focus groups take place during work hours, it will be up to you to ask for permission from your manager to participate in the research.

Before joining the online discussion, you will be asked to complete a participant information form indicating personal details such as your name, age, gender, ethnicity, and professional discipline. We will ensure that all information provided will be kept confidential and secure and will be accessible to only me and my supervisor.

What will happen to the results?

We will sound-record each focus group. The recordings will then be transcribed, and participants will be allowed to review the transcripts to correct any errors in the transcribing process regarding what they have said during the discussions, you are only able to make changes to your own comments in this review process. Our analysis will involve merging all the transcripts from each group that we run and looking for the common themes in what people have said. The results will be used to improve the video content. Once we have done this, we intend to produce a short article of the findings that we will publish in a peer-reviewed academic journal. The findings will also be a part of my Ph.D. dissertation.

Participant Rights

As a participant you have the right to:

- Withdraw from the study up until 2 weeks after the transcripts have been sent for review
- Ask any questions or raise any concerns you may have
- Decline to answer any particular question
- Be given access to a summary of the findings from the study if you request
- The right to confidentiality
- Ask for the recorder to be turned off at any time during the interview

CONTACT DETAILS:

Please feel free to contact me or my supervisors if you have any questions about this project:

Researcher

Chantel Fewtrell: chantel.research@gmail.com (Registered Nurse and Psychology Ph.D. student).

Supervisors

Dr. Don Baken: D.M.Baken@massey.ac.nz (Senior Clinical Psychologist and Research Coordinator).

Dr. Kirsty Ross K.J.Ross@massey.ac.nz (Senior Clinical Psychologist & Senior Lecturer).

Dr. Niki Murray N.S.Murray@massey.ac.nz (Senior Lecturer in Communication).

Support Services

Māori Cancer coordinators provide advice and support to people receiving care and services at MidCentral Health.

Māori Cancer Co-ordinators:

Best Care (Whakapai Hauora) Charitable Trust - Palmerston North City area
Phone: (06) 353 6385.

Raukawa Whānau Ora - Horowhenua / Ōtaki area
Phone: (06) 368 8678

Rangitāne o Tamaki nui a Rua - Danneverke and Tararua area
Phone: (06) 374 6860

Te Wakahuia Manawatū Trust - Palmerston North and Manawatu
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Phone: (06) 356 5355

This project has been reviewed and approved by the Massey University Human Ethics Committee: Southern A, Application 22/26. If you have any concerns about the conduct of this research, please contact Dr Negar Partow, Chair, Massey University Human Ethics Committee: Southern A, telephone 04 801 5799 x 63363, email humanethicsoutha@massey.ac.nz

APPENDIX FOUR: FOCUS GROUP QUESTIONS

Questions after each video:

Did you identify with any of the characters in the video?

Did you feel like the imagery in the videos reflected New Zealand?

Could you easily follow the storyline?

Did you find the video engaging?

Did you understand the underlying educational message of the video?

Do you have any suggestions about how the video could be improved?

General questions at the end:

What did you like about the videos?

What did you not like about the videos?

Are there any topics that you think will be useful to cover?

Do you have any general feedback about the videos?

Would you like to see these videos in an oncology waiting room setting?

APPENDIX FIVE: ADVERTISEMENT FOR CANCER PATIENTS

MASSEY UNIVERSITY
TE KUNENGA KI PŪREHUROA
UNIVERSITY OF NEW ZEALAND

Would you like to help others affected by cancer?

Kia ora! My name is Chantel.

I am looking for individuals who have a recent diagnosis of cancer, their whānau, and caregivers to participate in my PhD research project.

My research is seeking to find out whether common psychological coping strategies delivered through a digital animated video format are acceptable and useful to individuals with cancer and their families.

Participating in this research involves watching animated videos that teach psychological coping strategies (only a few mintues long) and providing feedback through an online discussion which will take approximately 60 minutes to complete.

If you would like to participate please contact me at **chantel.research@gmail.com.**

Thank you for your support!



SCAN ME

APPENDIX SIX: CONSENT FORMFOR PROLIFIC PARTICIPANTS

MASSEY UNIVERSITY
TE KUNENGA KI PŪREHUROA
UNIVERSITY OF NEW ZEALAND

Learn while you wait: Engaging minds in the waiting room

CONSENT FORM

Thank you for considering taking part in this research. If you have any questions arising from the Information Sheet, please ask the researcher before you decide whether to join in.

- I have read and understand the information outlined in the Information Sheet.
- I understand that I can withdraw from the study up until the transcripts have been reviewed.
- I understand it may not be possible to withdraw my data after taking part.
- I understand that the outcomes of this study will be published as part of a dissertation and a peer reviewed article.
- I understand if I would like to receive a copy of the results from the study, I will email the lead researcher.

Participant's Statement:

I _____ agree that the research project named above has been explained to me to my satisfaction and I agree to take part in the study. I have read both the notes written above and the Information Sheet about the project, and understand what the research study involves.

Signed Date

APPENDIX SEVEN: INTERVIEW QUESTIONS FOR PROLIFIC PARTICIPANTS

General interview questions

Questions after each video:

Did you identify with any of the characters in the video?

Did you feel like the imagery in the videos reflected New Zealand?

Could you easily follow the storyline?

Did you find the video engaging?

Did you understand the underlying educational message of the video?

Do you think this video will be useful to patients and their families?

Do you have any suggestions about how the video could be improved?

General questions at the end:

What did you like about the videos?

What did you not like about the videos?

Are there any topics that you think will be useful to cover?

Do you have any general feedback about the videos?

Would you like to see these videos in a GP waiting room setting?

APPENDIX EIGHT: SURVEY

MASSEY UNIVERSITY
TE KUNENGA KI PŪREHUROA
UNIVERSITY OF NEW ZEALAND

School of Psychology

Information page

MASSEY UNIVERSITY
TE KUNENGA KI PŪREHUROA
UNIVERSITY OF NEW ZEALAND



Learn while you wait: Engaging minds in the waiting room

Information Sheet

Researcher introduction

Kia ora! My name is Chantel.

I am undertaking this research project to fulfill the requirements of my Ph.D. in Psychology.

The Supervisors of this project are Dr Don Baken, Dr Kirsty Ross, and Dr Niki Murray.

What is this study about?

Mental health concerns affect individuals from all walks of life, yet not everyone has access to professional counselling or psychological services for various reasons. This research project is seeking to find out whether animated videos about general psychological coping strategies that are shown on a TV screen in a General Practice waiting room are useful and acceptable to patients and their whānau. Learning coping strategies might be useful for those who do not have

access to or do not want to see a counsellor or psychologist. Before the videos are shown in a waiting room, it is important to know whether the videos are seen as useful and acceptable. This study aims to collect feedback from people to see whether they would like to see these kinds of videos in a General Practice waiting room.

What does the study involve?

If you decide you would like to take part in this research project, your role as a participant will be to provide feedback about what you thought of the animated videos via a survey. Before completing the survey, you will also be asked some screening questions about your current level of distress and your comfort level with understanding health-related information. We will ensure that all information provided will be kept confidential and secure and will be accessible only to me and my supervisors.

What will happen to the results?

We intend to produce a short article on the findings that we will publish in a peer-reviewed academic journal. The findings will also be a part of my Ph.D. dissertation.

Participant Rights

As a participant, you have to right to:

- Withdraw from the study up until you have completed the survey.
- Ask any questions or raise any concerns you may have.
- Be given access to a summary of the findings from the study if you request.
- The right to confidentiality.

Contact information

If you have any questions or queries regarding this project, please don't hesitate to contact the following:

Researcher

Chantel Fewtrell (Registered Nurse and Psychology PhD. candidate)
School of Psychology
Massey University
Palmerston North
New Zealand
Email: Chantel.Fewtrell.1@uni.massey.ac.nz

Supervisors

Dr. Don Baken: D.M.Baken@massey .ac.nz (Senior Clinical Psychologist and Research Coordinator).
Dr. Kirsty Ross K.J.Ross@massey.ac.nz (Senior Clinical Psychologist & Senior Lecturer).
Dr. Niki Murray N.S.Murray@massey.ac.nz (Senior Lecturer in Communication).

This project has been evaluated by peer review and judged to be low risk. Consequently, it has not been reviewed by one of the University's Human Ethics Committees. The researcher(s) named in this document are responsible for the ethical conduct of this research.

If you have any concerns about the conduct of this research that you want to raise with someone other than the researcher(s), please contact the Research Ethics Office, email humanethics@massey.ac.nz.

Consent

Respondent Consent

Thank you for participating in this questionnaire.
Your participation implies consent.
You have the right to decline to answer any particular question.

I have read and understood the information sheet for this study and consent to collection of my responses.
(Please click on the 'Yes' choice if you wish to proceed.)

- ○ Yes
- ○ No

Record participant IDs

Please enter your Prolific ID:

$ (Braun & Clarke)

Demographics

Please enter your age in years.
(as a number)

What is your gender?

- ○ Male
- ○ Female
- ○ Prefer to self-describe

Which ethnic group do you belong to?
(Please select all that apply).

- [ ] NZ European
- [ ] Māori
- [ ] Samoan
- [ ] Cook Islands Māori
- [ ] Tongan
- [ ] Nuiean
- [ ] Chinese
- [ ] Indian
- [ ] Other (please state) _____
- [ ] Prefer not to say

Please state your highest level of education

- ○ Primary school
- ○ Secondary school
- ○ Undergraduate university qualification
- ○ Postgraduate university qualification
- ○ Trade qualification (e.g. electrician, plumber, builder)
- ○ Other (please state) _____
- ○ Prefer not to say

Health literacy (HL)

How often do you have someone (like a family member, friend, hospital/clinic worker or caregiver) help you read hospital materials?

- ○ None of the time
- ○ A little of the time
- ○ Some of the time
- ○ Most of the time
- ○ All of the time

How often do you have problems learning about your medical condition because of difficulty understanding written information?

- None of the time
- A little of the time
- Some of the time
- Most of the time
- All of the time

How confident are you filling out forms by yourself?

- None of the time
- A little of the time
- Some of the time
- Most of the time
- All of the time

Perceived stress scale (PSS)

In the last month, how often have you been upset because of something that happened unexpectedly?

- Never
- Almost never
- Sometimes
- Fairly often
- Very often



In the last month, how often have you felt that you were unable to control the important things in your life?

Never

Almost never

Sometimes

Fairly often

Very often

In the last month, how often have you felt nervous and stressed?

Never

Almost never

Sometimes

Fairly often

Very often

In the last month, how often have you felt confident about your ability to handle your personal problems?

- Never
- Almost never
- Sometimes
- Fairly often
- Very often

In the last month, how often have you felt that things were going your way?

- Never
- Almost never
- Sometimes
- Fairly often
- Very often

In the last month, how often have you found that you could not cope with all the things that you had to do?

- Never
- Almost never
- Sometimes
- Fairly often
- Very often

In the last month, how often have you been able to control irritations in your life?

- Never
- Almost never
- Sometimes
- Fairly often
- Very often

In the last month, how often have you felt that you were on top of things?

Never

Almost never

Sometimes

Fairly often

Very often

In the last month, how often have you been angered because of things that happened that were outside of your control?

Never

Almost never

Sometimes

Fairly often

Very often

In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?

- Never
- Almost never
- Sometimes
- Fairly often
- Very often

Reflecting on the past few years, how often have you experienced significant feelings of distress?

- Never
- Almost never
- Sometimes
- Fairly often
- Very often

Video header

Psycho-educational videos

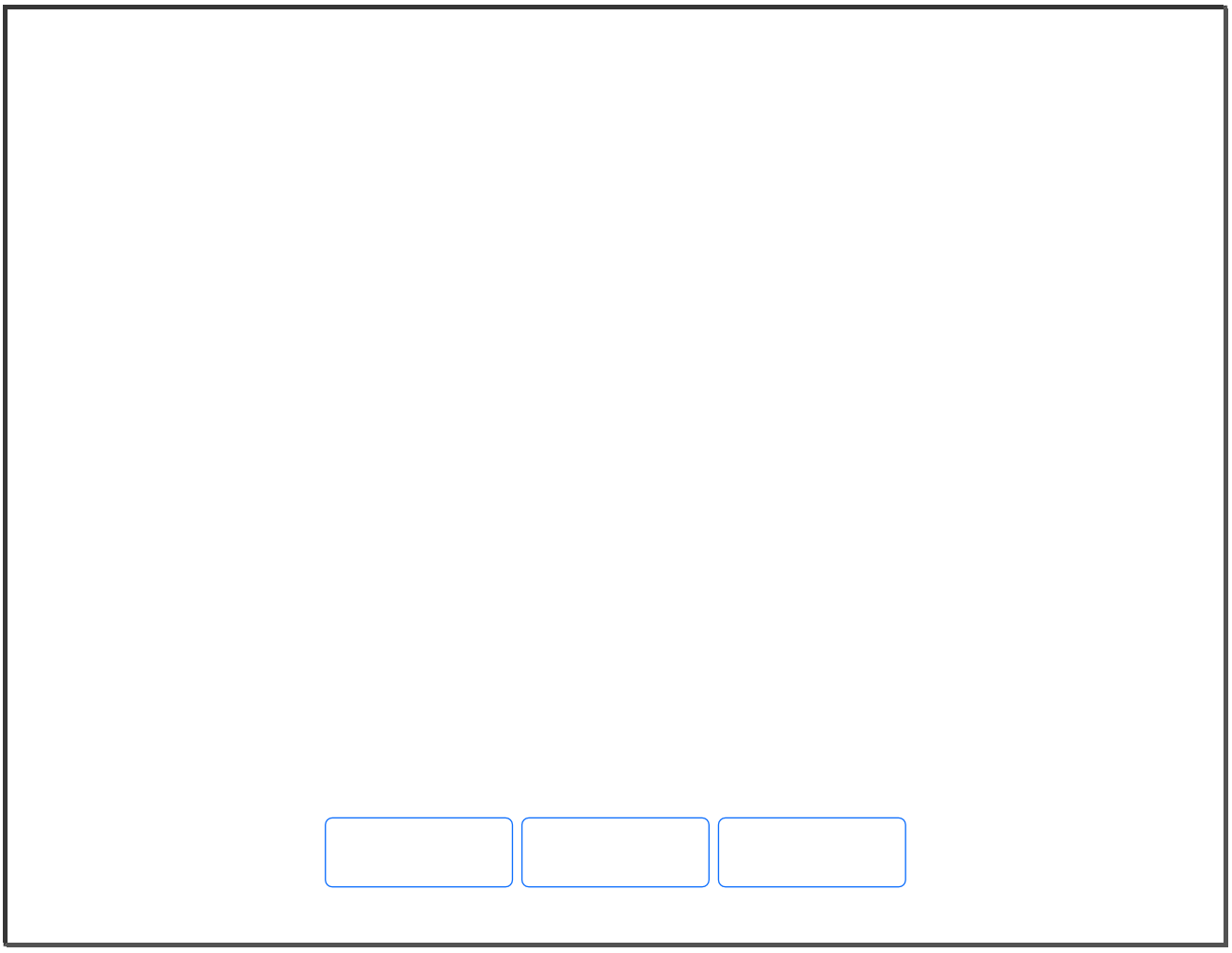
Next, you will watch three short psychoeducational videos (2-5 minutes long). The videos aim to teach coping strategies for general psychological distress. After watching the

videos, you will be asked some questions about what you thought of the videos.

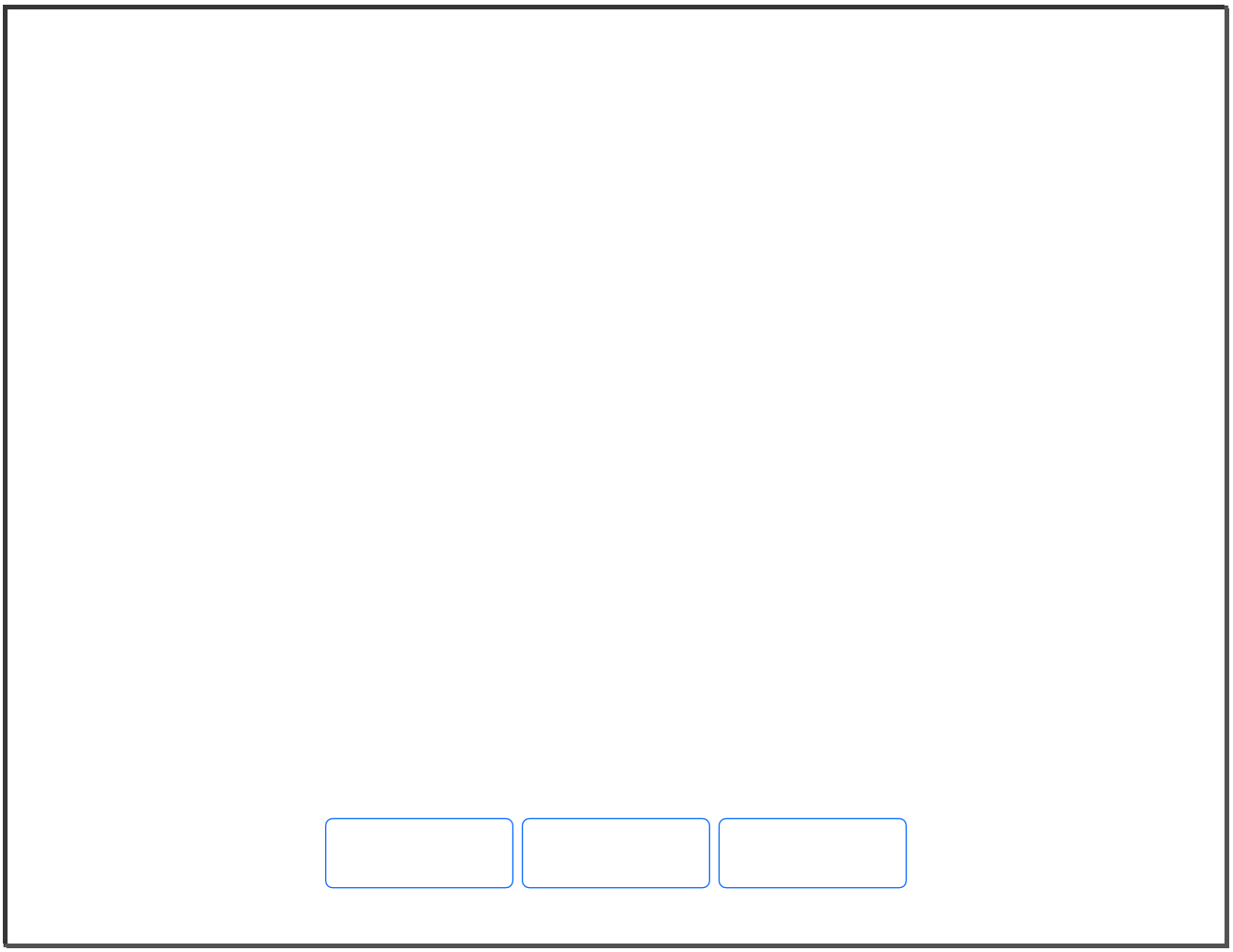
When the video screen appears, please click on the 'Play' arrow to start the video. Please click 'Unmute' to enable sound for the video.

Please be aware that you will not be able to advance to the next section until the video has finished playing. We encourage you to watch the entire video, as it will help you answer the questions that follow. Thank you for your patience!

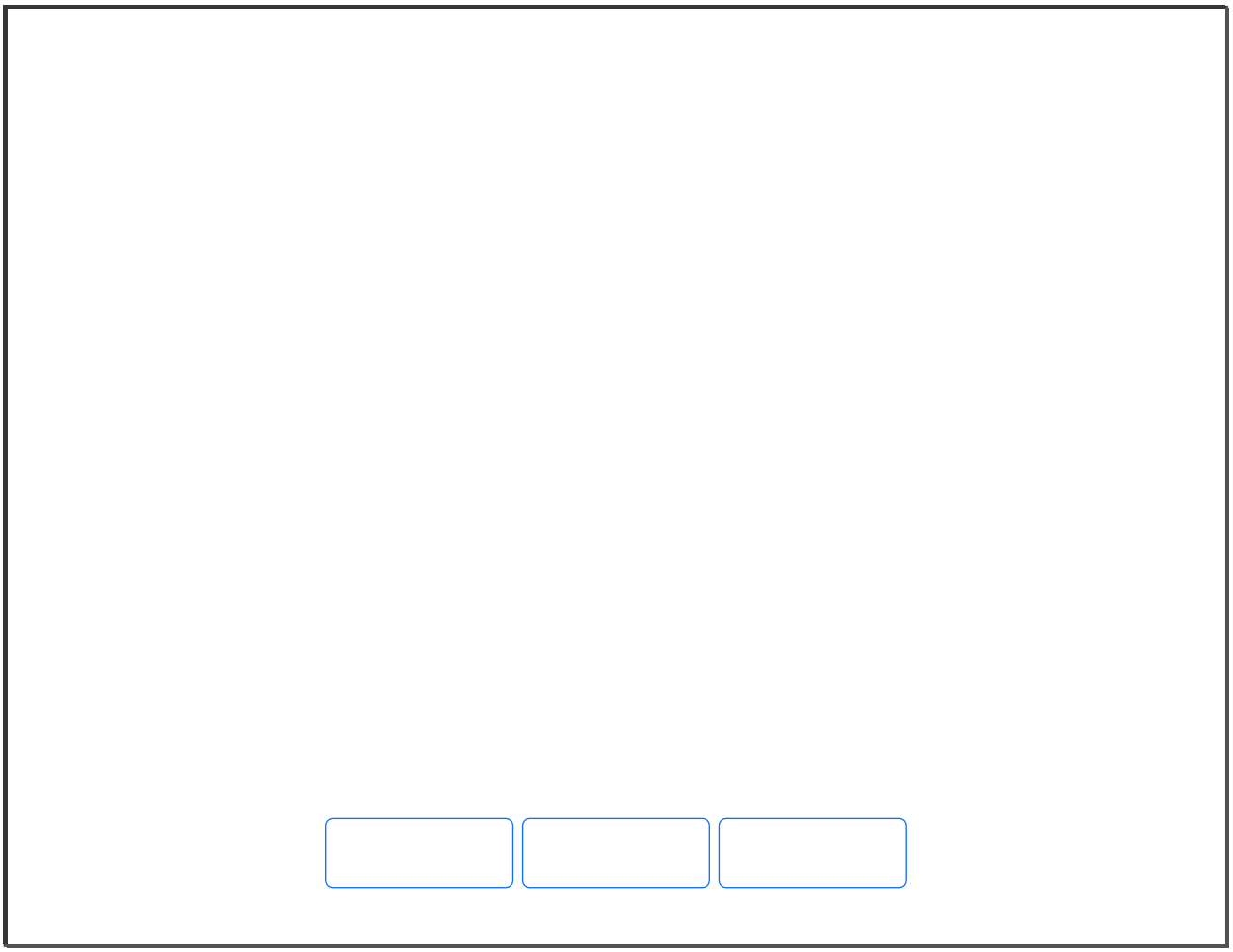
Video - Asking for help



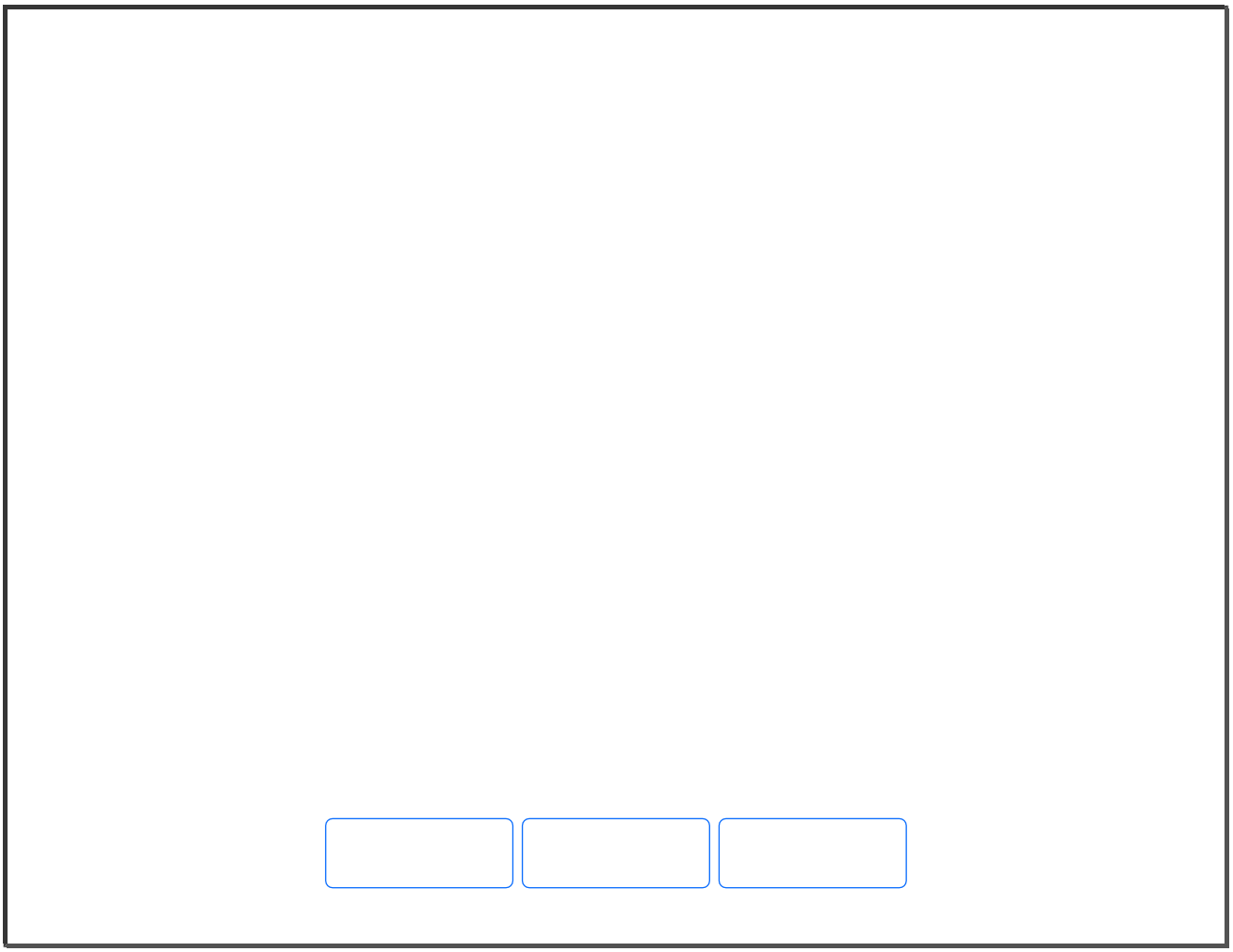
Video - Problem solving



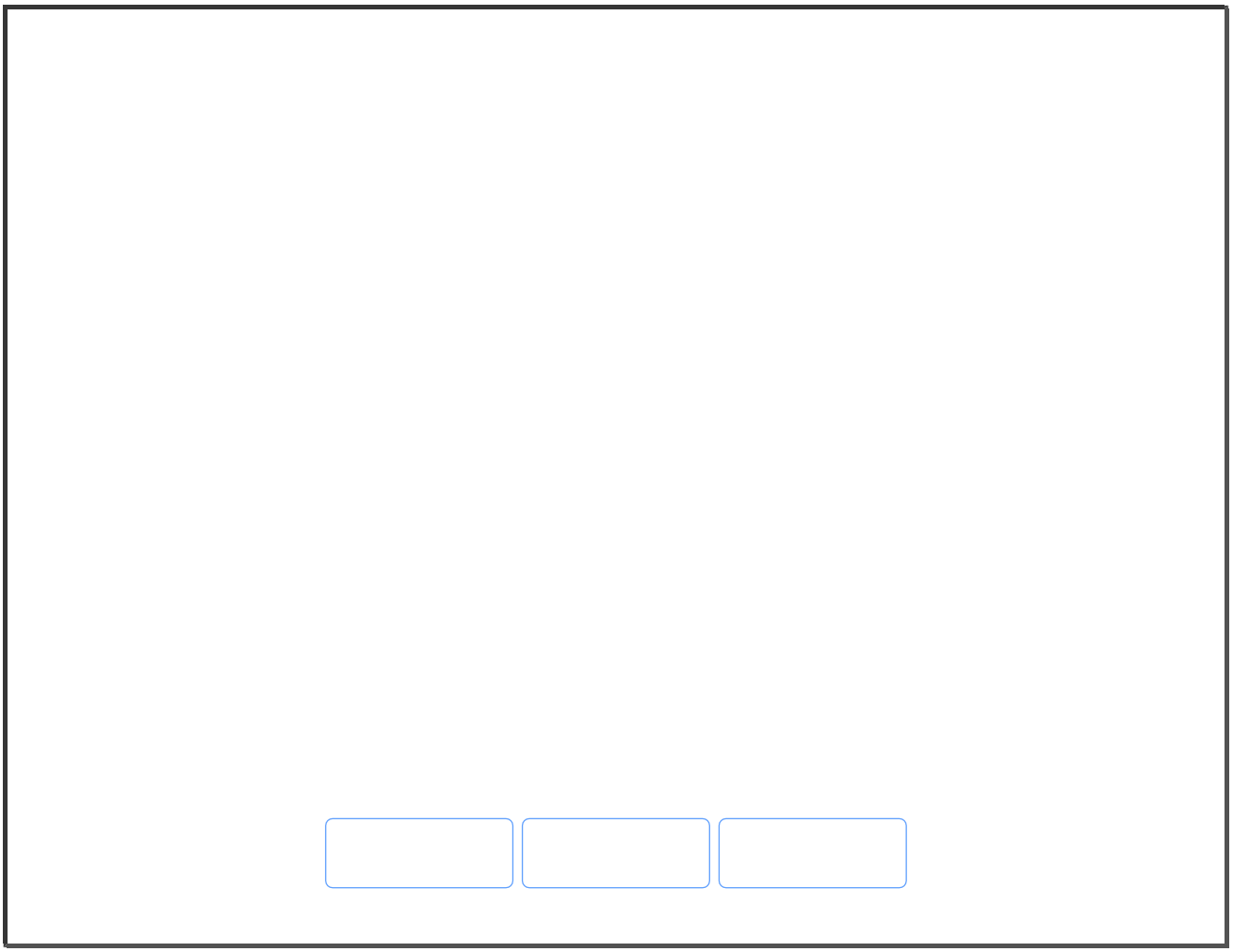
Video - Mindfulness



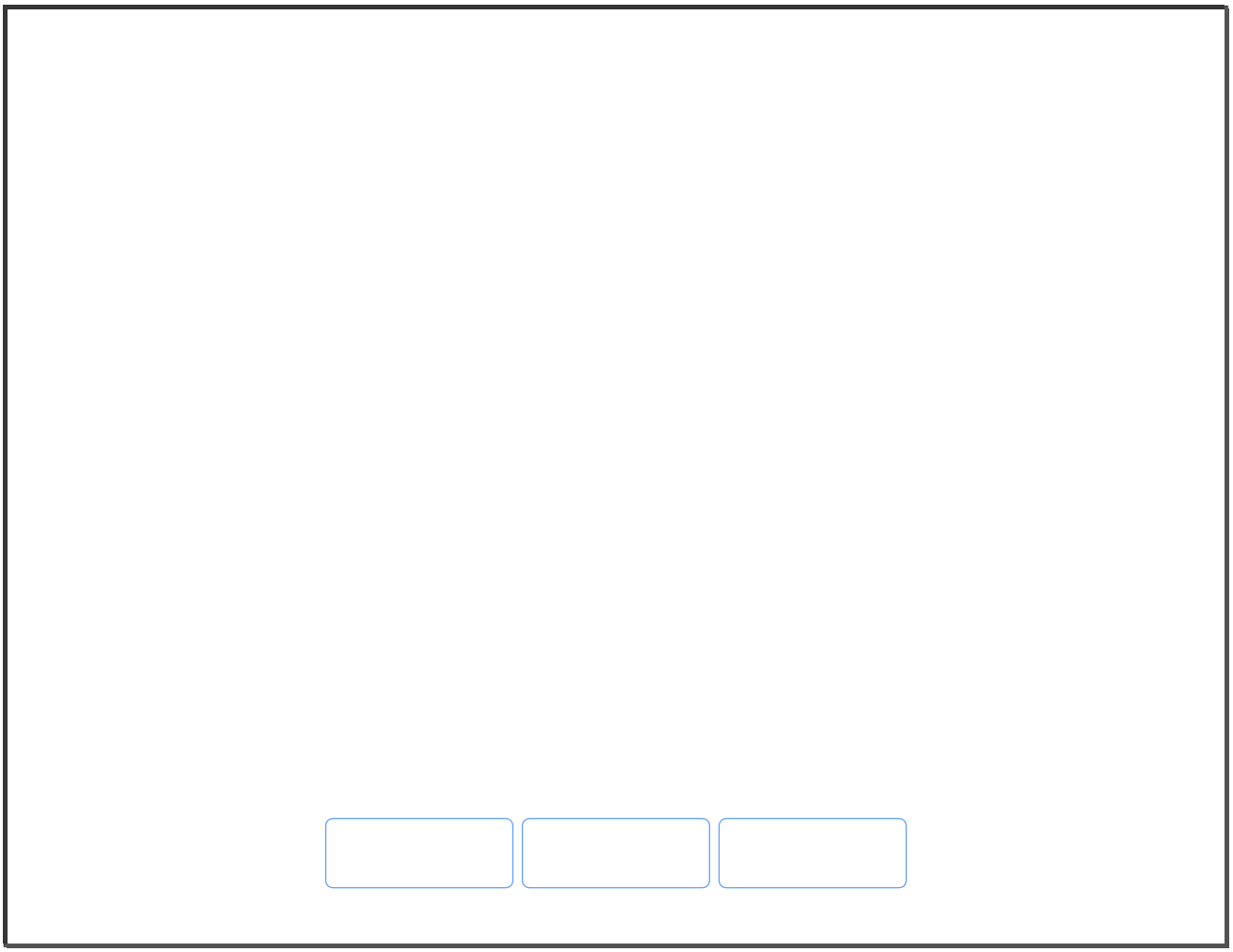
Vid - Deep breathing



Video - Behavioural activation



Video - Savouring



Theoretical framework of acceptability (TFA)

Did you like or dislike the strategies in the videos?

Strongly dislike

Dislike

No opinion

Like

Strongly like



Do you think it will take much effort to engage in the strategies suggested in the videos?

- No effort at all
- A little effort
- No opinion
- A lot of effort
- Huge effort

There are moral or ethical consequences to engaging with the strategies suggested in the videos.

- Strongly disagree
- Disagree
- No opinion
- Agree
- Strongly agree

It is clear to me how the strategies in the videos will help people.

Strongly disagree

Disagree

No opinion

Agree

Strongly agree

I think engaging in the strategies suggested in the videos will interfere with my other priorities.

Strongly disagree

Disagree

No opinion

Agree

Strongly agree

I think the strategies in the videos will help people cope better.

Strongly diagree

Disagree

No opinion

Agree

Strongly agree

How confident do you feel you could do the strategies suggested in the videos?

Very unconfident

Unconfident

No opinion

Confident

Very confident

How acceptable were the strategies in the videos to you?

Completely unacceptable

Unacceptable

No opinion

Acceptable

Completely acceptable

I would be interested in watching similar videos while I wait for my health appointment at the GP.

Strongly disagree

Disagree

Neutral

Agree

Strongly agree

Support pages

Thank you for taking the time to complete our survey.

If you find that you need additional support or someone to talk to about your experiences

or feelings, we encourage you to explore some of the counseling support services listed below.

Trained professionals are here to help you navigate any challenges you may be facing. Please don't hesitate to reach out for assistance.

Counselling and Wellbeing Support Services

If you feel you would like some counselling or extra support with your wellbeing we encourage you visit your doctor or health clinic to check in with where you're at, and make some plans for longer term support. Your GP can help you access low-cost counselling services, or access WINZ for funding for counselling.

Your employer may be able to connect you with Employee Assistance Programme, through which you can access free or low-cost counselling.
If you are a University Student, you may be eligible for free or subsidised counselling through Student Health. We encourage you to phone your student health clinic to chat with a GP or Nurse, and see what other help is out there for you.

The below services are free, and available to you now:

Puawaitanga

- Individual counselling over the phone for support with anxiety, low mood, relationships, grief, stress and general wellbeing. They offer free, phone-based counselling for 12 months. Available 9am-9pm every day.
- Call at 0800 782 999, email support@puawaitanga.nz to set up your first session.

Need to Talk?

- Free call or text 1737 at any time for support from a trained counsellor

Gumboot Friday Free Counselling (Under 25s)

You can find a counsellor through gumboot Friday at the below link, for face-to-face or digital counselling, for free for persons 25 or younger.
https://www.gumbootfriday .org.nz/get-a-counsellor

Lifeline Aotearoa

- 0800 543 354
- Free telephone counselling, available any day, any time.

Youthline

- 0800 376 633, or free txt 234, or email talk@youthline.co.nz

The Lowdown

- Text 5626, for support to help young people understand depression or anxiety

The Depression Helpline

- 0800 111 757, or free text 4202, to talk to a counsellor about how you're feeling

Samaritans

- You can call at any time of day 0800 72 66 66
- People on the phone will talk to you and help with feelings of loneliness, depression, despair, distress, suicidal feelings.

Anxiety Trust

- 0800 269 4389
- Phone support for people experiencing anxiety. Can connect people with support groups (free), counselling (may cost).

St John Caring Caller Programme

- 0800 780 780
- A free telephone friendship service, for people who are feeling lonely, and live alone. Volunteers phone regularly to check that things are ok, and have a chat.

Rural Support Trust

- 0800 787 254
- A free 24/7 support line for people living rurally, needing to talk about health and wellbeing, and the pressures of living rurally

A more comprehensive list of services in your area, specific to your individual needs can be found below, though not all services provide counselling, and not all counselling provided is free:
https://blog.opencounseling.com/hotlines-nz/

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Chantel

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