A Preliminary Exploration of the Feasibility and Acceptability of a Telephone-Based Mental Health Intervention for a Clinical Sample of Adults Aged 65+

by

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Abstract

Mental health problems (depression, anxiety) and psychosocial challenges (loneliness, social isolation) are commonly experienced by Canadian older adults. Few programs target the combined experiences of these mental health and psychosocial challenges. The CONNECT Program is a novel six-session group-based telephone intervention that utilizes principles of acceptance and commitment therapy (ACT) to help older adults better understand themselves and these challenges. Before offering this program to this clinical population, we must evaluate the acceptability of The CONNECT Program for a clinical sample of older adults. A single group pre-post exploratory study was conducted to (1) evaluate the study design and procedures, (2) understand participant experiences in this program, (3) explore the preliminary effectiveness of this program in this sample. Participants ($N = 3$) were recruited with the help of geriatric mental health professionals in Manitoba. Participants completed telephone questionnaires before, during, and after the program. The study design and procedures were evaluated through documenting recruitment, dropout, and the administration of study components (e.g., screening, questionnaires). Reflexive thematic analysis was used to analyze participant responses to open-ended questions about their experience of the program. Changes in mental health symptoms were analyzed by comparing responses to self-report measures completed before and after the program. Challenges with recruitment and dropout were observed, but the study procedures were executed as anticipated. Themes derived from the qualitative analysis of participant experiences centered around elements participants appreciated about the program (support and connection, comfort and convenience, relevant material, facilitation), and elements to improve (missing visual information, left wanting more, challenges maintaining consistency). Themes captured changes that participants identified in themselves throughout the program (attention to the

present moment, acceptance, self-compassion, goal setting), and perceptions of what led to these changes (group discussion, engagement with the material). Participants provided qualitative and quantitative feedback on what they would change about the program. Overall trends of improvement in mental health symptoms (anxiety, depression, psychological flexibility) were observed; However, research with a larger clinical sample is needed to further explore these trends. Future directions include testing this program using a larger clinical sample and modifying the program to fit their needs.

Keywords: older adults, anxiety, depression, social isolation, loneliness, acceptance and commitment therapy

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Statistics Canada projects that from 2009 to 2036, the number of Canadians over the age of 65 (referred to as "older adults" in this research) will double from 4.7 million persons to between 9.9 and 10.9 million persons (Statistics Canada, 2015; Statistics Canada, 2016). Furthermore, recent projections suggest that by 2068, the proportion of the Canadian population aged 65 and older will reach between 21.4% and 29.5%, when in comparison, 17.2% of Canadians were 65 and older in 2018 (Statistics Canada, 2019). In response to population aging, research investigating new ways to meet the health-related needs of older adults is needed to help individuals age successfully (i.e., having higher life satisfaction, fulfilling personal goals, and maintaining personal standards) (Freund, 2008; Palmore, 1979). These health-related needs include having services and programs that aim to address mental health problems that this age group experiences, such as anxiety and depression. In addition to mental health problems, there is a need for services that address psychosocial problems older adults experience, such as feeling socially isolated and lonely. Interventions that aim to address these challenges must be evaluated repeatedly before being offered to these populations. The current research explores the suitability of an intervention, called The CONNECT Program, through the eyes of a clinical sample of older adults. The **CONNECT** Program stands for: **C**reating **O**pportunities to build social **N**etworks, learn **N**ew skills to manage challenging emotions, **E**nhance mindful awareness and acceptance of emotions, & increase self-**C**ompassion, through **T**elephone-based group programming. This six-week telephone program focuses on mental health problems (i.e., symptoms of anxiety and depression) and experiences of social isolation and loneliness in a group format. The CONNECT Program was previously evaluated in a community sample of

older adults. The current research evaluates The CONNECT Program in a clinical sample of older adults with elevated symptoms of anxiety and depression (when compared to a community sample), to explore if this program could be suitable and acceptable for this sample. This clinical sample of older adults was recruited from geriatric mental health professionals across Manitoba. This research is the first step in evaluating the potential suitability of The CONNECT Program in a clinical sample. The findings of this research, presented below, offer suggestions for future directions for evaluation of The CONNECT Program.

In the following sections, I will outline the relevant literature surrounding mental health problems and psychosocial challenges faced by older adults. An overview of current interventions that exist for these problems, and gaps in services for these problems will be provided. The CONNECT Program will then be explained in detail and research on the separate elements that this program combines (group therapy, telephone therapy, ACT) will be outlined. An explanation regarding how this research contributes to existing research testing ACT-based interventions in a group format, over the telephone, and with older adults is provided. Next, I will explain the importance of program evaluation and how this relates to the current exploration of The CONNECT Program with this clinical sample. The remaining sections outline the research objectives, hypotheses, methods, results, conclusions, limitations, and future directions for this research.

Mental Health Problems in Older Adults

Depression and Anxiety

Mental health problems, such as anxiety and depression, are commonly experienced by older adults. Overall, depression is less prevalent among older adults when compared to younger adults (Fiske et al., 2009). With that said, in a sample of U.S. adults aged 55+, 6.8% reported a

mood disorder in the past year and 11.4% reported an anxiety disorder in the past year (Reynolds et al., 2015). Anxiety disorders and depression in older adults are highly comorbid (Wolitzky-Taylor et al., 2010). Research suggests that the onset and maintenance of depression later in life can be understood as, "an interaction between certain vulnerabilities, including genetic factors, cognitive diathesis and age-related neurobiological changes, and the types of stressful events that occur with greater frequency in late life than earlier in the lifespan" (Fiske et al., 2009, p. 5). Specific risk factors for depression in older adults include chronic disease (e.g., diabetes, heart failure), organic brain disease (e.g., dementia, stroke), endocrine and metabolic disorders (e.g., thyroid disease), and psychosocial factors (e.g., social isolation, bereavement and loss, history of depression) (Rodda et al., 2011). Other risk factors include poor self-perceived health, functional disability, personality traits (e.g., external locus of control, neuroticism), inadequate coping strategies, previous psychopathology, smaller network size, qualitative aspects of social networks (e.g., lack of support, loneliness, not satisfied with friendships), being unmarried, female gender, and stressful life events (e.g., negative life events in childhood, traumatic events) (Vink et al., 2007). Similar risk factors have been identified for anxiety disorders in older adults, such as specific personality traits, inadequate coping strategies, previous psychopathology, qualitative aspects of social network, stressful life events, and female gender (Vink et al., 2007). In addition to experiencing symptoms of anxiety and depression that meet a clinical cutoff (i.e., meeting the diagnostic criteria), some older adults experience subsyndromal levels of depression and anxiety. Subsyndromal depression involves, "elevated depressive symptoms that do not meet diagnostic criteria for major depressive disorder" (Laborde-Lahoz et al., 2015, p. 677). Subsyndromal depression and anxiety can impair daily functioning and are often associated with significant distress (Rivas-Vasquez et al., 2004; Soleimani et al., 2016). A nationally

representative U.S. sample of adults over the age of 55 revealed that 13.8% of older adults met criteria for subsyndromal depression and 13.7% met criteria for major depressive disorder (Laborde-Lahoz et al., 2015). Other research suggests that subsyndromal depression is at least two to three times more prevalent than major depressive disorder in older adults (Meeks et al., 2010). Older adults with subsyndromal depression are at increased risk for developing major depressive disorder and anxiety disorders (Laborde-Lahoz et al., 2015; Meeks et al., 2010). Additionally, subsyndromal depression in older adults is associated with increased use of healthcare services, disability, cognitive impairment, physical health decline, and increased suicidal ideation (Laborde-Lahoz et al., 2015; Meeks et al., 2010). This reinforces why it is important to detect and provide treatment to individuals experiencing these symptoms of anxiety and depression, even if they do not meet the clinical cutoff. Clearly, older adults experience symptoms of anxiety and depression, and it is therefore important to evaluate interventions that may have the potential to help this population understand these experiences and manage these symptoms. The current research evaluated The CONNECT Program in a clinical sample of older adults endorsing symptoms of anxiety and depression. This research is also timely considering the ways in which the COVID-19 pandemic has impacted the mental health and wellbeing of older adults.

The COVID-19 Pandemic and Mental Health Problems Among Older Adults

During the COVID-19 pandemic, restrictions such as physical distancing were implemented to help protect the health of at-risk populations, such as older adults, who are more susceptible to symptomatic COVID-19 (Kang & Jung, 2020). Unfortunately, there are negative consequences associated with prolonged isolation and other pandemic-related stressors. Amidst the pandemic in June 2020, U.S. research indicated that 23% of older adults reported mild levels

of depression, 12.8% reported moderate to severe levels of depression, 18.5% reported mild generalized anxiety, 8.6% reported moderate to severe anxiety, and 26% reported feeling lonely (Sams et al., 2021). The researchers concluded that individuals who reported lower socioeconomic status, worse physical health, and lower resiliency, reported higher levels of loneliness (Sams et al., 2021). Similar U.S. data revealed that 36% of older adults reported feeling stressed during COVID-19, 43% reported feeling lonely, and 31% indicated that these feelings of loneliness increased when social distancing measures were put in place (Emerson, 2020). Krendl and Perry (2020) found that older adults in the U.S. experienced higher levels of depression and loneliness during the pandemic, compared to before the pandemic. Older adults living in the U.S. have also reported stressors related to restrictions, a concern for the well-being of other people, loneliness, and social isolation because of the pandemic (Whitehead & Torossian, 2021). Relatedly, reports from older adults regarding their experience during COVID-19 indicate that staying busy, seeking social support, and having a positive mindset are coping strategies that appeared to be helpful during the pandemic (Fuller & Huseth-Zosel, 2021). Therefore, it is possible that The CONNECT Program, which aims to promote social connection and teach individuals new skills to manage challenging emotions, could help individuals deal with the effects of the COVID-19 pandemic. For some older adults, mental health challenges might have increased over the course of the COVID-19 pandemic, and it is important to evaluate interventions that target these symptoms. Nicol et al. (2020) state that, “Clinical researchers have an obligation to implement and measure the feasibility and scalability of new approaches, as well as the impact of these new approaches on participants and communities” (p. 924). Research suggests that interventions for older adults that are delivered at a distance (i.e., telephone-based), and aim to address mental health problems and loneliness, are recommended to help address the

psychological consequences of COVID-19 (Gorenko et al., 2021, Poscia et al., 2018). Clearly, the COVID-19 pandemic highlights the importance of identifying and treating mental health challenges among older adults. Closely related to these mental health challenges are psychosocial challenges, such as social isolation and loneliness, which are also common among older adults.

Social Isolation and Loneliness Among Older Adults

Defining Social Isolation and Loneliness

Social isolation is defined as "a state in which the individual lacks a sense of belonging socially, lacks engagement with others, has a minimal number of social contacts and [is] deficient in fulfilling and quality relationships" (Nicholson, 2009, p. 1346). A related, but distinct feeling is loneliness, which is "a subjective, negative feeling related to the person's own experience of deficient social relations" (Kaasa, 1998, p. 195). From an evolutionary perspective, loneliness can motivate humans to renew social connections that are needed to survive, reproduce, and prosper (Cacioppo et al., 2011; Masi et al., 2011). An individual will begin to feel that they are in a state of loneliness when they experience a discrepancy between the desired and achieved pattern of social relations (Karnick, 2005). According to data from the Canadian Longitudinal Study on Aging, the prevalence of social isolation was 5.1% and loneliness was 10.2% across a sample of Canadians aged 45 to 85 (Menec et al., 2019). Among Canadian older adults, nearly one in four reported that they would have liked to have participated more in social, recreational, or group activities in the past year (Gilmour, 2012). Data collected from 2008 to 2009 revealed that 12% of Canadians over the age of 65 felt isolated (i.e., reported feelings and loneliness and weak community belonging) and 24% were low participators (i.e., reported engaging in community-related activities less than weekly) (Gilmour & Ramage-Morin, 2020).

Low participation was measured by responses to questions about eight community-related activities, and how often individuals engaged in these activities. Research suggests that characteristics associated with severe loneliness (i.e., achieving the highest value of 7 on the Danish Version of the Three-Item Loneliness Scale) include being an ethnic minority, receiving disability or being unemployed, living alone, having a prolonged mental disorder, and receiving psychiatric treatment (Lasgaard et al., 2016). A similar study by Koc (2012) found that loneliness in individuals over the age of 60 was higher in men, those who had never married, primary school graduates, those who are childfree, those who lived alone, had a chronic disease, and used continual medication (Koc, 2012). Additionally, individuals with lower income experienced higher levels of social isolation and a lower sense of belonging. These findings may be due to structural factors (e.g., lack of resources) and interpersonal factors (e.g., stereotyping, avoidance) (Stewart et al., 2009). Furthermore, individuals with lower income experience barriers such as being unable to physically participate in social gatherings due to a lack of transportation (Stewart et al., 2009). Overall, these findings highlight the prevalence of social isolation and loneliness in older adults, which reinforces the need for interventions that help people manage these experiences, such as The CONNECT Program. These interventions become particularly important when the consequences associated with feeling socially isolated and lonely are considered.

Consequences of Loneliness and Social Isolation

Feelings of loneliness are described as both painful (i.e., feeling bothered and distressed) and intrusive (i.e., being unable to turn away from the loneliness) (Golden et al., 2009). Research shows a link between social isolation and loneliness and worsened cardiovascular and mental health outcomes, whereas social support is associated with positive health outcomes (Alcaraz et

al., 2019; Courtin & Knapp, 2017; Leigh-Hunt et al., 2017; Uchino, 2006). For example, a review revealed that "poor social relationships were associated with a 29% increase in risk of incident coronary heart disease and a 32% increase in risk of stroke" (Valtorta et al., 2016, p. 1014). Data from the English Longitudinal Study of Ageing revealed that mortality was higher among more socially isolated and lonely participants, and when they adjusted for demographic factors, social isolation was significantly associated with mortality, but loneliness was not (Steptoe et al., 2013). Social isolation and loneliness are also associated with a greater risk of being physically inactive and smoking (Kobayashi & Steptoe, 2018; Shankar et al., 2011). A review by Courtin and Knapp (2017) found that loneliness is a risk factor for depression in old age. Leigh-Hunt et al. (2017) found a link between loneliness, social isolation, and worsened mental health outcomes. Loneliness is negatively associated with cognitive function (Boss et al., 2015) and an association also exists between cognitive decline in older age and anxiety (Wolitzky-Taylor et al., 2010). When looking at a longitudinal study over 12 years, loneliness at baseline assessment predicted accelerated cognitive decline (Donovan et al., 2017). Clearly, social isolation and loneliness are associated with a variety of mental and physical health problems. Relevant to the current research, an association exists between mental health problems and loneliness and social isolation. The combination of these experiences (i.e., anxiety, depression, social isolation, loneliness) are targeted in The CONNECT Program, and it is therefore essential to understand how these challenges are connected.

The Relationship Between Social Isolation, Loneliness, Anxiety, and Depression

Older adults may experience social isolation and loneliness independent of mental health problems, but research suggests that they are often interconnected. For example, older adults with less diverse social network structures have less social support, and this is related to lower

life satisfaction and more depressive symptoms (Harasemiw, 2019). In a study of older U.S. adults living in retirement communities, a significant difference was found between lonely and non-lonely individuals, and lonely individuals had higher symptoms of anxiety and depression (Bekhet & Zauszniewski, 2012). Furthermore, research suggests that higher levels of loneliness predict higher levels of depression, social anxiety, and paranoia over a 6-month timeframe (Lim et al., 2016). Additionally, loneliness and social isolation predict major depressive disorder and generalized anxiety disorder (Domènech-Abella et al., 2019). Social isolation is also associated with sleep disturbance (Choi et al., 2015), depression, and worse mental health in older adults (Taylor et al., 2018; Fiordelli et al., 2020). Research shows that having few social supports is associated with higher rates of depression and suicidal ideation in older adults (Vanderhorst & McLaren, 2005). In a study of adults over 55, social disconnectedness predicted higher perceived isolation, and perceived isolation predicted higher depression and anxiety symptoms, further establishing this connection between a lack of social support and mental health challenges (Santini et al., 2020). Cohen-Mansfield et al. (2016) found that, "Psychological attributes that were associated with loneliness in older persons included depression and other indicators of poor mental health, low self-efficacy beliefs, negative life events, and cognitive deficits" (Cohen-Mansfield et al., 2016, p. 573). This relationship between mental health problems and social isolation and loneliness appears to be bidirectional, because older adults with anxiety or depression report feeling more lonely and socially isolated when compared to older adults without anxiety or depression (Evans et al., 2019). Similar studies have found that depressive symptoms predict loneliness (McHugh et al., 2020). A study of individuals aged 57 to 85 revealed that, "social disconnectedness predicted higher amounts of perceived isolation, which in turn predicted higher amounts of depression and anxiety symptoms" and, "in the reverse

direction, depression and anxiety symptoms predicted higher amounts of perceived isolation, which in turn predicted higher amounts of social disconnectedness" (Santini et al., 2020, p. 67). Clearly, mental health problems and psychosocial challenges are closely connected, and having perceived social support, larger social networks, and relationships that involve mutual proximity and a sense of belongingness, play protective roles against mental health problems (Santini et al., 2014). The potential benefits of social support on the mental health of older adults reinforces the potential usefulness of The CONNECT Program, which is delivered in a group format. While older adults navigate these mental health and psychosocial challenges, it is also important to consider the barriers to service use among this population.

Barriers to Service Use Among Older Adults

While older adults experience mental health problems and psychosocial challenges, service use among this population remains low (Byers et al., 2012; Cohen-Mansfield & Frank, 2008). In a study of adults over the age of 55 who met criteria for mood and anxiety disorders, 70% reported not using services (Byers et al., 2012). Research suggests that fewer than 1 in 10 older adults estimated to have serious mental illness in the past year reported receiving outpatient mental healthcare, which is three times lower than the rates found in younger adults (Karlin et al., 2008). Studies comparing younger and older adults' mental health service utilization found that younger adults were approximately twice as likely to have seen a mental health provider (Robb et al., 2003). Older adults with mental health problems may not perceive a need for help, therefore, decreasing their use of mental health services (Mackenzie et al., 2010). Other factors contributing to decreased help-seeking includes increased stigma in this age group (Conner et al., 2010), an over-reliance on pharmacotherapy (Kisely et al., 2000), few age-appropriate services available, financial barriers (Palinkas et al., 2007) and physical barriers that stop people from

attending in-person services (e.g., lack of transportation) (Choi & Gonzalez, 2005). Additionally, older adults often have limited knowledge regarding their own mental health problems, and limited knowledge of the mental health care system (Karlin et al., 2008; Reynolds et al., 2020). Older adults also report difficulties identifying a need for help with mental health problems (Wuthrich & Frei, 2015). This challenge identifying a need for help may stem from believing anxiety and depression symptoms are normal given their circumstances, normal given their age or health conditions, normal if they dealt with these symptoms for a long time, or their symptoms are not severe enough to require help (Wuthrich & Frei, 2015). It is also possible that anxiety symptoms in older adults may be undetected due to healthcare providers interpreting anxiety symptoms as normal or acceptable in later life (Voshaar, 2013). It is also important to recognize that these barriers, both structural and individual, are also found among older adults in rural areas (Brenes et al., 2015a; Sanders et al., 2008). Despite having decreased knowledge of mental health resources, research suggests that many older adults are receptive to mental health treatment (Robb et al., 2003). Clearly, there are several barriers that limit older adults from receiving services. Testing and developing novel interventions that make use of alternative modes of delivery can be one way to address barriers related to accessing services. The current intervention delivers psychotherapy through telephone-based programming, which may be suitable for this population. Further testing of this program delivery is needed to determine if this mode of delivery is suitable for this clinical sample of older adults. Furthermore, The CONNECT Program focuses on increasing one's knowledge of mental health problems and psychosocial challenges in this age group, and time is dedicated to reviewing resources for older adults to address these challenges. The development, purpose, and novelty of The CONNECT Program is described in the following sections.

A Novel Intervention to Address these Challenges: The CONNECT Program

In response to mental health problems (i.e., anxiety and depression), and psychosocial challenges (i.e., social isolation and loneliness) among older adults, The CONNECT Program was developed by a team of researchers, clinicians, and community stakeholders from the University of Manitoba, Brandon University, and A & O Support Services for Older Adults (Kristin Reynolds, Lesley Koven, Corey Mackenzie, Verena Menec, Nancy Newall) using participatory program development methodology. The CONNECT Program integrates acceptance and commitment therapy (ACT) (Hayes & Smith, 2005), self-compassion (Neff, 2015), and relevant aging theories (i.e., Selective Optimization with Compensation Theory; Continuity Theory; Socioemotional Selectivity Theory). The program consists of six 90-minute weekly sessions where individuals engage in group activities, group discussion, learn new skills to manage challenging emotions, learn about symptoms of anxiety and depression, and learn about challenges related to social isolation and loneliness among older adults. The six sessions follow The ACT Triflex Model which involves the following aims for each session: Open Up, Do What Matters, and Be Present (Harris, 2019). The ACT Triflex is made up of six core therapeutic processes of ACT, which include: contact with the present moment (be here now), values (know what matters), committed action (do what it takes), self-as-context (the noticing self), defusion (watch your thinking), and acceptance (open up) (Harris, 2019). Participants in The CONNECT Program use a workbook to help follow along during each session. The workbook contains homework and mindfulness activities that participants complete each week. The CONNECT research team is in the process of creating a facilitator manual to accompany the program. Following established guidelines for group therapy, The CONNECT Program was designed to include 5-8 participants per group and two facilitators (Yalom, 2005). As of

November 2022, The CONNECT team has offered The CONNECT Program to older adults who live in Manitoba and who were recruited through Age and & Opportunity Support Services for Older Adults. In total, seven groups of participants completed The CONNECT Program as part of a pilot project ($N = 34$). This pilot project using a community sample collected assessments of symptoms of anxiety and depression, feelings of loneliness and social isolation, knowledge of community resources, mental health literacy, psychological flexibility, and evaluations of The CONNECT Program and the workbook. Additionally, qualitative data were collected, which asked about participants' experiences in the program and suggestions for future changes to the program. Emergent data suggests feasibility in program participation and research, and reductions in anxiety, depression, loneliness, and social isolation, with improvement in psychological flexibility and mental health literacy. These results are extremely promising, and they offer preliminary evidence regarding the suitability for this program in a community sample of older adults who experience social isolation, loneliness, and symptoms of anxiety and depression.

To build upon this research from a community sample, the current research explores the acceptability of this program in a clinical sample of older adults with elevated symptoms of anxiety and depression. The clinical sample used for the current research included older adults who were seeking mental health services due to symptoms of anxiety and/or depression at the time of recruitment, and these individuals had contact with a mental health professional at the time of recruitment (e.g., psychologist, psychiatrist, community mental health worker). In addition to symptoms of anxiety and depression, this clinical sample of older adults reported feeling socially isolated and/or lonely. Therefore, this research builds upon the previous pilot

data which used a community sample of older adults, and new insights regarding how this program could be executed using a unique clinical sample of older adults are described below.

Acceptance and Commitment Therapy (ACT)

To understand The CONNECT Program, it is necessary to provide an overview of acceptance and commitment therapy (ACT) as this is the therapeutic orientation that the program follows. The CONNECT Program is theoretically oriented in evidence-based psychotherapy. ACT is a behavioural therapy focused on taking guided action towards the core values you hold (Harris, 2019). As Harris (2019) explains, "ACT gets you in touch with what really matters in the big picture: your heart's deepest desires for how you want to behave and what you want to do during your brief time on this planet. You then use these values to guide, motivate, and inspire what you do" (p. 3). The primary goal of ACT is to increase psychological flexibility (Hayes et al., 2006). Psychological flexibility is, "the ability to contact the present moment more fully as a conscious human being, and to change or persist in behaviour when doing so serves valued ends" (Hayes et al., 2006, p. 7). ACT is effective for reducing symptoms of depression in older adults (Davison et al., 2017) and for adults with anxiety disorders (Swain et al., 2013). In a study with adults aged 55-75 with mild to moderately severe anxiety symptoms, a blended ACT intervention (web-based lessons and four face-to-face sessions) and a face-to-face CBT intervention, yielded anxiety scores that significantly decreased from pre to post assessment, and these changes were maintained at a 12-month follow-up (Witlox et al., 2021). Importantly, treatment satisfaction was significantly higher for the blended ACT format (Witlox et al., 2021). A meta-analysis investigating the efficacy of ACT with adults found that ACT is more effective than treatment as usual and placebo conditions, and ACT has similar efficacy as established psychological interventions (i.e., CBT) for treating anxiety disorders, depression, addiction, and

somatic health problems (A-Tjak et al., 2015). Relevant to the current research, group-based ACT increased psychological flexibility and mindfulness in a sample of individuals with health anxiety (Hoffmann et al., 2014). This orientation of psychotherapy is well-suited for this population of older adults is because ACT does not attempt to reduce symptoms. Instead, ACT encourages individuals to be mindful, sit with their distress, and then increase behaviours that will allow them to live according to their deeply held values (Roberts & Sedley, 2016). Therefore, the ACT principles of acceptance, identifying goals, and living according to your values, may resonate with older adults (Petkus & Wetherell, 2013). Overall, research investigating the efficacy of ACT with older adults is still emerging, but ACT has been found to be effective for the following populations, such as individuals with chronic pain (Lunde & Nordus, 2009) and for stroke survivors (Majumdar & Morris, 2019). This suggests that ACT has the potential to be helpful with other populations, such as older adults, who may be facing similar problems (e.g., health conditions, chronic pain). Self-compassion is an important component of ACT that is introduced throughout The CONNECT Program sessions. Self-compassion includes self-kindness, feelings of common humanity, and mindfulness (Neff, 2011). As Germer and Neff (2013) explain, "with self-kindness we soothe and nurture ourselves when confronting our pain rather than getting angry when life falls short of our ideals. The inner conversation is gentle and encouraging rather than harsh and belittling. We clearly acknowledge our problems and shortcomings, but do so without judgment, so we can do what's necessary to help ourselves" (p. 857). Practicing self-compassion can enhance life satisfaction and improve self-care (Kim & Ko, 2018). Additionally, self-compassion is associated with increased well-being, which supports incorporating self-compassion into mental health programs (Allen et al., 2012; Barnard & Curry, 2011; Homan, 2016). Another important component of ACT is

mindfulness, and group members are encouraged to practice mindfulness inside and outside of sessions. Lindsay et al. (2019) found that a 14-lesson mindfulness smartphone intervention reduced loneliness in a community sample of adults. Overall, feasibility studies reveal that the efficacy of ACT interventions with older adults still requires further research (Wetherell et al., 2011). The current research is extremely valuable as it helps to understand the suitability of this intervention, which uses ACT in a group format and over the telephone, with older adults with clinically elevated symptoms of depression and anxiety, paired with psychosocial challenges.

Group Therapy

The CONNECT Program uses principles of ACT in the context of group therapy, and one of the goals of the program involves promoting social connection among older adults. Research suggests group therapy is effective for treating geriatric depression, sub-threshold depression, and other mental health symptoms in older adults (Agronin, 2009; Krishna et al., 2011; Krishna et al., 2013; Payne & Marcus, 2008; Tavares & Barbosa, 2018). A study investigating group-based ACT with patients with health anxiety found that patients were satisfied with the treatment, would recommend it to a friend, it helped them get better, it improved their lives, and there were statistically significant improvements on measures of illness worry in the ACT group (Eilenberg et al., 2016). Additionally, group-based Zoom videoconferencing which integrated cognitive-behavioural techniques, group discussions, and mindfulness, resulted in a decrease in loneliness and depressive symptoms in a community sample of older adults (Shapira et al., 2021). One study found that reminiscence group therapy reduced symptoms of anxiety, depression, and loneliness among older adults in India (Tarugu et al., 2019). Therefore, delivering psychotherapy in a group format can be effective for reducing mental health symptoms. Additionally, group programs that focus on improving social skills, enhancing social

support, increasing opportunities for social contact, and addressing maladaptive social cognitions, can lead to decreased feelings of loneliness and social isolation in older adults (Masi et al., 2011). Adding an educational component to these programs is also effective for reducing social isolation and loneliness (Cattan et al., 2005; Lapena et al., 2020; Menec & Newall, 2015). Group-based interventions that involve group-based activities or support, and sharing stories and fostering a common ground, are beneficial for older adults struggling with social isolation or loneliness (Franck et al., 2016; Stewart et al., 2001). Delivering a mental health intervention in group format may allow individuals to experience shared common ground, and experience social connection through the telephone. Furthermore, offering this group program over the phone may be beneficial for older adults who prefer services that are delivered remotely.

Telephone Therapy

The CONNECT Program utilizes telephone therapy, which may decrease the stigma surrounding treatment (Mozer et al., 2008) and this method of delivery is associated with decreased dropout rates (Mohr et al., 2012). Telephone therapy is effective for treating late-life depression and anxiety (Barrera et al., 2017; Brenes et al., 2015b; Raue et al., 2017), and has been found to reduce anxiety, worry, and insomnia in older adults (Brenes et al., 2012; Brenes et al., 2017). Research suggests that telephone therapy is a feasible intervention for depressed adults who are not responding to standard antidepressant treatment (Tutty et al., 2005). Telephone therapy may also be effective for older adults who are homebound (Choi et al., 2014). The literature suggests that a 4-week telephone-based emotion focused intervention for adults during COVID-19 resulted in improvements in loneliness, depression, and anxiety (Kahlon et al., 2021). This sample included adults ranging from 27 to 101 years of age, but 63% were at least 65, indicating that this type of intervention could be useful for a population of older adults

(Kahlon et al., 2021). Other types of telephone interventions that have been effective for reducing social isolation and loneliness involve telephone befriending programs, which have been found to reduce social isolation and loneliness, and improve emotional well-being and confidence (Cattan et al., 2011). The Senior Centre Without Walls Program, offered through Age and Opportunity Support Services for Older adults, involves educational sessions facilitated by volunteers, and it has been found to increase knowledge, reduce loneliness, and improve mood, without any difficulties accessing telephone sessions (Menec & Newall, 2015). Considering rural populations, telepsychology may be particularly useful to improve the accessibility and cost-effectiveness of mental health services (Caxaj, 2016; Dyck & Hardy, 2013). Clearly, telephone-based programming may appeal to individuals who are unable to attend in person sessions, and this method of delivery may be preferred in the context of COVID-19 restrictions and concerns regarding the spread of COVID-19.

The Novelty of The CONNECT Program: Addressing Gaps in Existing Interventions

As described above, The CONNECT Program is unique is because it aims to address the combination of social isolation and/or loneliness and symptoms of anxiety and/or depression. As noted above, ACT, self-compassion, group therapy, and telephone therapy have the potential to address these problems independently. However, it was unknown if these elements can be combined to create a helpful intervention that meets the needs of a clinical sample of older adults with these challenges. Additionally, it is unknown which components of this program may be most helpful in addressing these challenges. For example, perhaps individuals enjoy the group-format of the program, but they do not enjoy the telephone delivery and would prefer an in-person group. The CONNECT Program utilizes ACT in a unique program delivery (telephone and group based), and it is unknown if this combination of elements can be successful in helping

this sample manage their challenges. Therefore, the current program is evaluated to determine what this clinical sample thinks of The CONNECT Program, and their feedback will be used in the future to refine the program to better suit the needs of this sample.

Program Evaluation of The CONNECT Program Using a Clinical Sample

As explained above, it is unknown if The CONNECT Program will be a suitable intervention for a clinical sample of older adults. There is currently a gap in existing interventions that aim to address this combination of challenges (social isolation, loneliness, mental health challenges). Due to the novelty of this program, we must first evaluate the acceptability and feasibility of this program in this sample. Before implementing and offering this program to older adults with clinically elevated levels of depression and anxiety, this program must be evaluated multiple times with this sample. The first step in this program evaluation is to use a small clinical sample of older adults who complete the 6-session CONNECT program. After their participation, feedback was requested to learn more about what they liked and disliked about the program, and how this program impacted their symptoms. After this preliminary exploration, further research should be conducted, using a larger clinical sample of older adults, to collect more data and evaluate if this program is effective in reducing mental health symptoms and effective in addressing psychosocial challenges. Therefore, The CONNECT Program must undergo extensive program evaluation before it can be offered. Program evaluation is focused on monitoring and improving a particular program or service (Astramovich & Coker, 2007). This is an ongoing process where researchers can assess the effectiveness of the programs they are implementing with various populations and learn ways to improve the effectiveness and learn about the impact of their service on the population (Astramovich & Crocker, 2007). In the current research, I am interested in learning if

participants were satisfied with this program, and if it was meeting their expectations, and their needs. As noted above, emergent data using a community sample of older adults in The CONNECT Program suggests acceptability, feasibility, and trends of improvement in mental health symptoms. These findings cannot be generalized to different populations of older adults, and this is precisely why the current research is needed. This program aims to address this combination of both mental health and psychosocial challenges, but I do not know if this program has the potential to help this clinical sample of older adults with symptoms of anxiety, depression, psychosocial challenges, and who are currently seeking mental health services.

The Current Research

The current research tested The CONNECT Program using a clinical sample of older adults experiencing symptoms of depression and/or anxiety and loneliness and/or social isolation. Past research has not explored interventions for individuals who struggle with both social isolation or loneliness, paired with anxiety or depression. Therefore, this research project was exploratory in nature. Research suggests that the independent elements of The CONNECT Program are effective (e.g., group-based therapy, telephone therapy, ACT, self-compassion), but little is known about the effectiveness of an intervention that combines these separate elements. At the outset of this study, it was unknown if this intervention that combines these unique elements would be well-received by a clinical sample of older adults who were already in contact with a mental health professional. Before testing this program with a larger clinical sample of older adults, this research identifies if this program is suitable, using a smaller sample, in a study that is exploratory in nature (the current research). I recruited individuals with symptoms of anxiety and depression who were seeking mental health services at the time of recruitment. I also expanded upon existing research that has established the effectiveness of group-based

programing, telephone-based programming, and ACT interventions, through preliminary testing of The CONNECT Program in this clinical sample.

Research Objectives and Anticipated Findings

Objective 1: Evaluate the Study Design and Procedures. The first objective of this research is to determine the feasibility of conducting a future study of The CONNECT Program with a clinical sample of older adults (e.g., a Randomized Controlled Trial). Evaluating feasibility means "determining if the intervention, study design, and procedures can be successfully executed by the researcher and delivered to the participants as planned" (Feeley et al., 2009, p. 87). Prior to this study, The CONNECT Program was not tested using a clinical sample of older adults with elevated symptoms of depression and anxiety and who were in contact with a mental health provider for mental health related concerns. I evaluated the recruitment procedures, screening procedures (e.g., inclusion and exclusion criteria), dropout rates, response rates to questionnaires, data collection methods (e.g., telephone), the outcome measures used, and the administration of the 6-session CONNECT program.

Anticipated Findings. Recommendations for the sample size of a pilot study include a minimum of 20 patients in total (Sandvik et al., 1996), 12 patients per group (Julious, 2005), at least 9% of the main trial's sample size (Cocks & Torgerson, 2013), or 10 patients per group (Birkett & Day, 1994). Pilot studies evaluating the feasibility of novel psychological treatments often use a sample size of 10 to 20 participants per group (Burton et al., 2016; Santomauro et al., 2016; Thomas et al., 2013; Van Vreeswijk et al., 2020). Considering the current intervention, each CONNECT group can accommodate a maximum of 8 people. Therefore, I planned to recruit slightly fewer participants compared to some of these rules of thumb due to constraints on group size. I expected that I would be able to meet my anticipated sample size of N = 5-8

participants. I anticipated that dropout would occur (1-2 participants), and this was based on previous research of individual ACT which found a 17.35% dropout rate in ACT conditions and 18.62% dropout in the comparison conditions (Karekla et al., 2019). Among 68 studies, the dropout rate for ACT conditions was 15.8% (Ong et al., 2018). Considering group-based ACT, a study of individuals with severe health anxiety found that 4 out of 63 patients discontinued treatment (Eilenberg et al., 2016). In total, I anticipated that 1-2 participants may drop out of the study from the baseline questionnaire to the post-CONNECT questionnaire. I anticipated that the questionnaires would be administered as planned in the outlined timeframes and I anticipated that the 6 CONNECT sessions would be executed as planned within the 6-week timeline that is outlined.

Objective 2: Understand Participant Experiences in this Program. The second objective of this research is to understand participants' experiences in The CONNECT Program and determine if it is an acceptable intervention for this clinical sample. This includes determining "the suitability of the intervention and the study procedures from the perspective of the clinical population of interest" (Feeley et al., 2009, p. 87). Prior to this study, I did not know if this intervention could be appropriate for a clinical sample of older adults with anxiety or depression. I intend to learn what participants thought of the program, if it was suitable based on their specific needs, and things they would change about the program. I asked participants to describe their experience in the program after each session (at 6 timepoints) and during the final questionnaire (post-CONNECT questionnaire). Additionally, I analyzed questionnaire data that asked participants to provide satisfaction ratings on several different elements of the program, evaluate the workbook, and evaluate each session.

Anticipated Findings. I anticipated that this program would be well-received, meaning participants would think it was a useful program based on their needs. This anticipated finding was based on the previous pilot project with a community sample (described above), which revealed participants were satisfied with the program delivery (e.g., group, telephone) and the skills they learned (e.g., mindfulness). I expected the session ratings on the Group Session Rating Scales (GSRS) to be higher than 5 (on a scale of 1 to 10) for the majority of participants (over 50%) for each session. This was also based on high treatment satisfaction in previous studies evaluating ACT interventions (Witlox et al., 2021). Additionally, I anticipated that the majority of ratings would be satisfactory (over 50% rated "satisfactory") for the evaluation of intervention content and delivery on the post-CONNECT questionnaire (Witlox et al., 2021).

Objective 3: Explore the Preliminary Effectiveness of The CONNECT Program.

The final objective of this research is to determine if this program showed preliminary effectiveness in this clinical sample of older adults. I explored changes between pre-intervention (baseline questionnaire) and post-intervention (post-CONNECT questionnaire) on a series of self-report measures. I examined if changes in mental health symptoms were reported, through describing general trends in the data and calculating the effect size of these changes. I assessed if this program changed psychological flexibility, symptoms of depression, symptoms of anxiety, feelings of loneliness and social isolation, and one's knowledge of mental health resources. This final research objective aims to provide preliminary information regarding how mental health symptoms may be changing from the start to the end of the program, and this provides insight into future changes that could be observed in a future study using a larger sample of participants.

Anticipated Findings. I anticipated that psychological flexibility ("the ability to be fully conscious and open to your experience while acting on your values or, said more simply, the

ability to be present, open up, and do what matters") would increase from baseline to post-CONNECT (Harris, 2019, p. 84). This anticipated finding was based on results from the ongoing pilot project testing this program, which found an increase in psychological flexibility after participants finished the program. Finally, I anticipated participants would report decreases in anxiety and depression from baseline to post-CONNECT, due to the efficacy of psychotherapy for older adults, and due to the results from previous pilot data using a sample of older adults recruited from the community ($N = 34$).

Methods

Design

Before outlining the research design, it is important to review the modifications to the study design that were implemented throughout this research. Originally, I anticipated recruiting enough participants ($N = 16$) to conduct a pilot Randomized Controlled Trial (RCT), where participants would be assigned to the waitlist or intervention condition. This design was modified due to not meeting this anticipated sample size. The timeframe associated with this research project meant that this proposed pilot RCT was not feasible. After 7 months of recruitment, there was a change in the study design, and a single pre-post group exploratory design was implemented to evaluate The CONNECT Program and assess the feasibility of implementing and testing this intervention with a clinical sample of older adults. The quantitative data collected informed us about changes in self-reported symptoms on the primary and secondary outcome measures and revealed information about treatment satisfaction and how participants experienced each session. Additionally, the questionnaire that was administered after each session (the GSRS) and the final questionnaire (the post-CONNECT questionnaire) included open-ended

questions where participants could expand on their answers about treatment satisfaction and their experience in each session.

Participants

As noted above, I aimed to recruit a minimum of 5 participants and a maximum of 8 participants for this study. After seven months of recruitment (from January 2022 to August 2022), five participants were enrolled in the study. These five participants provided research consent and expressed their availability to attend sessions starting in August. The CONNECT sessions started in August 2022 and continued until September 19, 2022. Three participants remained in the study for the duration of the project. One participant withdrew before the sessions began (n = 1), and one participant withdrew after the session 1 (n = 1). Due to the time constraints associated with this research, I started the study with fewer participants than proposed. This decision was also made because I noticed that some participants who signed up for the study earlier (e.g., February 2022) later withdrew from the study after waiting several months for the study to begin (n = 3). Therefore, I did not want similar dropout to be observed with the current participants who were enrolled in the study, with the possibility that they would withdraw from the study after waiting several months for the study to begin, repeating the cycle observed with earlier participants.

Inclusion criteria for this study included being over the age of 65, currently living in Manitoba, self-reporting symptoms of social isolation or loneliness, and self-reporting symptoms of depression or anxiety. Exclusion criteria included being under 65 years of age, living outside of Manitoba, being unable to provide consent independently, substantial hearing loss (i.e., cannot hear over the phone), an absence of self-reported symptoms of anxiety or depression, an absence of symptoms of loneliness or social isolation, self-reporting active suicidal ideation, substance

use disorder or substance dependence within the past six months, bipolar I or II, psychotic disorders, and major neurocognitive disorders. I screened participants' age, experiences of loneliness and social isolation, symptoms of anxiety and depression, substance use and alcohol use disorders, and major neurocognitive disorders, during the screening questionnaire (Appendix B). Additionally, the screening questionnaire asked an open-ended question about being diagnosed with a mental health problem during your lifetime. Several participants who were screened were receiving mental health services and were being monitored by a mental health worker, and this did not make them ineligible for the study due to the exploratory nature of this study. When a large scale RCT is executed in the future, it is important to keep in mind that it may be challenging to recruit individuals who are not receiving other services at the same time, since I recruited through mental health workers. The other services an individual was receiving were documented during the baseline questionnaire and post-CONNECT questionnaire. There was no specific cutoff that participants needed to reach on the screening measures of depression and anxiety to be eligible for this study. Clinician judgement from myself (MA student in Clinical Psychology), the group facilitator (Dylan Davidson, PhD student in Clinical Psychology), and supervising psychologist (Kristin Reynolds, Clinical Psychologist), were used to determine if they were suitable for the study. The open-ended responses provided rich information into each person's challenges which helped determine suitability. Participants' mental health symptoms were also assessed during the clinical intake interview, which was conducted by the group facilitator (see Appendix C). This clinical intake is a semi-structured interview which asks the participant about their presenting complaints, goals for The CONNECT Program, and current life context (i.e., health and lifestyle, relationships, work, education, culture, legal). The clinical intake interview was a second opportunity to determine if this

program would be a good fit considering the needs of the individual participant and to further explore challenges such as suicidal ideation. This clinical information was charted and stored through the Psychological Service Centre at The University of Manitoba. If an individual did not meet the inclusion criteria during this screening process, they could be referred to services that better suited their needs if they were interested, and the justification behind the exclusion criteria could be explained to the individual. None of the participants who completed the screening were ineligible, but several participants chose not to participate due to a lack of interest in the study.

Recruitment

Study information was provided to geriatric mental health providers in Manitoba. The study information was provided to these professionals in the form of an Information Flyer (see Appendix D) which is a one-page summary of the research. These professionals also received a document that provided additional information about the study which they could review to familiarize themselves with the study and help decide if a client would be a good fit for the research. This information was distributed to mental health professionals by email. The professionals could then distribute this study information to their clients, and the clients could contact me using the research phone number. Potential participants would call this number to begin the screening questionnaire. Alternatively, mental health professionals could make referrals to me directly, after obtaining consent from the client to pass on their information (name and phone number). For example, if a mental health professional (e.g., clinical psychologist) thought a client may be a good fit for this research, they could call the research phone number and pass on the name and number needed to contact this client. Then, I contacted this individual directly and explained that their mental health worker provided me with this information, and I was calling to describe the study.

As noted above, all recruitment took place virtually. Therefore, I contacted clinicians and mental health professionals and asked if they would be interested in sharing the study information with their clients. Ethics approvals were received before I made this contact. Mental health professionals worked out of various locations, and they can be categorized into two areas: Winnipeg Regional Health Authority (WRHA)/Shared Health (SH) and Prairie Mountain Health (PMH). Recruitment involved sending requests to mental health professionals, asking if they would like to share the study information to their clients. The study information was distributed to Community Mental Health Workers (CMHW) within Prairie Mountain Health. Study information was also shared with Geriatric Program Assessment Teams and Geriatric Mental Health Teams within Winnipeg Regional Health Authority. Study information was shared with geriatric mental health providers (e.g., psychiatrists and psychologists) within Winnipeg Regional Health Authority at Victoria Hospital. Next, study information was shared with CMHWs working within WRHA which were contacted through specific WRHA Access Centers. This sample was categorized as a clinical sample since all participants were in contact with a mental health professional and this is how they were referred to the study or were informed about the study.

Recruitment began by explaining the purpose of the study to the individual. Participants were informed that they would receive compensation in the form of gift cards for their time completing the questionnaires. In total, participants received a $10 gift card for the baseline questionnaire and a $10 gift card for the post-CONNECT questionnaire ($20 in gift cards total). If participants withdrew from the study, they were able to keep this compensation. Participants were told that participation would include completing 6 CONNECT sessions, two longer questionnaires (45 to 60 minutes), and six shorter questionnaires (5 to 10 minutes) after each

session. During this initial phone call, I completed the screening questionnaire if the individual was interested in the research. The screening questionnaire took approximately 30-60 minutes to complete, and it was administered over the telephone. Once complete, I asked the individual if they were interested in the study. Next, I read the research consent form and the individual provided verbal research consent (see Appendix E). On some occasions, the participant requested to have a separate call to complete the research consent form. The participant was required to provide research consent to be enrolled in the CONNECT program. All participants were mailed a paper copy of the research consent form to keep for their records. Participants were told that they have the freedom to withdraw from this study at any point. If they withdrew from the study, they could have continued with The CONNECT Program, to continue care for these individuals who were seeking psychological services.

Procedure

All the research components were completed over the phone. See Appendix F for a step-by-step description of the study components. To begin, each participant was sent a copy of the research questionnaires and consent forms in the mail (baseline questionnaire, post-connect questionnaire, group session rating scale, research consent form, clinical consent form). These mailed questionnaires gave participants the opportunity to follow along during the phone call while the research questionnaires were administered. Before each research related phone call, I asked if the participant was still interested in the research. Participants first completed the screening questionnaire and I read the research consent form and collected verbal consent for research. Once all the participants were enrolled in the study, the baseline questionnaires were completed within one week before the first session (see Appendix G). During this same week, the clinical intake interview and clinical consent took place between the group facilitator and

each participant. Clinical consent was obtained before the participant began the program, and this was collected by the group facilitator. Participants then completed six sessions of CONNECT group therapy and completed group session rating scales after each session (6 total) (see Appendix I) to monitor participant progress from session to session and to evaluate the group-therapy alliance (Davidsen et al., 2017; Quirk et al., 2013). Within one week of the last CONNECT session, participants completed the post-CONNECT questionnaire (see Appendix H). After this final research questionnaire, their participation was complete.

The Intervention

The CONNECT Program

The CONNECT program consists of six 90-minute sessions of group therapy through WebEx Audio. See Appendix J for an overview of the topics covered in each CONNECT session. This CONNECT Program is a telephone therapy group which typically involves 5 to 8 participants per group and 2 group facilitators. In the current research, three participants completed the program with one group facilitator. Each session involves a mixture of group discussion and introducing new material. Participants are encouraged to share their personal experiences with the mindfulness exercises, their experiences with challenging emotions (e.g., loneliness and social isolation), symptoms of anxiety and depression, and their experiences with the homework activities. Participants also received the CONNECT workbook that includes a separate section for each session. The workbook contains an outline of each session, the mindfulness activity to be completed for that specific week, and the homework activity for that week. The workbook contains a mixture of point form notes, paragraphs, and visuals for the participants. Additionally, there are areas for the individuals to take their own notes in the workbook. I was available by phone between sessions to answer any participant questions or

pass on questions or concerns to the group facilitator, who would then call the participant to follow-up. The group facilitator who led The CONNECT Program was not involved in the research component of the program. The facilitator was a PhD student in Clinical Psychology at the University of Manitoba. The facilitator is responsible for running each CONNECT session, informing me of problems during/before/after sessions, informing me of participant attendance, and following up with participants between sessions if necessary. Therefore, a clear distinction was made between the research and clinical aspects of this program. The group charting for the sessions were entered into Titanium through the Psychological Service Centre (University of Manitoba). These notes were not used for research purposes, and this health information is protected through the Personal Health Information Act in Manitoba. Additionally, information collected during the clinical intake interview was not used for research purposes.

The CONNECT Program Facilitator

The CONNECT Program was facilitated by a doctoral student in Clinical Psychology at the University of Manitoba. He had experience facilitating this program before, and he was one of the facilitators involved in the pilot study evaluating The CONNECT Program with a community sample. His facilitation of this program was supervised by a registered clinical psychologist who was available for consultation regarding the group members. This was the facilitator's first time facilitating this program independently, as previous iterations of this program were completed with 2-3 facilitators per group. He followed the individual session agendas, developed by the CONNECT research team, which outline the main topics to cover each session. Additionally, the workbook contains the information that the facilitator covers during the session, and it includes all in-session activities, such as the script for mindfulness exercises. The workbook also contains textboxes where participants can respond to questions

about their experiences. The facilitator uses these reflection boxes and questions to stimulate group discussion during the sessions. I was in contact with the facilitator after each session and we shared information such as participant attendance, changes in scheduling, and comments or questions that participants requested that I share with the facilitator after the group sessions. If participants required follow-up between sessions, I coordinated phone conversations between the facilitator and the group members. For example, if a participant missed a session, we offered the option of having the facilitator call the participant and check-in with the participant to see if they had any questions about the session material.

The CONNECT Program Clinical Intake Interview

Before beginning the six sessions, each participant completed a clinical intake interview with the group facilitator over the telephone. This interview lasted approximately 60 minutes. This was the first opportunity for the group facilitator and the participant to start to build their therapeutic relationship. During this interview, the facilitator learned about the person's mental health related history, treatment goals for the program, and topics they would like to focus on in the program (e.g., managing anxiety, depression, loneliness, social isolation). This clinical intake interview is another opportunity to evaluate if this program would be a good fit for the participant. The facilitator then used this information to help guide the focus of each session and target these individual treatment goals during sessions where the focus was on values identification and goal setting. This clinical information was not used for research purposes, and it was stored within the Psychological Service Centre.

Data Collection

Self-report measures were administered through telephone by me. Participants provided verbal consent before completing each questionnaire. These telephone conversations were not

audio-recorded. Therefore, I took detailed notes for each answer provided by the participants. This required a slow pacing of conversation, with detailed note taking during each response. The questions asked of participants were separated into specific questions where participants could provide short answers (in comparison to an interview where long-detailed answers would be provided). I collected a detailed account of what each participant shared during the questionnaires, and this was recorded in a word document. Furthermore, data was collected at several different timepoints. Research suggests some benefits to not having an audio-recording, such as capturing data in a more realistic or naturalistic sense. One research article found that the data quality between audio-recorded transcripts and interview scripts written directly after the interview indicated they were comparable in detail captured (Rutakumwa et al., 2020). Of note, there are drawbacks associated with not recording these questionnaires, such as not having a permanent record to use after the fact (Tessier, 2012). To assist with ease of administration of the questionnaires, participants were mailed the questionnaires beforehand, to follow along. Since many of the measures have multiple response options, it could be challenging to keep the response options in mind while answering the questions. Therefore, to ensure the accuracy of responses, the written copy of each questionnaire could assist with choosing the most accurate option. Participants could skip questions they did not want to answer. To begin, the baseline questionnaire asked participants to self-report their current functioning (e.g., symptoms of depression) and answer demographic questions (e.g., age). These questions about self-reported symptoms were repeated in the post-CONNECT questionnaire. Additionally, participants evaluated the intervention during the post-CONNECT questionnaire. Participants shared their experiences in each session during the group session rating scale (GSRS). The data collected was stored on a password protected computer, with no identifying information associated with

participant responses (i.e., using a numbered system). The research questionnaire data was separate from the information collected by the group facilitator.

Primary Measures

Testing Trial Procedures

I documented the number of individuals who expressed interest in the study, those who consented to participate, the number of individuals who completed each component of the study, and other missing data and dropouts. The date of completion for each questionnaire was recorded to see how well the recommended timelines were followed. I took notes on the process of administering questionnaires, the time it took to complete these assessments, and concerns, questions, and comments expressed by the participants regarding the research questionnaires. Additionally, I recorded my contact with the participants throughout the duration of the research. For example, if the research participant contacted me or the group facilitator between sessions, this information was recorded. This information was used to determine if the study procedures need to be modified.

Treatment Satisfaction and Feedback

Treatment satisfaction was evaluated using responses from the post-CONNECT questionnaire and the GSRS (Duncan & Miller, 2007). The GSRS is a reliable measure of global alliance within group therapy (Quirk et al., 2013). Participants in The CONNECT Program rated four aspects of each session (i.e., relationship, goals and topics, the acceptability of the approach used, and a sense of overall fit) on a scale of 1 to 10 (Duncan & Miller, 2007). The relationship is rated from “10 = I felt understood, respected, and accepted by the leader and the group” to “0 = I did not feel understood, respected, and/or accepted by the leader and/or the group”. The goals and topics are rated from “10 = We worked on and talked about what I wanted to work on and

talk about" to "0 = We did not work on or talk about what I wanted to work on and/or talk about". The acceptability of the approach is rated from "10 = The leader and the group's approach is a good fit for me" to "0 = The leader and/or the group's approach is not a good fit for me". Overall fit is rated from "10 = Overall, today's group was right for me – I felt like a part of the group" to "0 = There was something missing in the group today – I did not feel like a part of the group". Each question is rated on a scale of 1 to 10, and the scores are added together, with a total possible score of 40 (Quirk et al., 2013). After answering these four questions, participants provided their comments, questions, or concerns regarding that session and the group. Finally, participants were asked an open-ended question about if they noticed any changes in their life since the program began (Elliot, 1999). If they indicated noticing changes, they were asked what those are, how expected the change was, and what they believed caused the change (Elliot, 1999). The post-CONNECT questionnaire asked participants to rate the intervention content and the intervention delivery type (McCracken et al., 2014). Participants rated components of the intervention as "satisfied", "neither satisfied nor unsatisfied", or "unsatisfied". They were asked to explain their answer if they rated a component as "unsatisfied" or "neutral". Additionally, participants provided their opinions of the workbook by indicating if they used the workbook, how they used the workbook, and features they would like to see in future versions of the workbook. Participants then answered a series of open-ended questions during this post-CONNECT questionnaire. These questions asked participants to describe their experience in the group in their own words, rather than selecting a response option.

Psychological Flexibility

The Acceptance and Action Questionnaire II (AAQ-II) measures psychological inflexibility and experiential avoidance (Bond et al., 2011). This scale has satisfactory internal

consistency, high test-retest reliability, and discriminant validity (Bond et al., 2011). Participants are asked to rate how true is each statement is for them. To calculate the total score, the responses are summed, and higher total scores indicate less psychological flexibility. The AAQ-II has higher reliability than the AAQ-I, with alpha coefficients averaging between 0.78 and 0.88 (Bond et al., 2011). High scores on this measure are related to greater levels of depression, anxiety, stress, and psychological distress (Bond et al., 2011). For the purposes of this research, I modified the response options on this scale. Specifically, I changed the response options from 7 choices to 5 choices. The five response options included "never true = 1", "rarely true = 2", "sometimes true = 3", "often true = 4", and "always true = 5". Using only five response options reduces frustration and increases the quality of responses among individuals answering the questions (Babakus & Mangold, 1992). Additionally, the other measures in this study use a 5-point response option format. Therefore, I used the same metric during our statistical analyses.

Depression

The Patient-Reported Outcomes Measurement Information System (PROMIS) Depression Short Form 4a (Cella et al., 2010; Cella et al., 2019) was used to measure symptoms of depression. This scale is responsive to change in clinical trials (Kroenke et al., 2021), has good internal reliability, strong convergent validity (Kroenke et al., 2014), and construct validity (Cella et al., 2010). Raw scores on this scale are converted to T-scores which have an average of 50 and standard deviation of 10. A higher T-score indicates greater depression severity. The four items are rated on a 5-point scale from "1 = never", "2 = rarely", "3 = sometimes", "4 = often" and "5 = always". Total scores are obtained by summing the answer for each item. The values of each response item range from 1 ("never") to 5 ("always").

Anxiety

The PROMIS Anxiety Short Form 4a (Cella et al., 2010; Cella et al., 2019) was used to measure symptoms of anxiety. This scale is responsive to change in diverse clinical groups (Schalet et al., 2016) and has good internal reliability, convergent validity (Kroenke et al., 2014), and construct validity (Cella et al., 2010). The four items are rated on a scale from "1= never", "2 = rarely", "3 = sometimes", "4 = often" and "5 = always". The scoring follows the same scoring procedure for other PROMIS scales (e.g., PROMIS Depression).

Secondary Measures

Loneliness

The Three Item Loneliness Scale (Hughes et al., 2004) was used to measure loneliness. This scale has acceptable reliability, discriminant validity and convergent validity (Hughes et al., 2004). The 3-item loneliness scale is a shorter version of the 20-item UCLA Loneliness Scale. This scale was specifically designed for telephone surveys. The three items are rated on a three-point scale from "1 = hardly ever", "2 = some of the time", and "3 = often". To calculate the total score, the responses for each question are added. The brevity of this scale is well-suited for this telephone questionnaire.

Social isolation

The PROMIS Social Isolation 8a (Cella et al., 2010) was used to measure social isolation. This scale has acceptable internal consistency, test-retest reliability, convergent validity, and discriminant validity (Carlozzi et al., 2019). The eight items contain response options that range from "1 = never", "2 = rarely", "3 = sometimes", "4 = usually" and "5 = always". The scoring procedure mimics that of the other PROMIS scales (e.g., PROMIS depression).

Emotional Support

The PROMIS Emotional Support 8a (Cella et al., 2010) was used to measure the emotional support that participants have available to them. This scale has acceptable internal consistency, test-retest reliability, convergent validity, and discriminant validity (Carlozzi et al., 2019). The eight items contain response options that include “1 = never”, “2 = rarely”, “3 = sometimes”, “4 = usually” and “5 = always”. The scoring follows the scoring of the other PROMIS scales.

Mental Health Literacy

The Brief Measure of Mental Health Literacy Scale (Mackenzie & Reynolds, in preparation) evaluates one’s knowledge of mental health problems and services available for these mental health problems. Participants rated “how knowledgeable [are you] about”: the signs and symptoms of mental health problems, the possible causes of mental health problems, the types of professional help available, and how to go about seeking help. The response options range from “1 = not at all”, “2 = somewhat”, “3 = moderately”, “4 = very” or “5 = extremely”. The total score is calculated by adding up these values. Participants also rated their knowledge of mental health resources for adults aged 65+ in the community on a scale from “1 = poor”, “2 = fair”, “3 = good”, “4 = very good” and “5 = excellent”. The total score is calculated by adding these values together.

Demographic Information

Participants were asked a series of closed- and open-ended questions about themselves during the baseline questionnaire. They were asked to report their gender identification, age, highest level of education completed, occupational status, marital status, living arrangement, location of residence, and racial or ethnic background. Participants were asked about their

perceived physical health status and mental health status, rated on a scale from “1 = poor”, “2 = fair”, “3 = good”, “4 = very good”, and “5 = excellent”.

Data Analysis

Objective 1: Evaluate the Study Design and Procedures

To determine the feasibility of conducting a large-scale RCT with a clinical sample in the future, I evaluated the study design and procedures used in this research. First, I assessed the recruitment process by recording the number of people who: (a) expressed interest, (b) completed the screening, and (c) provided research consent throughout the duration of recruitment. I documented the number of people who withdrew from the study and failed to complete the research questionnaires. The group facilitator and I documented challenges with administering the study components. I took detailed notes on any concerns that participants expressed throughout their participation in the study. I also took notes on the process of administering questionnaires over the telephone, problems with the screening or consent process, time to administer questionnaires, and any challenges completing the CONNECT sessions (e.g., cancelled sessions). Additionally, I recorded contact with the participants throughout the study. The group facilitator communicated any challenges with running the individual group sessions with me, and this information is included below. This information was used to determine if the study procedures need to be modified.

Objective 2: Understand Participant Experiences in this Program

To evaluate participants’ experiences in this program, I examined responses from the post-CONNECT questionnaire to determine if aspects of the intervention and workbook were rated as satisfactory, neither satisfactory nor unsatisfactory (neutral), or unsatisfactory. I also recorded participants suggestions on “How could we make this better?” if they answered

"unsatisfactory" to one of these components of the intervention. Next, I examined responses to the GSRS by examining the ratings each week that range from 0 to 10, and I coded the open-ended responses regarding comments about the program, and changes participants noticed throughout the program. I examined the open-ended responses to the post-CONNECT questionnaire and group session rating scales using reflexive thematic analysis (TA) (Braun & Clarke, 2019; Braun et al., 2019). Reflexive TA involves identifying themes in the data, which are patterns of shared meaning that are organized around a core concept or idea (Braun et al., 2019). TA also captures codes in the data, which are the smallest unit of analysis that capture interesting features of the data (Clarke & Braun, 2017). The steps taken to complete this reflexive thematic analysis included: (1) becoming familiar with the data by re-reading and searching for meaning and patterns (2) generating the initial codes; (3) searching for themes across the data; (4) reviewing these themes and refining them; (5) defining and naming the themes; (6) producing the report (Braun & Clarke, 2006). An important aspect of reflexive thematic analysis is that the themes created during this process are created by the individual analyzing the data and are therefore subjective. In other words, these themes do not passively emerge from the data in front of us (Braun & Clarke, 2019). Instead, they are created by the researcher, and they are based on the assumptions of the researcher (Braun & Clarke, 2019). Additionally, I used the 15-point checklist for criteria for good thematic analysis, which was created by Braun and Clarke (2006) to ensure correct coding of the data (Braun & Clarke, 2006). By analyzing the open-ended responses in this manner, I collected meaningful responses from participants that illustrated a story of their experience in this program. The GSRS data and the post-CONNECT questionnaire data provided detailed insights on what participants appreciated

about the program, and what could be done to improve the program, through evaluating the program, each individual session, and the workbook.

Objective 3: Explore the Preliminary Effectiveness of the Program

For the quantitative analyses, I used SPSS Version 28 and an alpha level of 0.05. First, I coded all the variables (e.g., 3-item loneliness scale: 1 = "never" 2 = "some of the time", 3 = "often"), I identified abnormal response patterns in the data, and checked for missing data. Next, I reported descriptive statistics for the self-report measures and demographic variables. To determine how symptoms changed over the course of treatment, I analyzed the overall trends in the data through looking at the means on each outcome measure to see if there were changes from baseline to post-CONNECT. To measure changes at two time points (baseline and post-CONNECT), paired samples t-tests were used to provide an estimate of the effect size (Cohen's d). I calculated the effect size for the primary outcome measures (depression, anxiety, psychological flexibility) and secondary outcome measures (loneliness, emotional support, social isolation, and mental health literacy). Due to the small nature of this sample, significance testing was not conducted.

Results

Objective 1: Evaluate the Study Design and Procedures

Sample

I anticipated that I would meet my anticipated sample size of N = 5-8. The results revealed that some individuals dropped out of the study before the study began (n = 3). Other participants dropped out right before the sessions began (n =1), and after the first session (n = 1). Therefore, I did not meet this anticipated sample size of N = 5-8. Despite having a smaller sample size than anticipated, all participants met the clinical eligibility criteria. At baseline

assessment, all participants rated their mental health as “fair”. Two of the three individuals were receiving services through a psychiatrist, and one participant was not currently receiving mental health treatment. All participants were referred to the study by a mental health professional. Participants reported loneliness at baseline, with total scores on the loneliness measure ranging between 8 to 9 (maximum score of 9 on this scale). Participants all endorsed social isolation, with scores ranging from 20 to 33 (maximum score of 40 on this scale). Participants endorsed symptoms of anxiety with scores ranging from 11 to 15 (maximum score of 20 on this scale), and participants endorsed symptoms of depression with scores ranging from 10 to 17 (maximum score of 20 on this scale). Finally, scores on the measure of psychological flexibility at baseline ranged from 21 to 29 (maximum score of 35 on this scale) where higher scores suggest less flexibility. These characteristics distinguish this sample from a previous community sample as all participants were endorsing the symptoms listed above. I conceptualize this as having successfully recruited a sample that matched with my intended criteria.

Demographics

Most participants were female (66.7%, *n* = 2), and one was male (33.3%, *n* = 1). Age of participants ranged from 68 and 72 years old, and the mean age was 69.67. Participants reported varying degrees of education, including a College Diploma (33.3%, *n* = 1) and University Degrees (66.7%, *n* = 2). All participants reported being retired (100%, *n* = 3). Participants reported being single/widowed (33.3%, *n* = 1), married (33.3%, *n* = 1) and divorced (33.3%, *n* = 1). Some participants were living alone (66.7%, *n* = 2) and others lived with a partner (33.3%, *n* = 1). Participants lived in both urban (66.7%, *n* = 2) and rural locations (33.3%, *n* = 1). All participants identified as Canadian (100%, *n* = 3).

Recruitment

Recruitment began in January 2022 and continued until August 2022. Recruitment involved sending weekly, bi-weekly, or monthly emails to the recruitment sites. The recruitment material was distributed to clinicians through email, with the information flyer and information package for clinicians to consult if they needed more specific information about the study. Participants were screened into the program in February (n = 3), March (n = 2), April (n = 1), May (n = 2), June (n = 3) and July (n = 3). In total, I contacted 14 individuals and provided information about the study during this initial phone call. Only 1 participant who was referred by a mental health professional was unable to be reached after multiple attempts at initiating contact over the course of several months. A total of 6 individuals decided they were not interested in the study after hearing more about the study, and this was determined during the first research screening call. These individuals were not contacted for follow up. Reasons for this lack of interest included being too busy, the time of year, not interested in the group format, or they did not elaborate. A total of 8 participants completed the screening questionnaire and provided research consent to participate in the study. A total of 3 participants dropped out between the date of research consent and the date of the program starting. A total of 1 participant dropped out between the program materials being sent and the clinical intake interview. A total of 1 participant withdrew from the study after the sessions began. Reasons for dropout included no longer being interested due to the time of year the program was now offered, not responding to multiple follow-up attempts at contact, no longer interested after learning more about the group composition, and changes in personal circumstances making them unable to participate.

Regarding the process of recruitment, all the referrals listed above were initiated directly from the mental health worker. Although I planned for both potential participants and the mental health workers to contact to me to initiate contact, I found that older adults did not reach out

independently to initiate this contact. Instead, the mental health workers informed their clients of the study, obtained consent to pass on the client's information, and then contacted me and passed on this information. This is interesting to note and could inform revisions to future versions of the program. Future avenues of recruitment may include having an email address, for example, that older adults could contact to indicate their interest. Some mental health professionals provided feedback regarding challenges they encountered with recruitment. This feedback included challenges finding suitable clients for the study. For example, many clients had neurocognitive disorders, were unable to hear over the telephone, and had mental health diagnoses that made them ineligible for the research.

Session Administration

The group facilitator communicated technical challenges that were faced during the administration of the group sessions. First, session #4 was rescheduled due to technical challenges with the video conferencing platform. This session was postponed one week, and the new date was confirmed with all participants. Next, session #5 needed to be rescheduled because only one person was able to attend, and this session was postponed one week, and the new date was confirmed with all participants. Therefore, solutions were found for each challenge encountered. Factors contributing to participants missing some sessions included challenges that came up in people's lives during the program, and two of the group sessions were held on holidays. Interestingly, this is the first time that this program has been offered with one group facilitator. Typically, two or three facilitators are involved in the program sessions. Therefore, this research suggests that having only one group facilitator moving forward is possible, but further research would need to be conducted to determine how this may impact program delivery, what individuals think of this (compared to having two facilitators), and how this

experience is for the facilitator. For example, future research testing this program in a clinical sample with one group facilitator should include an interview with the group facilitator to determine how they experienced the sessions.

Screening and Consent

No problems were expressed by potential participants during the screening process. Several participants chose to complete the research consent during a separate phone call, because the screening questionnaires took between 30 and 45 minutes to complete. This was not anticipated at the outset of the study, but possible reasons for why this occurred included that participants in this clinical sample had more information to share regarding their current mental health symptoms, mental health related history, and experiences of social isolation and loneliness. Furthermore, it is possible that some participants appreciated that extra time between the screening call and the research consent call to determine if this program would be a good fit based on their needs. In total, the research consent process took approximately 30 minutes to complete. This involved reading the entire research consent form to participants over the telephone. No challenges with the consent process were expressed by participants. Participants who previously consented before the study design changed were called a second time to re-consent using the new consent form, and no issues were expressed during this process.

Weekly Group Session Rating Scales

The timeline for the administration of the group session rating scales was followed. These were all administered within an hour of each session ending. To achieve proper timing for these weekly questionnaires, the group facilitator told me when the group was finished, and which group members attended, so that I would only contact appropriate participants. Next, I contacted any participants who did not attend the session to check-in to confirm they were still interested in

continuing in the program, and if any follow-up was required from the group facilitator. If a participant did not attend the group session, they did not complete the rating scale for that week. The missing data for these questionnaires included one missing participant for session 1, one missing participant for session 4, one missing participant for session 5, and one missing participant for session 6. Timing of the GSRS administration ranged from 5-15 minutes, and the questionnaires were administered immediately after each session, one after another.

Baseline Questionnaire

The timeline for the administration of the baseline questionnaire was followed. The questionnaire was administered to each participant during the week before the start date of the first session. Timing for this questionnaire ranged from 10 minutes to 20 minutes. All participants followed along with the questionnaire that was mailed to them; this likely helped with the quick administration time for this questionnaire.

Post-CONNECT Questionnaire

The timeline for the administration of the post-CONNECT questionnaire was followed for two participants, which was within one week of the final session. For the remaining participant, the date of administration was exactly 2 weeks following the final CONNECT due to the participant being unable to complete it sooner. The time of administration for these questionnaires ranged from 40 minutes to 75 minutes. None of the participants used the mailed version of the questionnaire to follow along for this final questionnaire.

Objective 2: Understand Participant Experiences in this Program

To first demonstrate what participants thought of the program and how it impacted them, I will present the responses to the open-ended questions. Next, I will present responses that describe how satisfied participants were with each individual component of the program and

what they thought of the workbook and the individual sessions. This qualitative data was collected through the open-ended responses to the questionnaire items throughout the program, and after the program ended. Participant's answers provided insight into what participants thought about the program itself (About the Program) through sharing the features that they appreciated about the program, and features that could be improved. Next, participants provided insight into their personal experiences in the program through identifying the changes that they noticed throughout the program (About Me). Finally, participants explored how they perceived these changes emerging, and which components of the program might have helped to influence some of these changes (Perceptions of Change). The themes presented below both capture common responses that were expressed by multiple participants, while still capturing the unique perspectives of each participant.

About the Program

These themes are centered around understanding what participants thought of The CONNECT Program. This was separated into features that participants appreciated (See Figure 1) and features that could be improved (See Figure 2). Four themes were created for features participants appreciated, including Theme 1: Support and Connection, Theme 2: Comfort and Convenience, Theme 3: Relevant Material, and Theme 4: Facilitation. Three themes were created for features that could be improved, including Theme 5: Missing Visual Information, Theme 6: Left Wanting More, and Theme 7: Challenges Maintaining Consistency.

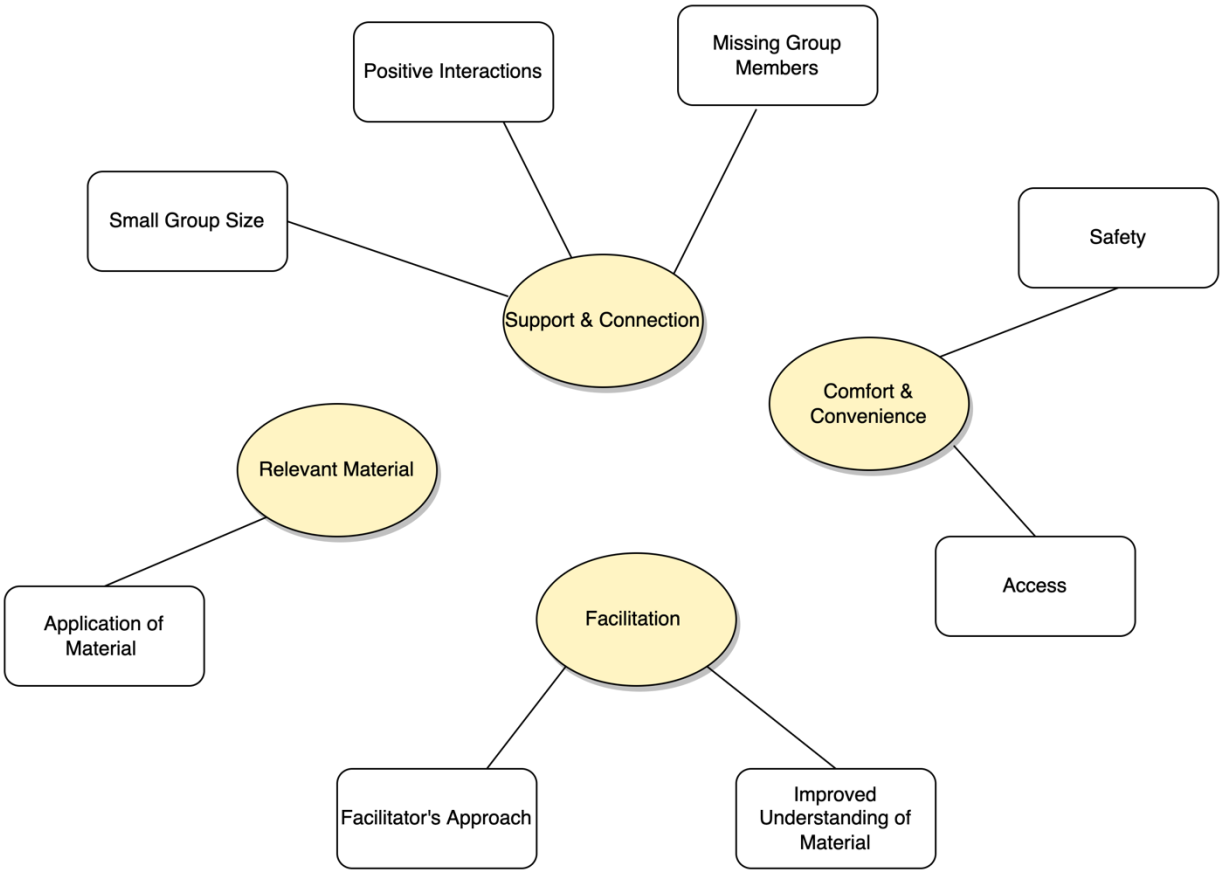

Figure 1. About the Program: First 4 themes and associated subthemes

Theme 1: Support and Connection. This theme demonstrates the quality of interactions that participants described experiencing throughout the program. Based on participant descriptions, these interactions were marked by feeling supported and feeling connected to the other group members. To illustrate this theme, one participant explained that "You could sense the warmth of the people even though it was over the phone" (p.1). Three subthemes were created under Theme 1: Support and Connection, including Positive Interactions (1a), Missing Group Members (1b) and Small Group Size (1c). Participants noted that their communication with other group members within sessions were positive and they expressed feeling respected by one another. As one participant explained, "I found that we were a supportive group to one

another" (p.3). Due to the strong connections among group members, participants expressed concern when one group member was missing from a session. One participant explained, "We missed one member of the group, and we hope [they] can join next time" (p. 3). Finally, some participants attributed the connection that they felt with other group members to the small size of the group. One participant explained, "Any more participants would have been too many. Everyone got to speak with the amount we had" (p.1). Another participant noted, "I think 3 or 4 people is the perfect number. We were able to get to know each other more this way. I don't think I would have felt comfortable sharing or talking if there were more than 3 or 4 people in this group" (p.3). Therefore, it is possible that the small group size helped participants feel comfortable sharing their experiences with one another, which then strengthened these connections.

Theme 2: Comfort and Convenience. This second theme illustrates the advantages of the telephone-based delivery of this program, specifically, the comfort and convenience it provided participants. Despite some participants expressing that they would prefer an in-person program or zoom based program (described later in Theme 5: Missing Visual Information), these same participants explained that the "the convenience of it is most important, though" (p.4). Two subthemes were created under Theme 2: Comfort and Convenience, including Safety (2a) and Access (2b). Regarding safety, some participants appreciated the anonymity and feelings of comfort and security associated with telephone delivery. One participant explained, "Being able to access the program from home made it more comfortable" (p.3). Another noted, "I liked the anonymity of it being over the phone at the beginning" (p.1). Therefore, participants appeared to feel comfortable during the beginning stages of this program. The lack of visual cues, despite being seen as a downside once these connections were established, might have also made it

possible for those connections to be established in the first place. Regarding access, participants explained that the telephone-delivery decreased travel time, and this was beneficial, and it made it easy to join the program each week. One participant explained, “It is easy, don’t need to travel to attend” (p.4). Therefore, there are benefits and drawbacks with this telephone-based delivery. On the side of benefits, participants appreciated the accessibility of this program, and the comfort and safety they felt while they participated in the sessions.

Theme 3: Relevant Material. This theme captures how The CONNECT Program material was relevant for the individual participants. Participants were asked if there were topics or sessions that did not resonate with them, and one participant explained, “[the sessions] all applied to me in some way” (p. 3), and “it all resonated with my life for sure (p. 1). To further demonstrate how the session material applied to individual participants, a subtheme was created under Theme 3: Relevant Material, which is Application of the Material (3a). This subtheme is captured through participants descriptions of using these skills that were reviewed in the group sessions, outside of the sessions. One participant explained, “I was able to transfer mindfulness outside of the group” (p.4). Another participant noted, “I would look at things around me and look for the good in things” (p.1). Other participants described using the skills throughout the program when stressful events came up in their lives. Some participants explained that they had previous experience using some of the skills in this group, and they were looking forward to continuing learning more. One participant explained that “I am enjoying learning about mindfulness” (p.3). Therefore, this theme illustrates how despite each participant being a unique individual with unique challenges, the session material appeared to have real-life applications for each person.

Theme 4: Facilitation. This fourth theme captures the important role of the facilitator in The CONNECT Program. It is evident that the facilitation was a contributing factor to this safety and security participants felt, their ability to understand the material, and the connections group members formed with one another. The facilitator of the CONNECT program plays an integral role, as they are there to facilitate discussion between participants and convey the skills and material described in the workbook. Two subthemes emerged within Theme 4: Facilitation, including Improved Understanding of Material (4a) and The Facilitator's Approach (4b). Under the subtheme of improving understanding of material, participants noted that the material came to life when it was explained in session. When referring to the session on values using a Crokinole board as a visual representation, one participant noted initial confusion about this, and explained, "It took a while for me to understand, but after [the facilitator] explained it, I understood" (p.4). Regarding the approach taken by the facilitator, the group members expressed appreciation for the facilitator's style, noticing that the facilitation was "excellent" (p.3) and "great" (p.4). The participants identified that the facilitation was organized and smooth, noting, "[The facilitator] would clarify things, [they] would be open to answering questions, [they] [were] easy to get in contact with" (p.1). Additionally, participants noted that the facilitator resolved any issues that came up (e.g., technical problems).

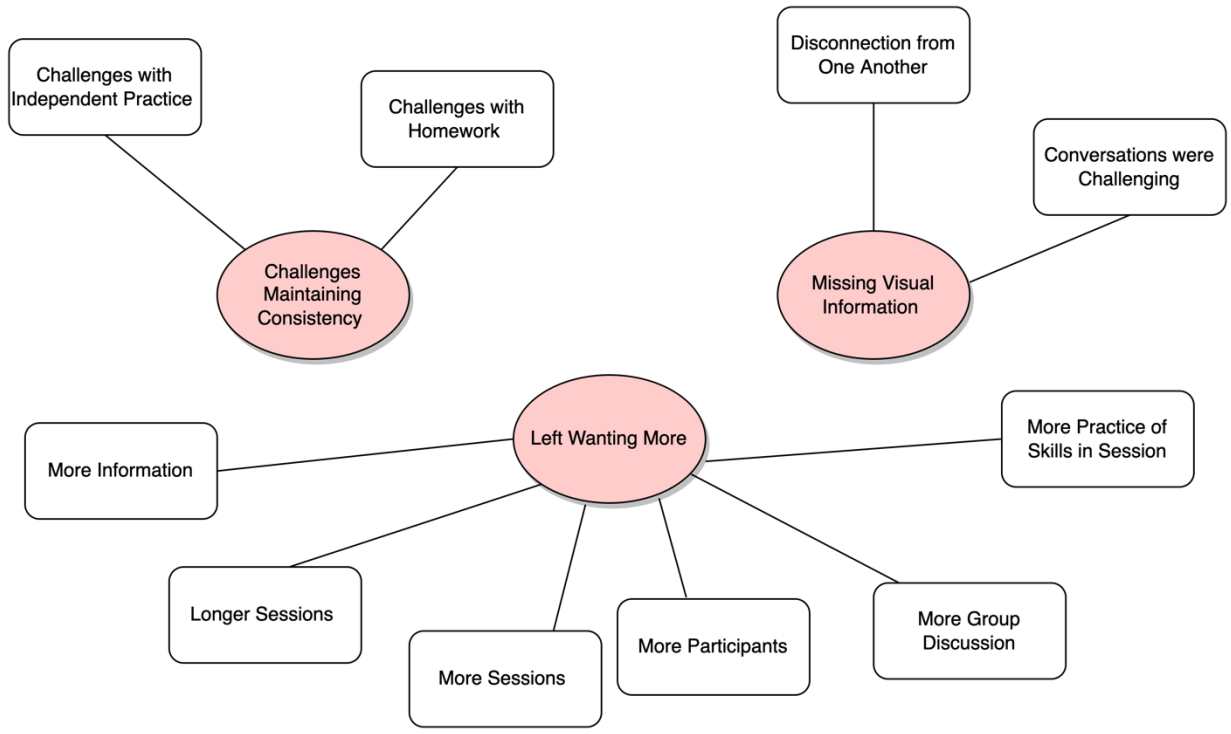

Figure 2. About the Program: Remaining 3 themes and associated subthemes

Theme 5: Missing Visual Information. This theme captures the disadvantages associated with missing visual information in a telephone-based program, which was a common observation noted by participants. Participants explained that they would have appreciated visual cues during the sessions. To illustrate this theme, one participant explained, "It was like group therapy, but it was missing the visual cues" (p.4). Three subthemes emerged within Theme 5: Missing Visual Information, including Conversations were Challenging (5a) and Disconnection from One Another (5b). To illustrate the first subtheme, participants explained, "Conversations are harder without those [visual] cues" (p.1). Participants described challenges when more than one person would try to speak at the same time. One participant described this challenge, "Sometimes over the phone we would stumble over one another, like one person would start talking at the same time as another person, which was awkward at times, although everyone was nice about it." (p.1). Regarding the second subtheme, participants described feeling disconnected

from one another during conversations. One participant described how the lack of visual cues made it hard to gauge how people experienced each session, such as their level of distress, or how well they understood the material. They explained, "[visual cues] might be useful for each other and the facilitator to be able to see people's level of distress as they are talking" (p.3). Another participant said that the lack of visual cues made them feel less connected to the group members, through explaining how "You cannot see these people… they are just a voice on the telephone" (p. 3). Another participant explained that "It would have been nice to see the faces of people I met through here because I think we developed good connections." (p.3). Therefore, feeling connected to the group members might have caused participants to desire additional visual information to strengthen these connections.

Theme 6: Left Wanting More. This theme captures the areas of The CONNECT Program that participants thought could be modified or changed. Theme 7: Left Wanting More, has 6 subthemes which capture the specific components that participants felt were missing from the program. These subthemes include More Sessions (6a), Longer Sessions (6b), More Group Discussion (6c), More Participants (6d), More Practice of Skills in Session (6e) and More Information (6f). A variety of answers were provided by participants, and this number of subthemes was required to capture the unique experience of each participant. To begin, participants expressed a desire for more sessions, explaining, "I wish the group could have continued past 6 weeks" (p. 3), "I think the program was too short" (p.4), and "More sessions would have been better… Approximately 4-5 more sessions" (p.1). Additionally, some participants noted that in addition to more sessions, they were interested in having longer sessions, "Sometimes we would get rolling and then it was time to call it quits" (p.1). Other participants explained that they wanted more sessions, or longer sessions, because certain skills

could have been explained in greater detail, such as unhooking and goal setting. One participant said that goal setting and unhooking could be spread out to 2 sessions per topic (rather than 1 session per topic). Another reason for wanting longer sessions was related to the fact that participants expressed a desire for more group discussion and open discussion between participants to strengthen connections between participants. One participant noted, "I would have liked to have known more about the individuals I was talking to" (p.3). Similarly, participants felt like there was not enough time for this group discussion, noting, "Sometimes we had to hurry things along during the group, even more time for group discussion would have been great" (p.3). Some participants thought that more participants would have been better, noting, "6 people in the group might be good" (p.4). Keeping in mind that some participants felt that 3 group members allowed for connection and comfort. Next, participants expressed a desire for more practice using the skills in session. One participant said, "I also think we needed more time to practice mindfulness and maybe provide more variety of mindfulness exercises" (p.4). An important element of this additional practice in session was the opportunity to receive more feedback from the facilitator and other group members. One participant noted, "More practice of these skills in session because you need feedback in session" (p.4). Finally, some participants were left wanting more information about certain elements of the program in the workbook, such as the background of the program creation, how The CONNECT Program is designed for older adults specifically, and the type of therapy being used in this program (ACT) and how it differs from other types of therapy. Finally, some participants wanted more information about specific skills, such as unhooking. Theme 6: Left Wanting More, offers new avenues to explore adding to future iterations of the program to meet the needs of a clinical sample.

Theme 7: Challenges Maintaining Consistency. Despite some participants feeling comfortable transferring skills from the sessions into their real-life (See 3a), this real-life application also posed challenges. This theme was separated into two subthemes, including Challenges Completing Homework (7a) and Challenges with Independent Practice (7b). This theme is conceptualized as difficulties associated with building cohesion between the material reviewed in session, then taking this material and practicing it outside of sessions. Regarding homework, some participants explained, "Sometimes other things came up, and they interfered with my ability to do [the homework]" (p.1). Others noted that "I was not good at doing the homework exercises, it was harder for me to accomplish them to be honest" (p.3). Clearly, some participants found it difficult to complete the homework at various timepoints throughout the program. This appeared to also be due to the unique circumstances that each participant found themselves in. Secondly, participants found it challenging to practice some skills independently. Some participants noted that the lack of group support outside of sessions contributed to this challenge with independent practice. One participant said, "It is tougher to do these things independently, it is easier to put yourself down when you are alone and without others" (p.1). Other participants noted concerns associated with practicing specific skills, "I found that I had a problem with practicing the mindfulness outside of sessions" (p.3). Overall, this theme could be used to demonstrate how impactful the social support received inside sessions is for participants. Additionally, if participants did not feel confident practicing new skills independently, this may be related to why they wanted more sessions, and longer sessions, once the program had ended.

About Me

The second category of themes focus on understanding the participants' personal experiences throughout the program and changes they noticed during this program (About Me).

Four themes were created, including Theme 8: Attention to the Present Moment, Theme 9: Acceptance, Theme 10: Self-Compassion, and Theme 11: Goal Setting.

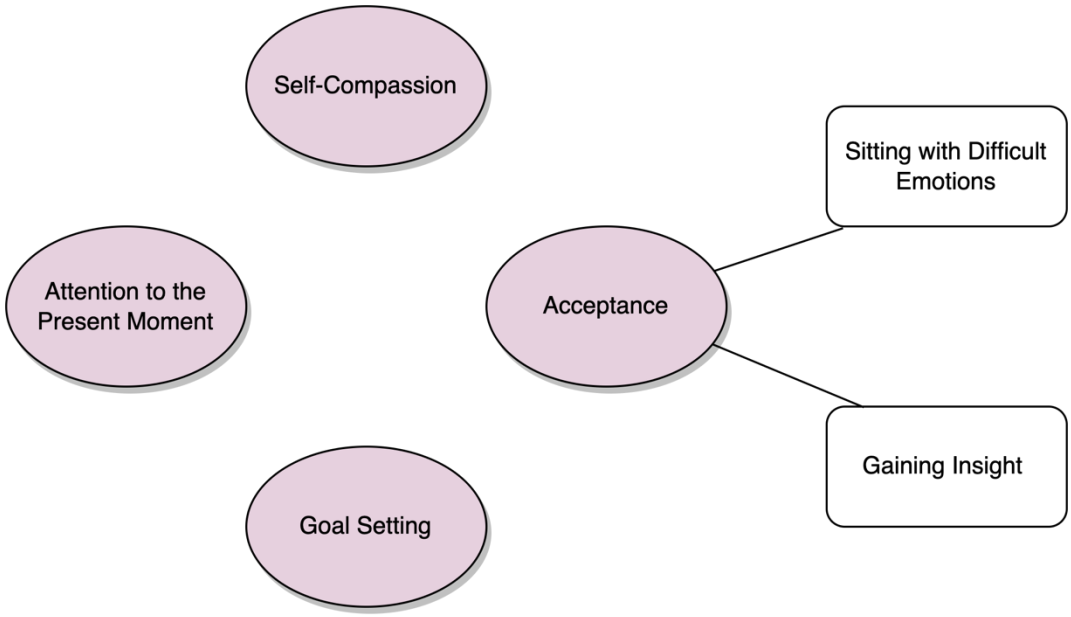

Figure 3. About Me: 4 themes and associated subthemes

Theme 8: Attention to the Present Moment. This theme captures participants' experiences opening up to the world around them and paying attention to their experiences. This present moment awareness is one of the core principles of ACT. When we are in contact with the present moment, we are better able to pay attention to our experiences, both things occurring in the world around us, and the world within us (e.g., thoughts, emotions, memories). With increased attention to the present moment, we are fully engaged in our experience (Harris, 2019). Participants noted, "I am more aware of my surroundings. With depression, you walk around in a fog sometimes" (p.3). Participants also shared that they were paying attention to their present moment experiences, including both painful thoughts and difficult emotions. In ACT, the individual is encouraged to accept one's thoughts and feelings, even the painful ones. One

participant said, “I am noticing my negative thoughts more” (p.4). Finally, participants noted changes in their ability to tune in and notice their emotions. One participant explained, “I am paying attention to my feelings more” (p.1).

Theme 9: Acceptance. The next theme involves the changes that participants noticed within themselves regarding their ability to make room for their thoughts and emotions, even if they are unwanted or painful. The two subthemes that were created for this theme include Sitting with Difficult Emotions (9a) and Gaining Insight (9b). Regarding this ability to sit with difficult emotions, participants reflected on how they felt they could let things go more easily, rather than being dominated by their thoughts. One participant explained, “I am noticing that it is easier for me to sit with negative emotions and thoughts without reacting to them, and I am finding that I no longer give so much weight to these thoughts” (p.3). One participant mentioned, “I am learning that it is okay not to be happy about everything all the time” (p.1). Participants also noted that when they were able to accept their thoughts and emotions, then they could view these experiences in a new way and have new insight into their experiences. One participant explained, “I noticed I was able to sit with a negative feeling and negative thoughts, think about it, and have more insight into why I was feeling that way” (p.3).

Theme 10: Self-Compassion. The concept of self-compassion is reviewed throughout The CONNECT Program sessions. Participants noted speaking to themselves in kinder ways, which then helped them move forward towards their goals. For example, one participant explained, “I am learning to be kinder to myself, and being kinder to myself helps me in my goal setting” (p.3). The idea of self-compassion was introduced earlier in the program, before goal setting, to help participants move towards their goals with a sense of awareness, acceptance, and self-compassion. Participants also described their self-compassion in implicit ways. For example,

when one participant was describing their challenges completing the homework exercises, they described their persistence, noting, “the more you work at it the better you got” (p.1).

Theme 11: Goal Setting. Setting goals is another core component of ACT, and goal setting helps individuals take meaningful action towards their values (Harris, ACT Made Simple). One participant noted, “With goal setting, I am learning how to break things down into smaller pieces in order to help me accomplish my goal” (p.3). Therefore, participants were learning how to take reasonable small steps towards their goals. Additionally, some participants appeared to gain a new perspective regarding the things they could accomplish. One participant noted, “I am thinking about things that previously I wanted to do but thought I could not do, and now I know how to set manageable goals for myself” (p.1).

Perceptions of Change

The following themes focus on exploring which components of The CONNECT Program were perceived to influence personal changes (Perceptions of Change). Two themes were created, including Theme 12: Group Discussion and Theme 13: Engagement with the Material. These themes illustrate how the participants viewed changes in themselves. Participants were asked to describe what they felt was the cause of the changes they listed after each individual session, and their responses illustrate what they believed helped lead to the changes they viewed in themselves.

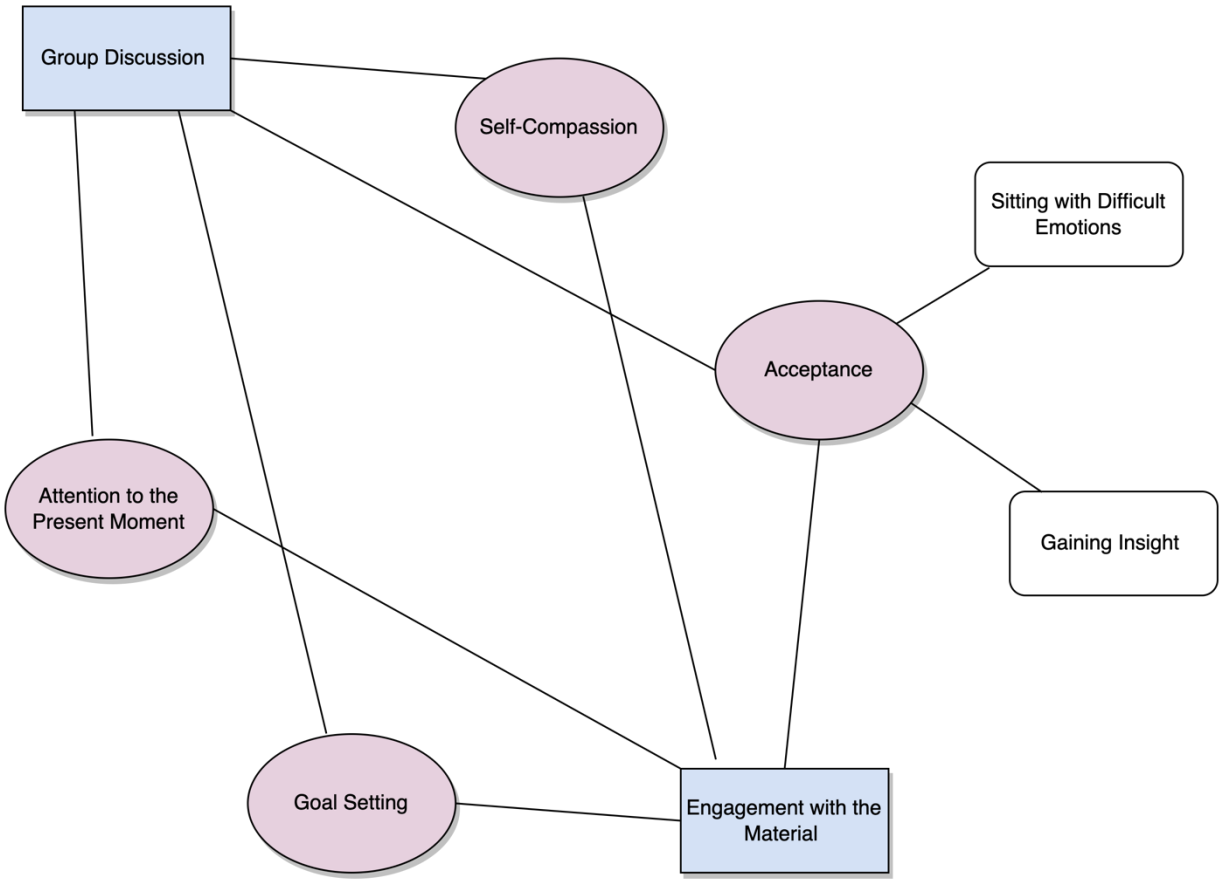

Figure 4. Perceptions of Change: 2 themes

Theme 12: Group Discussion. Participants identified the group discussions during sessions as a key reason as to why this program was helpful. For example, one participant noted, "Having other people talk about mindfulness helps me to practice it, and then listening to how other people experience mindfulness also helps me" (p.1). This demonstrates how participants learned more about these concepts through hearing other people's experience with them. Additionally, participants mentioned, "The group members help to get me really thinking about these topics" (p.3). Therefore, listening to others provided new perspectives and allowed participants to see new elements that they might have not considered before.

Theme 13: Engagement with the Material. It appears that another reason why participants felt some of these changes within themselves, was due to their own engagement with the session material, including reading the material and practicing with the homework after session. One participant attributed these changes to, "Reading the material each week" (p.4). Another participant talked about how, "I find the homework exercises have been helpful in practicing what we learn" (p.4). Therefore, the combination of the group discussions and trying out the skills and homework activities appeared to aid participants in making meaningful changes in their lives.

Evaluation of Specific Components of the Program

Participants rated separate elements of the intervention on a scale from, "satisfied", "neutral" or "unsatisfied". Certain elements of the intervention were rated as satisfactory for all participants. These satisfactory ratings were provided to the following elements: time of day of the sessions, the content and theme of each session, the participation in group exercises, the engagement with the facilitator, their interaction with other group members, the expertise of the facilitator, the clarity of the facilitator's voice, and the time allocated to answering questions each session. Components of the research study and the program that were rated as satisfactory by all participants included: the process of receiving assessments over the phone, providing consent over the phone, the availability of the facilitator to answer questions between sessions, and the steps performed to reassure privacy and confidentiality.

In addition to these satisfactory ratings, certain elements of the program received mixed ratings or dissatisfied ratings. Regarding the number of sessions, all three participants were not satisfied. All participants described wanting more sessions, and preferences ranged from two more sessions to 6 more sessions. Considering the length of sessions, 2/3 participants were

satisfied, and one participant indicated feeling neutral. This participant indicated that longer sessions would also be fine. Next, 2/3 participants were satisfied with the number of participants in the group, and one participant noted wanting more participants (2 or 3 more participants). Next, 2/3 participants were satisfied with the mindfulness at the start of the session, and one participant felt neutral, and indicated that these exercises sometimes lasted too long. Next, 2/3 participants were satisfied with the time dedicated to the intervention each session, and one participant was not satisfied with this, and they wanted more time to discuss the session content, rather than spending this on explaining the session material. Next, 2/3 participants were satisfied with the homework and take-home exercises, and one participant was neutral, and they felt that it was hard for them to accomplish the homework. Next, 2/3 participants were satisfied with the time for group discussion. As noted above, one participant wanted more group discussion during sessions, more open discussion between group members, and more flexibility with attending to a particular issue that a participant may bring up to spend more time on this during the session. Regarding the total number of technical issues throughout the group, 2/3 participants were satisfied with this, and one participant felt neutral, by noting that one meeting was rescheduled due to these technical issues.

Evaluation of the Workbook

Participants described how they used the workbook, what they liked and disliked about it, and what they would like to see in future versions of the workbook. To begin, all participants said that they read the workbook thoroughly before each session, wrote notes in the workbook before the sessions in preparation for the sessions, and participants used the workbook to follow along during sessions and used the workbook to take notes during the sessions. When they were asked about what they did not like about the workbook, 2/3 participants mentioned the “slippery”

and “glossy” paper, and 1/3 participants said the boxes for writing reflections and answers in the workbook were too big. When they were asked one thing that could make the workbook better, 2/3 participants suggested changing the paper to something that is easier to grip and write on (e.g., less slippery), and 1/3 participants suggested putting the individual sessions into a binder. Participants were asked if there was anything unclear in the workbook, and 2/3 participants said no, while one participant desired more clarification on the theoretical orientation being used (ACT) and more information about the history of The CONNECT Program and how it is designed for older adults. Participants were asked if there was anything that they wanted more information on in the workbook, and one participant said no, one participant wanted more information about the history of the program, and one participant wanted more information about unhooking from thoughts. Participants said that the following features were not necessary to include in a future version of the workbook: less content, larger font, more pictures, making content easier to skim, more areas to take notes, and including definitions. Participants were mixed on their opinions about adding more content, and 2/3 participants wanted more content in a future workbook. Participants were mixed on their opinions regarding providing an electronic version of the workbook, and 2/3 participants noted that they wanted this. Finally, participants were mixed on their opinions regarding providing an audio-recording version of the workbook, and 1/3 participants indicated that they would like this.

Evaluation of Individual Sessions

To determine how participants experienced each session throughout the program, I examined the responses to the group session rating scales. I examined the mean for each group session rating scale. Regarding the overall ratings for each session, the group mean was lowest for session 1 ($M = 6.5$), and it increased in session 2 ($M = 9.6$), sessions 3-5 ($M = 10$), and

session 6 (*M* = 9.5) (See Figure 5). The range of scores across the four domains was 4-10 for session 1, between 8-10 for session 2, and between 9-10 for session 3 to session 6. These findings confirm my prediction that over 50% of the scores would be rated at a 5 or higher on the GSRS each week.

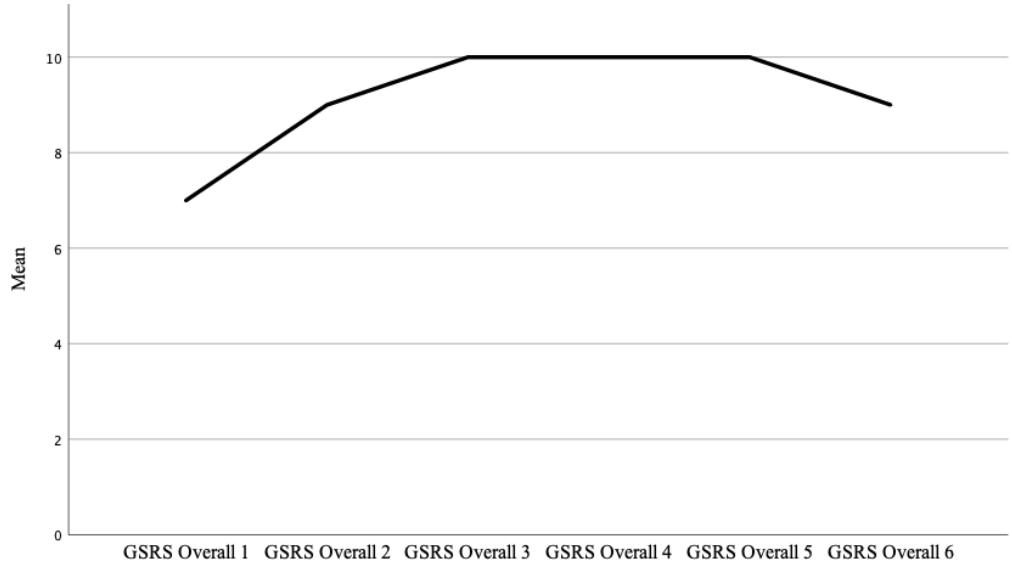

Figure 5. Overall Ratings for Sessions 1-6

Objective 3: Explore the Preliminary Effectiveness of this Program

Trends in Mental Health Symptoms

As noted above, a sample size of three participants does not allow for conclusions to be made about the effectiveness of this program. With that said, it is possible to explore overall trends in self-reported symptoms before and after the program. The following results describe overall trends in the data across the three participants as they were measured at two timepoints (baseline and post-CONNECT). The means at each timepoint are illustrated in the figures below. To begin, psychological flexibility increased over time (higher scores indicate less flexibility), from baseline (*M* = 24.33, *SE* = 2.40) to post-CONNECT (*M* = 22.33, *SE* = 2.85) and this was a large effect (*d* = 1.16, 95% CI [-.44 – 2.64]). Depression decreased over time, from baseline (*M*

= 12.33, *SE* = 2.33) to post-CONNECT (*M* = 10.33, *SE* = 2.33) and this was a large effect (*d* = .76, 95% CI [-.63 – 2.02]). Findings revealed that anxiety decreased over time, from baseline (*M* = 12.67, *SE* = 1.2) to post-CONNECT (*M* = 9.67, *SE* = 1.86) and this was a large effect (*d* = 1.5, 95% CI [-.31 – 3.22]). Loneliness decreased over time from baseline (*M* = 8.67, *SE* = 0.33) to post-CONNECT (*M* = 7.67, *SE* = 0.88) and this was a large effect (*d* = 1.0, 95% CI [-.51 – 2.39]). Findings revealed that social isolation decreased over time, from baseline (*M* = 27.33, *SE* = 3.84) to post-CONNECT (*M* = 24.33, *SE* = 2.6) and this was a medium effect (*d* = .58, 95% CI [-.72 – 1.77]). Emotional support increased over time, from baseline (*M* = 23.67, *SE* = 4.33) to post-CONNECT (*M* = 25, *SE* = 7.94) and this was a small effect (*d* = -.19, 95% CI [-1.31 – .98]). Findings revealed that mental health literacy increased over time, from baseline (*M* = 14.33, *SE* = 1.33) to post-CONNECT (*M* = 16.67, *SE* = 0.33) and this was a large effect (*d* = -1.12, 95% CI [-2.59 – .46]).

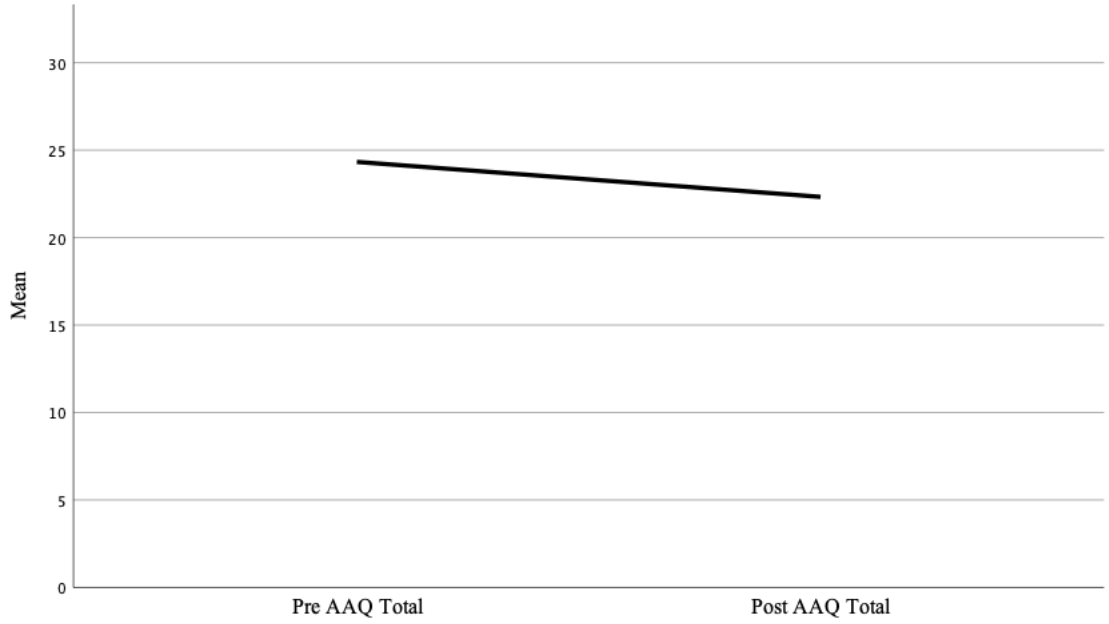

Figure 6. Psychological Flexibility (High scores indicate less flexibility, low scores indicate more flexibility)

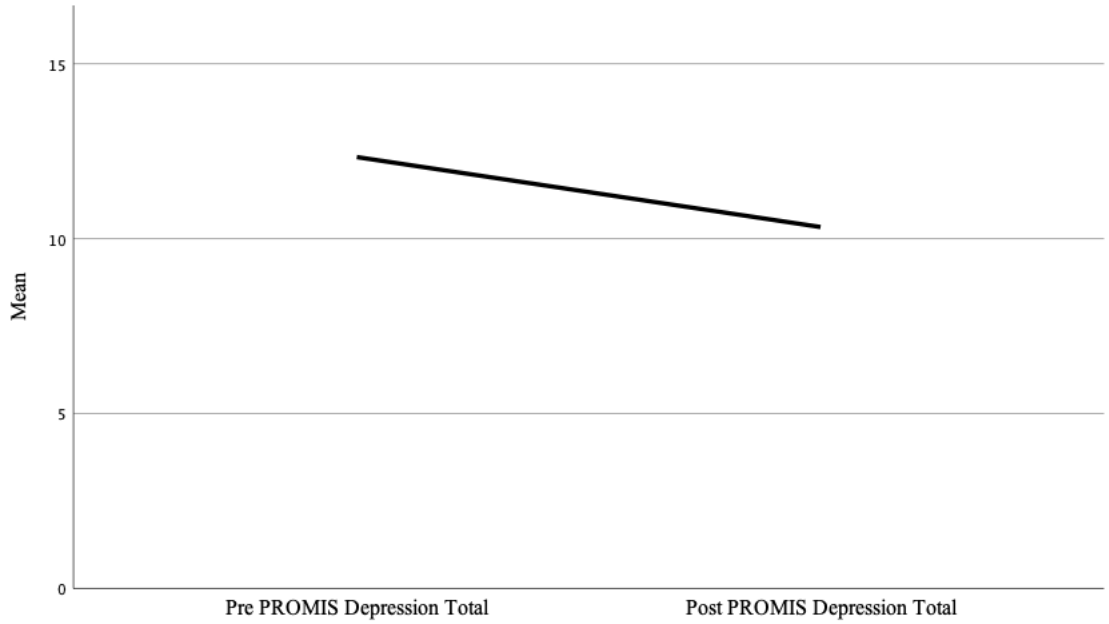

Figure 7. Depression

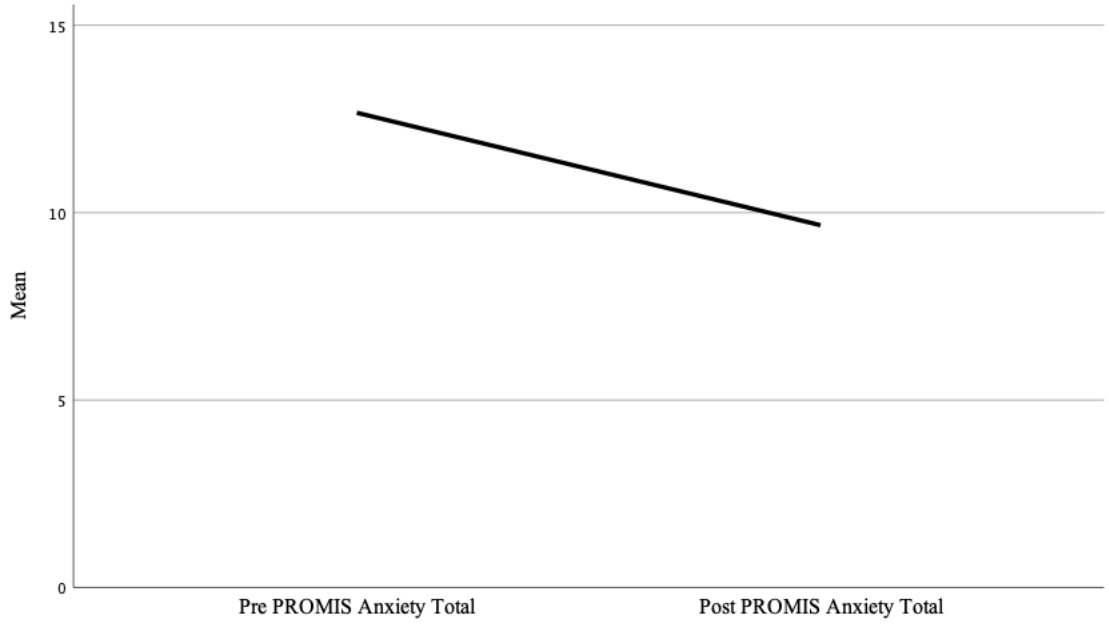

Figure 8. Anxiety

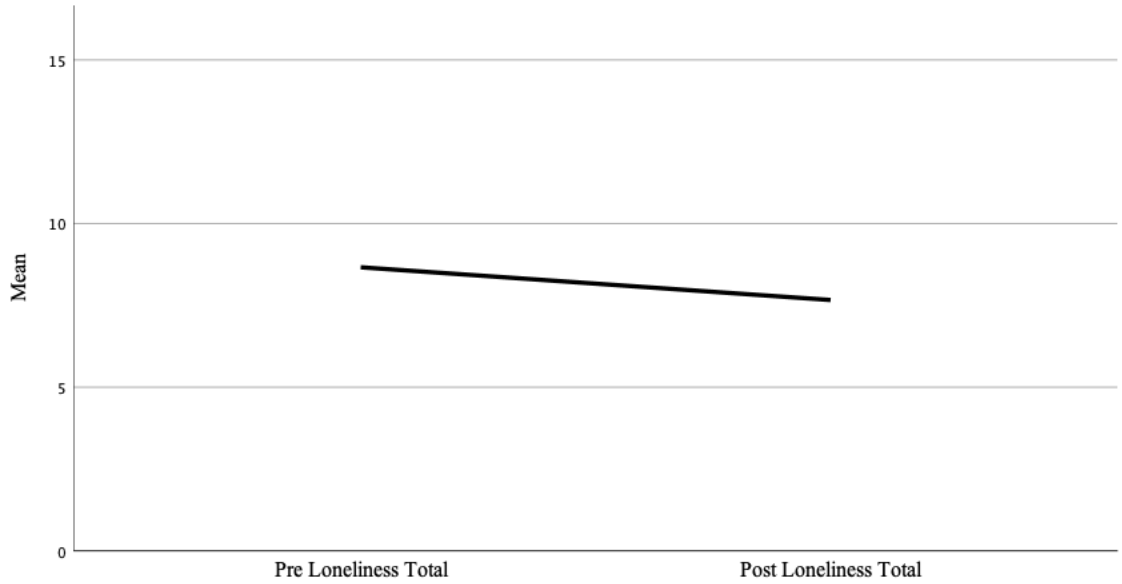

Figure 9. Loneliness

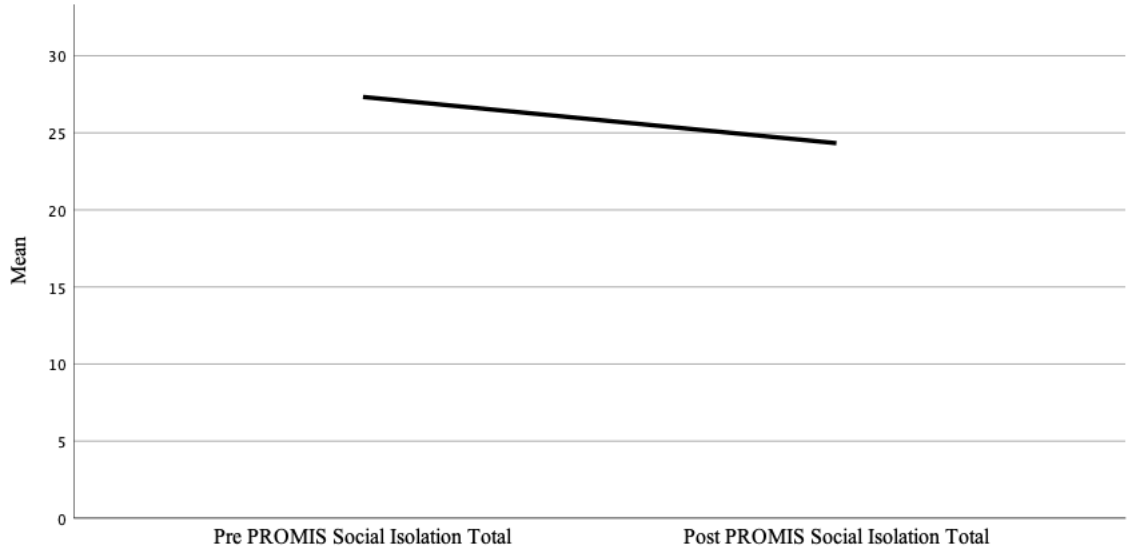

Figure 10. Social Isolation

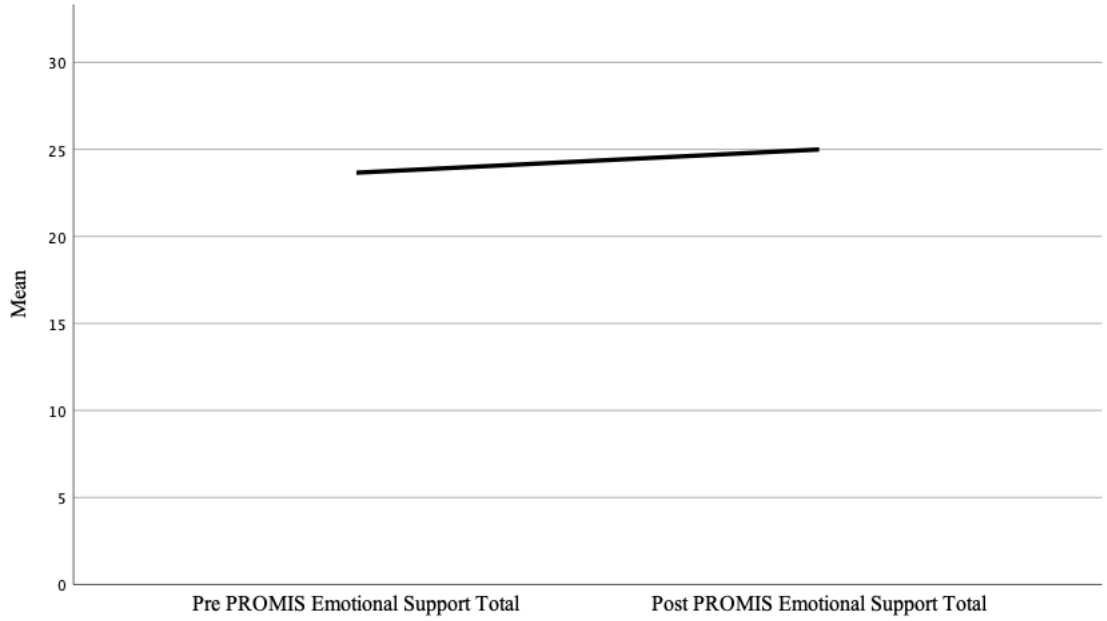

Figure 11. Emotional Support

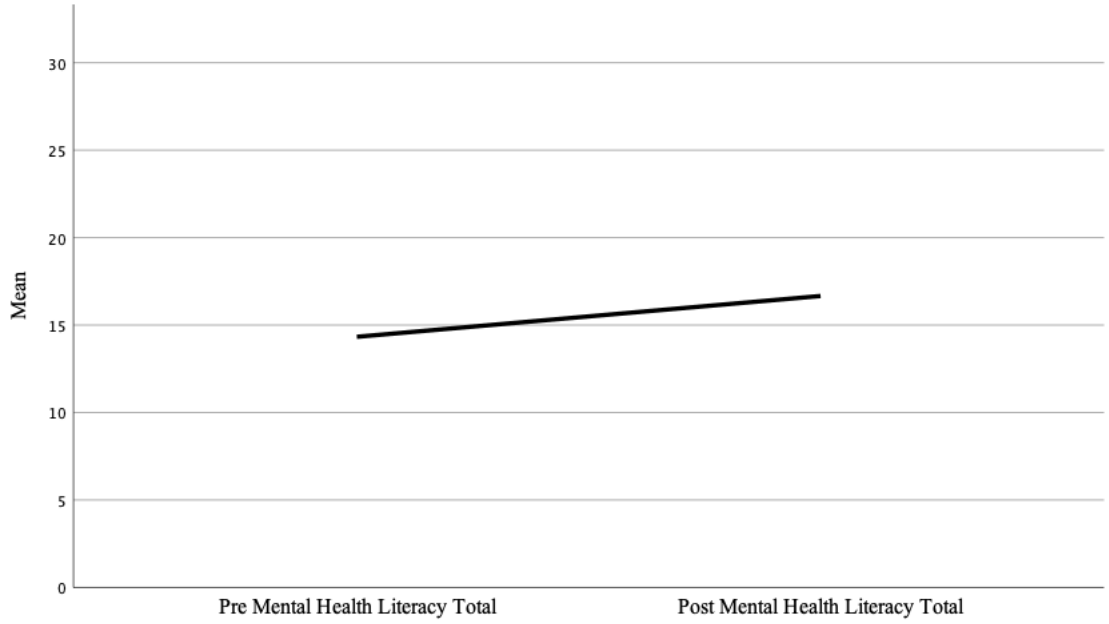

Figure 12. Mental Health Literacy

Discussion

The results of this research suggest that The CONNECT Program should be further modified, and then evaluated in a future study testing the program with a clinical sample of older adults (e.g., RCT). Through evaluating the study design and procedures, modifications can also be made to the study design. Primarily, changes to the recruitment procedures should be made to recruit more participants in a future study. These changes may include recruiting from a larger pool of individuals in more areas. For example, recruiting across multiple locations in Manitoba. Furthermore, it may be helpful to recruit over a shorter period, to keep the participants who provided research consent earlier interested in the research, and so they do not need to wait for an extended period for the study to begin. Additionally, in-person recruitment could be helpful to distribute the study information, and to help form connections between myself and the mental health professionals who are asked to distribute this study information to their clients. Finally, it

is possible that I could recruit through different avenues, such as community organizations that focus on mental health.

This research revealed important information about participant experiences in the program, and components that could be modified to better suit the needs of a clinical sample of older adults. Specifically, participants found the program provided them support and connection (theme 1) and it was comfortable, convenient, and secure (theme 2). Additionally, the program material appeared to be relevant for their unique experiences (theme 3). Participants also expressed that the facilitation was a positive aspect of this program (theme 4). Regarding things that could be modified moving forward, participants explained that the program was missing visual information (theme 5). Furthermore, some participants were left wanting more (theme 6), such as wanting more sessions, longer sessions, more group discussion, more participants, more practice of skills in session, and more information. Next, participants experienced some challenges maintaining consistency (theme 7) and transferring the skills learned in session to the outside world. Next, participants explained changes that they noticed in themselves throughout the program began, including increased attention to the present moment (theme 8), acceptance (theme 9), self-compassion (theme 10) and goal setting (theme 11). Finally, participants explored the reasons why they felt the above changes occurred throughout the program, and they explained contributing factors to these changes, such as the importance of group discussion (theme 12) and engagement with the material (theme 13). Several components of the program were rated as satisfactory for many participants, which suggest that these elements of the program met their specific needs. With that said, some participants felt that certain elements could be modified, such as the number of sessions. Furthermore, participants evaluated the

workbook as helpful in following along during the sessions, but reported challenges with the texture of the paper, and reported wanting more information in the workbook.

Through exploring the preliminary effectiveness of the program, general trends of change in mental health symptoms and psychosocial challenges were observed. Testing the significance of these findings was not appropriate due to the small sample, and therefore, future research is needed to determine the effectiveness of this program. With that said, overall trends suggest that participants experienced changes in their mental health symptoms from baseline to post-CONNECT, which is a promising finding that can be expanded upon in future studies with a larger sample size.

Limitations

One limitation of this study is that questionnaires were administered over the phone, and it is possible that participants might have felt uncomfortable answering honestly when someone was listening to their responses. Although this was not explicitly reported by any participants, it is still possible. This research used self-report measures, which are susceptible to biases due to the inabilities of some participants to accurately self-reflect. The final sample size was much smaller than expected, and this provides less power when making conclusions about the preliminary effectiveness of this intervention. I expected that I might face challenges with recruitment in this population due to the established difficulty in recruiting participants for research testing interventions. For example, research investigating 114 trials between 1994 and 2002 in which 31% of the trials achieved their original recruitment target (McDonald et al., 2006). A similar study investigating 73 RCTs from 2002 to 2008 found that 55% recruited their originally planned sample size (Sully et al., 2013). These reasons might have contributed to the challenges associated with recruitment. Despite these challenges, as mentioned above, I recruited

the type of sample I wanted (a clinical sample of older adults) with participants who met the eligibility criteria. This suggests that the recruitment procedures did result in participants who were suitable for this research.

Conclusions

Implications

The discrepancy between the number of older adults experiencing mental health challenges and those who use services, points towards a need for more research regarding accessible interventions that can be used with older adults who are experiencing challenges related to social isolation, loneliness, and symptoms of anxiety and depression. This research aimed to assess older adults' experiences participating in an intervention that is accessible for individuals in various locations (e.g., urban or rural). The short-term implication of this study is that it will inform future revisions to The CONNECT Program that are needed to create a program that is suitable for a clinical sample of older adults. Additionally, this study highlights some of the elements of an ACT-based therapy program that appeared to be most helpful for this sample of older adults. The long-term implication of this study is that it may inspire a new model of psychotherapy for older adults who are lonely, socially isolated, anxious, or depressed. In addition to providing individuals with skills and psychoeducation, this program offers lonely and socially isolated individuals an opportunity to create connections with other people. This mental health program is particularly important because waitlists for clinical services across Manitoba can be lengthy and difficult to access. Through testing, and modifying this intervention, this resource can be supplemented with other mental health services currently available. This program could expedite wait times by offering the program in group format, and by telephone, which is a more accessible modality for some, compared to in-person services. Additionally, this

program can be translated in other languages and delivered in alternative formats (e.g., online) to reach more people. This program can also be made available to individuals who are blind, by providing the workbook in an audio version. As mentioned above, these future directions depend on preliminary testing of this intervention.

Future Directions

Change to the Study Design

In future versions of this study, it will be helpful to learn why participants signed up for the program in the first place. This can provide information about what features of the program are most important to this sample (e.g., the focus on loneliness or focus on mental health problems). Additionally, this information can help us modify the recruitment strategies to highlight certain elements of the program that might help to attract future participants. The current study is also missing feedback from the group facilitator. Asking the group facilitator to share their experience facilitating the program can help to inform revisions to the program and it can provide direction regarding how the facilitation may be modified for a clinical sample. These insights will be particularly beneficial when we explore the ratio of group facilitators to group members that is appropriate (e.g., do we need more than one facilitator?). Furthermore, the group facilitator can document the extra time it takes to contact participants in between sessions (if needed) and changes that could be made to this design to lessen the burden on the facilitator. It may also be helpful to give participants the option to fill out the questionnaires in-person or online (rather than only over the phone), to decrease the length of time that the participants are on the phone with the researcher and to lessen the burden on participants. Another possibility is to collect data on participant's mental health symptoms throughout the program to determine how these changes emerge, and at what point in the program symptoms change. For example,

this could be done through asking participants to answer a short questionnaire before each session that asks them to report current symptoms of depression and anxiety. Finally, it will be useful to collect data from participants at follow-up timepoints after the study ends to see if any changes are maintained for an extended period. We can collect data at a 1-month follow up timepoint and a 3-month follow-up timepoint.

Change in Recruitment Strategy

As noted above, modifications could be made to the recruitment strategy to recruit a larger clinical sample of older adults in a future trial. It appears that having CMHWs send the referral was most effective in getting people signed up for the study. Perhaps this group of individuals who were being followed by a CMHW felt that they did not need services because they were already receiving some form of care. Different strategies for recruiting more individuals include recruiting during a time of year where people may be more likely to sign up (e.g., winter). We may choose to present information through meetings that are held in-person, in hospitals or other mental health settings, rather than only recruiting online. Additionally, engaging stakeholders at these various sites could be effective in helping them share this study information with their clients and co-workers. It would be important to emphasize that this program is an intervention that could possibly help individuals with said challenges. Sharing this information in multiple formats, such as in-person, online, through phone, through radio, may help it reach more people. I may choose to share this information using general practitioners who have knowledge of the person's mental health challenges and could recommend this study to their patients, or through pharmacists. I may want to share the information with organizations that focus specifically on mental health challenges, if older adults are in contact with these organizations, and they could refer clients to the study. Additionally, I may want to share the

information with personal care homes, specifically to target socially isolated individuals. It would be helpful to recruit people across more areas in Manitoba, including more rural locations. These individuals in remote communities may be more reliant on telephone programs since travelling becomes more challenging, and therefore, they may be more interested in this telephone-based program. It may be helpful to slightly modify the eligibility criteria to increase the number of participants who could participate. For example, the eligibility criteria could be changed to 60+. It may be helpful to have more individuals in the group, even if some are younger (e.g., age 60-65), rather than having fewer people in the group. I may also find it helpful to distribute this study information to centralized locations where potential participants can read about the study themselves and decide to enrol, rather than having this depend on a mental health worker referring them to the study.

Changes to the Program

Participants from this sample provided insights and suggestions regarding what could be changed in future iterations of the program, based on their unique needs. Examples of these suggestions include expanding the program to include more than six sessions, including more participants in the program, having more time to practice skills in session, and having more group discussion during the sessions. Furthermore, participants suggested that a blended format may be helpful to get the visual cues that are helpful while communicating in a group format. For example, participants may enjoy a blended-format, with some sessions over the phone, some sessions in-person, or some sessions over a video conferencing platform like Zoom. It is important to keep in mind that the preferences for individual participants will be different. Therefore, it will be important to test the study with some of these modifications to see if participants begin to feel satisfied with these elements of the program.

Overall, the results of this research are helpful to learn about what a clinical sample of older adults might want to see in this program in the future. Additionally, I gained insight into challenges that can be encountered when recruiting a clinical sample of older adults. These findings will propel us towards continuing to evaluate this study with more participants, revising the program, and then hopefully offering this program as a treatment option for clinical populations of older adults in the future. This preliminary study suggests that even without these changes made, it appears that for this small sample, the participants felt that they experienced the support and connection from other group members, and they also learned new skills to manage challenging emotions.

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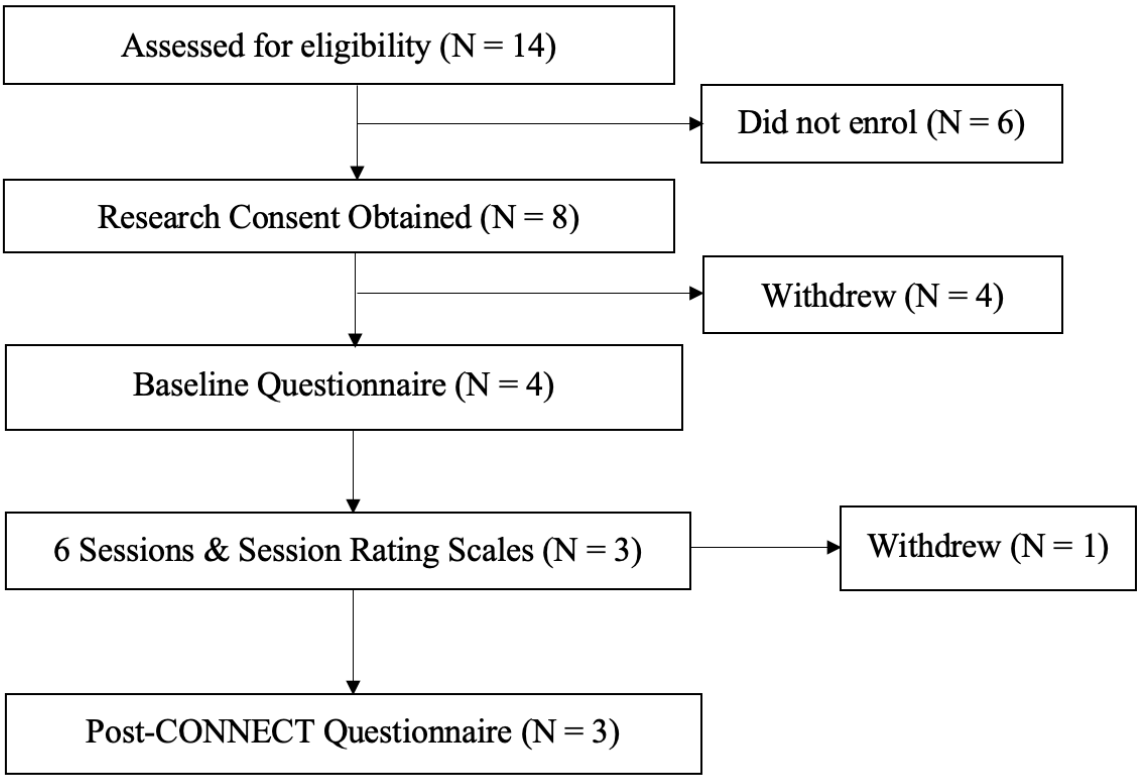
Appendix A

Flow of Study



Appendix B

Screening/First Telephone Contact

Script: Brief Explanation of the Study

- Hello, my name is (e.g., Inga Christianson, Masters Student in Clinical Psychology at the University of Manitoba) thank you for your interest in this research study.
- This phone call will take approximately 45 minutes to complete. Do you have time for this and are you interested in continuing the call?
- This study is titled, "A Pilot Study of The CONNECT Program: Testing a Telephone-Based Mental Health Intervention in a Clinical Sample of Socially Isolated Older Adults", and it is being conducted as part of my Master's Thesis.
- This study will examine a new telephone group-based mental health intervention called The CONNECT Program.
- Are you interested in hearing more about this study? (Y/N)
- No – Thank you for your time.
- Yes – First, I will explain the purpose of this study. We are conducting a pilot study to test the feasibility of conducting a larger trial, to test the acceptability of this mental health intervention, and to evaluate its preliminary effectiveness of this intervention. This telephone program is designed for adults 65+ who are experiencing mental health challenges related to social isolation, loneliness, anxiety, and depression. This program is 6-sessions long, with one session per week. Each session lasts 90 minutes.
- After completing the screening questionnaire, research consent, and clinical intake interview, participants will begin their participating in the 6-session CONNECT Program.

- All participants in the study will be asked to complete several questionnaires that will provide information about different mental health symptoms. These questionnaires will be administered over the phone before and after the program.
- Participants will also be asked to provide weekly evaluations of each session. The weekly evaluations take place over the phone with a research assistant and they will last about 10-15 minutes each.
- The larger questionnaires (baseline, post-CONNECT) take approximately 45-60 minutes to complete.
- Do you have any questions for me at this time?
- Are you still interested in participating?
    - If no – *ask if they would like to elaborate – not because we need a justification, but because this information may be valuable to help us improve our delivery/study purpose/compensation/time commitment/etc.*
- If Yes - Before enrolling you into this research study I have a series of screening questions for you, which will help us to determine whether it will be a good fit for yourself and your needs.
- The screening questionnaire will take 20 to 30 minutes of your time, do you have time for that right now, or would you like to reschedule?

Script: The Screening Questionnaire

- I will be taking notes as we speak, but these notes (i.e., your answers) will not be used for research purposes. These notes will help us to better-understand your eligibility for the program. Once we have determined your eligibility, these notes will be discarded (i.e., deleted from my computer) and I will contact you again regarding consent to participate

in the research. Until that decision is made, the notes that I take will be password-protected, stored on my password-protected computer.

- Please let me know if you would like to take a break/end the call at any point during this phone call.
- Do you have any questions before I proceed?
- Now I will ask a few questions about you-please note that we want to ensure that people are able to fully engage with the program and experience all of the benefits from the program that we hope. There may be services that exist that are better suited to you and your interests that we can discuss if this group is not a good fit for you.
    - What is your age: (Looking for ages 65+)
        - Current experience of social isolation: 4-item PROMIS: (Never, Rarely, Sometimes, Usually, Always)
            - I feel left out
            - I feel that people barely know me
            - I feel isolated from others
            - I feel that people are around me but not with me
        - Current experience of loneliness: 3-item Loneliness Scale (Hardly ever, Some of the time, Often)
            - How often do you feel that you lack companionship?
            - How often do you feel left out?
            - How often do you feel isolated from others?
        - Current experience of anxiety: 4-item PROMIS: (Never, Rarely, Sometimes, Often, Always)

        - I felt fearful
        - I found it hard to focus on anything other than my anxiety
        - My worries overwhelmed me
        - I felt uneasy
    - Current experience of depression: 4-item PROMIS: (Never, Rarely, Sometimes, Often, Always)
        - I felt worthless
        - I felt helpless
        - I felt depressed
        - I felt hopeless
    - How would you describe your hearing: (Q: Can you hear over the phone?)
    - How would you describe your vision: (Q: Can you read?)
    - Do you have a telephone that you have access to on a regular basis?
    - Are you willing and interested in participating in a program that is conducted solely over the telephone?
    - How would you describe your reading abilities? (Workbook is grade 10 reading level)
    - What are your perceptions regarding being involved in a group?
    - What challenges do you have when speaking to others on the telephone or attending telephone-based programs?
    - Have you been diagnosed with a mental health problem in your lifetime?
        - If yes – Please describe (Follow-up Qs: What? When? How are you managing this?)

    - In your opinion, are you currently experiencing any mental health problems (this question may tap into mental health problems that have not been formally diagnosed)?
    - In your opinion, are you currently feeling socially isolated and/or lonely (informal measure of social isolation/loneliness)?
    - Follow up questions. Have you been diagnosed with:
        - Bipolar?
        - Schizophrenia or other psychotic disorders?
        - Dementia or other major neurocognitive disorders?
        - Substance or alcohol use disorder?
    - If you have a mental health problem, please describe if/how are you managing these disorders.
    - Do you have any issues providing consent? (Do you provide consent independently?)

- Thank you for your time.
- Do you have any questions for me at this time?
- Are you still interested in this study?
- Yes - Great, we can now review the research consent form (alternatively – participants may want time to think about this – can call back).
- Collect contact information – in order to send consent forms, resource list and workbook
- "Would you like the questionnaires mailed to you, or emailed to you?"
- If the participant is ineligible – Discuss reasons for exclusions and discuss alternative resources if you are interested.

Appendix C

Clinical Intake Interview

Intro (~5 mins)

- Thanks for speaking with me today. This will take about 1 hour of your time.
- The purpose of us speaking today is for me to get to know you a bit better and help you form some goals for the program.
- First, we'll go over informed consent, then I'd like to learn more about your background and reasons for signing up for the CONNECT program. Then we'll conclude by discussing your goals and the things you need to know before our first meeting date for the program.

Informed Consent (~15 mins)

- In order for us to go any further, there are some things for you to be aware of regarding our call today as well as the CONNECT group in the future.
- Everything you share with us is confidential and private, but there are some limitations to this where we may be obligated share your information to the proper authority:
    - Reports of imminent harm to yourself or others.
    - Abuse or neglect to a child or other vulnerable persons.
    - Court subpoena for any court case related to you.
- Do you have any questions about this?
- Do I have your consent to proceed further with our call? (note down obtained verbal consent to proceed with call, date/time)
- **REVIEW CONSENT FORM WITH PARTICIPANT-PAUSING BETWEEN QUESTIONS TO SEE IF THEY HAVE QUESTIONS**

- NOTE THAT We will also be sending you a paper copy of the consent form by mail. Please let us know if you have any questions-our contact information can be found on the form. I can also be reached at (204) 558-3347 and Dr. Reynolds can be reached at Kristin.Reynolds@Umanitoba.ca

DATE OF BIRTH: _____

Presenting Complaint(s)/Goals (~10 mins)

- Example questions:
    i. What made you decide to sign up for this program?
    ii. What are you looking to change or improve on in this program?
    iii. Have you been involved in programs like this before? If yes, what was that like/how did that go?
    iv. Have you met with a psychologist or counsellor before? If yes, what was that like/how did that go?
    v. Have you been diagnosed with a mental heath problem at any point in your life? When was that and what was the problem?

- **Goals-What are you hoping to get out of this program?**
    - Example questions: If this program is successful…
        vi. …what will you do differently?
        vii. …what will you start/stop doing?
        viii. …how will you treat yourself/others/the world differently?
        ix. …what things/people/activities will you approach/start/resume contact with?
        x. …what tasks will you be able to better focus on?

xi. …are there any people you'll be more attentive to or present with?

xii. …what will you be able to appreciate more?

History-taking (~20 mins)

- **Current Life Context**
  - Health & Lifestyle
    i. How would you describe your general health?
    ii. How would you describe your mental health?
    iii. Are you currently receiving mental health services?
    iv. Medication use? Type, dose, purpose of use?
    v. Coping strategies for managing stress/stressful situations?
    vi. How would you describe your typical day/week?
  - Relationships
    i. Where are you currently residing? (identify/note type of residence)
    ii. Who lives in your household? (if housed in independent housing complex)
    iii. Who in your life do you see the most?
    iv. How would you describe your family life?
    v. How would you describe your other friendships/relationships?
  - Work
    i. Are you currently employed? If so, where do you work?
    ii. What did you used to do for work? (if retired/unemployed)
    iii. When did you retire? (if applicable)
    iv. Does/did your work provide a source of stress or joy?
    v. Do you miss your work? (if applicable)

- Education
    i. What was the highest level of education that you completed?
    ii. How was school for you (fulfilling, difficult, fun)?
- Culture
    i. What cultural background do you identify with?
    ii. How important is your cultural identity to you?
- Legal
    i. Are you currently experiencing any ongoing legal issues we should know about?

- **Relevant Past History**
    - What events do you think led you to seeking help with loneliness/isolation/anxiety/depression/stress? (Use most relevant terms/terms used by participant/client)

Group Preparation (~10 mins)

- The main focus of our group will be:
    - To help you better-understand yourself - including your emotional experiences (loneliness, social isolation, anxiety, depression), your relationship with your emotions (avoidance, acceptance of them), and your values and action guided toward living in accordance with these values.
    - To encourage connection with the present moment, bringing new awareness and curiosity.
    - To enhance self-compassion (self-kindness).

    - To build connections with others in the group and with the broader community, including enhancing awareness of community-based resources.
    - This program does not aim to reduce loneliness, social isolation, anxiety or depression; rather this program aims to change your relationship with these experiences and emotions.
    - While we do not focus on changing or reducing these emotional experiences, we can often eventually experience change through mindful awareness and acceptance, which is a big focus of the group.
- Pause for any questions.
- The group will meet for 1.5 hours each week starting on [DATE] from [TIME]. We will meet 6 times and the final group date will be [DATE].
- Inform them that they will need the workbook each week. We will be sending you the workbook by mail.
- Inform them about basic phone/group etiquette (i.e., be seated in a quiet space, not multitasking).
- Final questions?

Interviewer Guide: Guiding principles for facilitator/therapist

- Underlying questions to consider as the interviewer:
    - What valued direction does client want to move in?
    - What is getting in their way?
- Goal of interview is also to build rapport. Practice own psychological flexibility by not adhering strictly to below format – remain in contact with clients' present concerns/comments/questions.

Consider the following during + after interview:

- Motivational Factors
    - Positive/negative goals, dreams, desires, values that will impact therapeutic outcome.
- Psychological Flexibility VS Rigidity (evaluate/note signs of below)
    - Defusion VS Fusion (able to step back and evaluate thoughts VS negative thoughts dominating actions/awareness)
    - Acceptance VS Experiential Avoidance (making room for VS avoiding unwanted thoughts, feelings, memories)
    - Values VS Remoteness from Values (behaviour driven by things they do VS do not want or value doing)
    - Committed Action VS Unworkable Action (physical/psychological actions move toward VS interfere [e.g., social withdrawal, substance use, excessive TV use, suicidality] with values)
    - Present Moment VS Inflexible Attention (flexibly attending to current experience VS difficulty sustaining attention on it, loss of interest/involvement in present, and/or lack of contact with thoughts/feelings)
    - Fusion with Self-concept VS Self-as-Context (awareness of what they think/feel/sense/do in a given moment VS rigidly adopting story about who they are)
- Client Resources
    - Strengths, resources and skills that could lead to positive therapeutic outcome.
    - Sources of psychosocial and professional/clinical support.

Appendix D

Information Flyer

University of Manitoba
Department of Psychology
190 Dysart Road
Winnipeg, MB, R3T 2N2

A Pilot Study of The CONNECT Program: Testing a Telephone-Based Mental Health Intervention in a Clinical Sample of Socially Isolated Older Adults

Principal Investigator: Inga Christianson, B.A., M.A. Student in Clinical Psychology, University of Manitoba
Supervisor: Dr. Kristin Reynolds, C. Psych, Assistant Professor, University of Manitoba

Purpose:

- To test The CONNECT Program in a clinical sample of adults aged 65+
- Understand the experiences of this clinical sample of adults 65+ in The CONNECT Program
- Investigate the preliminary effectiveness of The CONNECT Program with this sample

What is The CONNECT Program?

- The CONNECT Program was developed by Dr. Kristin Reynolds, University of Manitoba and Brandon University Researchers
- This program involves 6, weekly, 1.5 hour sessions over WebEx Audio
- **CONNECT** stands for:
  Creating
  Opportunities to build social
  Networks, learn
  New skills to manage challenging emotions
  Enhance mindful awareness and acceptance of emotions, and increase self-
  Compassion, through
  Telephone-based group programming

Who is eligible?

- Adults aged 65+
- Living in Manitoba
- Currently experiencing symptoms of depression and/or anxiety
- Currently experiencing social isolation and/or loneliness

What is involved?

- Participants will complete the 6-session telephone-based group-based CONNECT Program

- Participants will complete a series of telephone questionnaires before and after participating in The CONNECT Program
- Questionnaires will all be completed over the phone with the study coordinator

Time Commitment:

- Each questionnaire will take between 45 minutes and 60 minutes to complete
- Participants will be asked to dedicate 3 hours and 30 minutes for research related questionnaires over the span of 11 weeks
- Additional time commitments: The 6-week CONNECT Program, which takes place once a week for 1.5 hours (9 hours total), a clinical intake interview (1 hour), and an optional 7th follow-up session which will take place one month after The CONNECT Program ends (1.5 hours). Participants are not compensated for these activities.

Compensation:

- Participants will receive a $10 gift card for each questionnaire they complete
- Participants will receive $20 in total for the baseline questionnaire and the post-CONNECT questionnaire

Please contact the study coordinator, Inga Christianson, if you are interested in hearing more about the study.

Please note: Involvement in this study will have no impact on the care you receive at The University of Manitoba or through any other organization where you may receive services.

This research has been approved by the Research Ethics Board at the University of Manitoba, Fort Garry campus.

Appendix E

Research Consent Form

University of Manitoba
Department of Psychology
190 Dysart Road
Winnipeg, MB, R3T 2N2

Research Consent Form

Title of Research: A Pilot Study of The CONNECT Program: Testing a Telephone-Based Mental Health Intervention in a Clinical Sample of Socially Isolated Older Adults

Principal Investigator: Inga Christianson, MA Student, The University of Manitoba

Advisor: Dr. Kristin Reynolds, Assistant Professor, The University of Manitoba

You will receive a copy of this consent form by mail. The consent form is only part of the process of informed consent. It should give you the basic idea of what the research is about, who is involved in the research, and what your participation will involve. If you would like more detail about something mentioned here, or information not included here, you should feel free to ask.

Purpose of the Study:

The purpose of this study is to evaluate the 6-session telephone-based CONNECT program (**C**reating **O**pportunities to build social **N**etworks, learn **N**ew skills to manage challenging emotions **E**nhance mindful awareness and acceptance of emotions, and increase self-**C**ompassion, through **T**elephone-based group programming). The CONNECT Program is a

group-based intervention that utilizes principles of Acceptance and Commitment Therapy (ACT). The CONNECT Program aims to help you better understand yourself and your emotions, and connect with the present moment and with other people. You will receive more information about The CONNECT Program during your clinical intake interview with a group facilitator. During this clinical intake interview, you will also review the clinical consent form for services. The current research study will aim to: (1) assess the feasibility of conducting a large-scale randomized controlled trial, (2) learn about participant experiences in this program, and (3) learn about the preliminary effectiveness of this program.

Study Procedures:

After completing the screening, research consent and baseline questionnaire, participants will begin their involvement in the 6-session telephone based CONNECT program.

First, you will go through the screening questionnaire and research consent process with the research coordinator, which will take approximately 45 minutes to complete. This will be completed over the phone.

Next, the baseline questionnaire will take approximately 45-minutes to complete. You will complete this survey by telephone with the research coordinator. Questions covered in this first questionnaire include: demographic information (i.e., sex, age, education, occupational status, marital status, living arrangement, living environment, location of residence (urban, rural), racial/ethnic background); current mental health treatments you are receiving, perceived health

status; mental health; perceived loneliness; social isolation; emotional support; knowledge of resources; mental health literacy; and acceptance.

After each group session, the study coordinator will contact you by telephone for a 10-minute survey with questions regarding how you felt during the group session that day, and how the group is going for you.

At the end of the 6-sessions, you will complete the post-CONNECT questionnaire, which will take approximately 60 minutes to complete. This will be done over the telephone. Questions ask about mental health; loneliness; social isolation; emotional support; knowledge of resources; mental health literacy; and acceptance. Additionally, you will provide your opinions regarding The CONNECT Program during this questionnaire.

At the end of your involvement with the program (i.e., after the 6 sessions are done) you can decide to join a follow-up seventh session, which will take place one month after the sixth CONNECT session. This seventh session acts as an opportunity to follow-up on some of the skills learned during the group, and see how things are going.

In total, the participants will be asked to dedicate 3 hours and 30 minutes for research related questionnaires over the span of 11 weeks.

Additional time commitments include the 6-week CONNECT Program, which takes place once a week for 1.5 hours (9 hours total), a clinical intake interview (1 hour), and an optional 7th follow-up session which will take place one month after The CONNECT Program ends (1.5 hours). Participants are not compensated for these activities.

Potential Benefits and Risks of the Research:

There are no programs that exist in Manitoba or across the country that are similar to this. As a participant in this research, you will be helping to refine this program, by helping our research team to learn more about what is helpful, and how we can refine the program to better meet your needs. Results of this study will directly inform revisions to this program.

Discussing and reading about problems such as isolation, loneliness, anxiety, and depression may carry with it the risk of experiencing increased emotional distress. If you notice any feelings of distress after completing in the research components, please consult one of the attached resources for assistance.

Compensation

Participants will receive a $10 gift card for each baseline questionnaire and post-CONNECT questionnaire that is completed. Participants will be asked to complete one baseline questionnaire and one post-CONNECT questionnaire ($20 total). This gift card will be mailed to you after you have provided Research Consent and Clinical Consent.

Research Consent and Clinical Consent:

This Research Consent Form only covers information regarding research-related activities (e.g., the completion of the research questionnaires). This Research Consent Form does not cover information related to The CONNECT Program itself. If you decide to participate in This CONNECT Program, a separate Clinical Consent Form will be read to you, over the phone by one of The CONNECT Program group facilitators. Therefore, Clinical Consent will also be collected verbally through the telephone. This consent form will include more details about The CONNECT Program.

Voluntary Participation:

Participation in this research is voluntary and your decision to participate or not participate will NOT influence your involvement with the services or facilities through which you are being contacted.

Freedom to Withdraw:

It is your choice whether or not to participate in this study. Participation is voluntary and you may withdraw at any time with no penalty. Withdrawing from this research study will not impact your participation in The CONNECT Program sessions. If you chose to withdraw after the study is complete, please let the study coordinator know by contacting them at (204) 880-1791. Please note that this withdrawal must be done before data analysis is complete. Beyond this point, data analysis will be completed, and withdrawal will no longer be possible. The approximate date for data analysis to be complete is August 2022. Therefore, you will not be able to withdraw after this point.

Confidentiality:

All data collected will be confidential. Information gathered in this research study may be published or presented in public forums in aggregate form, for example in thesis-related work, journal articles, in conference presentations, and other forums (e.g., colloquia). All data will be kept in a password-protected file on a secure server called University of Manitoba SharePoint. If you chose to participate in this research, the research coordinator (Inga Christianson), and her graduate advisor (Kristin Reynolds), will have access to the data. Research data will be securely stored off-campus due to COVID-19 restrictions on building access. Please note that all data stored and shared using Office365 files tools is hosted in Microsoft Data Centres located in Toronto and Quebec City. Research material will be kept until this research has been published (approximately 2 years-September, 2024), following which it will be destroyed.

Questions or Concerns:

If you have any questions about this study, please do not hesitate to contact the study coordinator, Inga Christianson.

Statement of Consent:

Your verbal consent indicates that you have understood to your satisfaction the information regarding participation in the research project and agree to participate as a subject. In no way does this waive your legal rights nor release the researchers, sponsors, or involved institutions from their legal and professional responsibilities. Your continued participation should be as informed as your initial consent, so you should feel free to ask for clarification or new information throughout your participation.

The University of Manitoba may look at your research records to see that the research is being done in a safe and proper way.

This research has been approved by the Research Ethics Board at the University of Manitoba, Fort Garry campus. If you have any concerns or complaints about this project you may contact any of the above-named persons or the Human Ethics Officer at 204-474-7122 or HumanEthics@umanitoba.ca. A copy of this consent form has been given to you to keep for your records and reference.

I understand that information regarding my personal identity will be kept confidential, but that confidentiality is not guaranteed. By providing verbal consent, I have not waived any of the legal rights that I have as a participant in a research study.

I,_____(spoken name), have read the above information and hereby consent to participate in this study.

_____ _____

Participant's Spoken Endorsement Date of Verbal Consent (day/month/year)

Are you interested in receiving a summary of the findings once the study is completed (approximately 2 years, September 2024)? If so, please provide verbal consent and the address of correspondence to reach you.

I,_____(spoken name), am interested in hearing about the findings of this research, and these findings can be sent to me by mail at:

_____(address)

_____ _____

Participant's Spoken Endorsement Date of Verbal Endorsement (Day/Month/Year)

IF YOU ARE HAVING THOUGHTS OF HARMING YOURSELF OR OTHERS, OR ARE IN CRISIS:

- WRHA CRISIS RESPONSE CENTRE at 817 Bannatyne Avenue or WRHA Mobile Crisis Service at 204-940-1781 (24 hours/7 days a week)
- KLINIC COMMUNITY HEALTH CENTRE CRISIS LINE (24 hours/7 days a week) at 204-786-8686
- MANITOBA SUICIDE LINE (24 hours/7 days a week) at 1-877-435-7170

MENTAL HEALTH RESOURCES:

- ANXIETY DISORDERS ASSOCIATION OF MANITOBA: Suite 100 – 4 Fort Street; Phone: 204-925-0600
- MOOD DISORDERS ASSOCIATION OF MANITOBA: Suite 100 – 4 Fort Street; Phone: 204-786-0987
- KLINIC COMMUNITY HEALTH: 870 Portage Avenue; Phone: (204) 784-4090
- CANADIAN MENTAL HEALTH ASSOCIATION: 930 Portage Ave; Phone: 204-982-6100
- WINNIPEG REGIONAL HEALTH AUTHORITY PROGRAMS GERIATRIC MENTAL HEALTH: http://www.wrha.mb.ca/prog/gmh/index.php; Phone: 204-982-0140
- MPS – Find a psychologist online: http://members.mps.ca/

Appendix F

Step by Step List of Study Components

Steps	Questionnaire	Purpose	When	Time
Screening & Research Consent	• Screening questionnaire • Research consent form	• Inform potential participants of the study • Obtain research consent	• First step	• 30-60 minutes
Clinical Intake & Clinical Consent)	• Clinical intake interview • Clinical consent form	• First meeting of group facilitator and group member • Obtain clinical consent for services	• 1 week before first session	• 60 minutes
Baseline Questionnaires	• Baseline Questionnaire	• Baseline assessment of symptoms	• 1 week before first session	• 30 minutes
Intervention & Session Ratings	• Six CONNECT sessions • Six Group Session Rating Scales (GSRS)	• Attend six sessions of CONNECT • Provide ratings of each session • Describe experiences in the program	• After each session	• 90 minutes per session • 10-15 minutes per GSRS
Post-CONNECT Assessment	• Post-CONNECT Questionnaire	• Assessment of symptoms • Provide feedback on the program	• Within 1 week of the 6th session	• 60 minutes

Appendix G

Baseline Questionnaire

Note: Please describe any term that participants are unsure of. For example, "isolated", "depressed, "anxious".

* At this point you should have their contact information (phone number and address).

* Resource list should be sent to all participants at this point.

* Prior to each research-related telephone contact, study coordinator or research assistant will affirm that participant is still interested in continuing in the research component of the program.

* Please let me know if you would like to decline to answer any of the questions, I will move on to the next question.

Study ID:

Today's Date:

Gender identification, "With which gender do you identify?":

Age, "What is your age?":

Highest Level of Education Completed, "What is your highest level of education completed?":

Occupational Status, "What is your occupational status?":

Marital Status, "What is your marital status?":

Living Arrangement, "What is your living arrangement, for example, do you live alone, with family?":

Location of Residence, "What is your location of residence?":

- **Urban**
- **Rural**

Racial/Ethnic Background, "What is your racial or ethnic background?":

Perceived Physical Health Status:

How would you describe your physical health (Select one)?

- Poor
- Fair
- Good
- Very Good
- Excellent

Perceived Mental Health Status:

How would you describe your mental health (Select one)?

- Poor
- Fair
- Good
- Very Good
- Excellent

Are you currently receiving mental health treatment? If yes, please describe.

Have you received mental health services in the past? If yes, please describe.

Are you currently using medications? If needed, specify medications for mental health related problems.

***For the next questions, read out every single response option each time you read a new statement or question.*

3-item Loneliness Scale

Response Options: Hardly ever / Some of the time / Often

Items:

How often do you feel that you lack companionship?

How often do you feel left out?

How often do you feel isolated from others?

PROMIS Social Isolation 8a

Response Options: Never / Rarely / Sometimes / Usually / Always

Items

I feel left out

I feel that people barely know me

I feel isolated from others

I feel that people are around me but not with me

I feel isolated even when I am not alone

I feel that people avoid talking to me

I feel detached from other people

I feel like a stranger to those around me

PROMIS Emotional Support 8a

Response Options: Never / Rarely / Sometimes / Usually / Always

Items:

I have someone who will listen to me when I need to talk

I have someone to confide in or talk to about myself or my problems

I have someone who makes me feel appreciated

I have someone to talk with when I have a bad day

I have someone who understands my problems

I have someone I trust to talk with about my feelings

I have someone with whom to share my most private worries and fears

I have someone I trust to talk with about my problems

PROMIS Anxiety Short Form 4a

Response Options: Never / Rarely / Sometimes / Often / Always

In the past 7 days …

Items:

I felt fearful

I found it hard to focus on anything other than my anxiety

My worries overwhelmed me

I felt uneasy

PROMIS Depression Short Form 4a

Response Options: Never / Rarely / Sometimes / Often / Always

In the past 7 days …

Items:

I felt worthless

I felt helpless

I felt depressed

I felt hopeless

Knowledge of Resources

How would you rate your knowledge of mental health resources for adults ages 65+ in the community?

- Poor

- Fair
- Good
- Very Good
- Excellent

Brief Measure of Mental Health Literacy

Response Options: Not at all / Somewhat / Moderately / Very / Extremely

Items

How knowledgeable are you about:

The signs and symptoms of mental health problems such as anxiety and depression?

The possible causes of mental health problems?

The types of professional help available for common mental health problems such as anxiety and depression?

How to go about seeking professional help for mental health problems?

Acceptance and Action Questionnaire II (Modified response options)

Response options:

1 = Never True

2 = Rarely True

3 = Sometimes True

4 = Often True

5 = Always True

Items:

My painful experiences and memories make it difficult for me to live a life that I would value

I am afraid of my feelings

I worry about not being able to control my worries and feelings

My painful memories prevent me from having a full life

Emotions cause problems in my life

It seems like most people are handling their lives better than I am

Worries get in the way of my success

Appendix H

Post-CONNECT Questionnaire

* Prior to each research-related telephone contact, study coordinator or research assistant will affirm that participant is still interested in continuing in the research component of the program.

* Please let me know if you would like to decline to answer any of the questions, I will move on to the next question.

Study ID:

Today's Date:

Perceived Physical Health Status:

How would you describe your physical health?

- o Poor
- o Fair
- o Good
- o Very Good
- o Excellent

Perceived Mental Health Status:

How would you describe your mental health?

- o Poor
- o Fair
- o Good
- o Very Good
- o Excellent

Are you currently receiving mental health treatment? If yes, please describe.

Are you currently using medications? If needed, specify medications for mental health related problems.

3-item Loneliness Scale

Response Options: Hardly ever / Some of the time / Often

Items

How often do you feel that you lack companionship?

How often do you feel left out?

How often do you feel isolated from others?

PROMIS Social Isolation 8a

Response Options: Never / Rarely / Sometimes / Usually / Always

Items

I feel left out

I feel that people barely know me

I feel isolated from others

I feel that people are around me but not with me

I feel isolated even when I am not alone

I feel that people avoid talking to me

I feel detached from other people

I feel like a stranger to those around me

PROMIS Emotional Support 8a

Response Options: Never / Rarely / Sometimes / Usually / Always

Items

I have someone who will listen to me when I need to talk

I have someone to confide in or talk to about myself or my problems

I have someone who makes me feel appreciated

I have someone to talk with when I have a bad day

I have someone who understands my problems

I have someone I trust to talk with about my feelings

I have someone with whom to share my most private worries and fears

I have someone I trust to talk with about my problems

PROMIS Anxiety Short Form 4a

Response Options: Never / Rarely / Sometimes / Often / Always

In the past 7 days …

Items

I felt fearful

I found it hard to focus on anything other than my anxiety

My worries overwhelmed me

I felt uneasy

PROMIS Depression Short Form 4a

Response Options: Never / Rarely / Sometimes / Often / Always

In the past 7 days …

Items

I felt worthless

I felt helpless

I felt depressed

I felt hopeless

Knowledge of Resources

How would you rate your knowledge of mental health resources for adults ages 65+ in the community?

- Poor
- Fair
- Good
- Very Good
- Excellent

Brief Measure of Mental Health Literacy

Response Options: Not at all / Somewhat / Moderately / Very / Extremely

Items

How knowledgeable are you about:

The signs and symptoms of mental health problems such as anxiety and depression?

The possible causes of mental health problems?

The types of professional help available for common mental health problems such as anxiety and depression?

How to go about seeking professional help for mental health problems?

Acceptance and Action Questionnaire II

Response options:

1 = Never True

2 = Rarely True

3 = Sometimes True

4 = Often True

5 = Always True

Items

My painful experiences and memories make it difficult for me to live a life that I would value

I am afraid of my feelings

I worry about not being able to control my worries and feelings

My painful memories prevent me from having a full life

Emotions cause problems in my life

It seems like most people are handling their lives better than I am

Worries get in the way of my success

Questions for individuals who completed the Intervention

Allow time for participants to explain their answers if they select (not satisfied). Ask, "What would make this intervention better?"

Evaluation: Intervention Content

Aspects of the Intervention	**Satisfied**	**Neither Satisfied nor Not Satisfied**	**Not Satisfied "What could we do instead?"**
Number of the sessions			
Time of day at which the program was delivered			
Length of the sessions			
Content and theme of each session			

Number of participants in the group			
Mindfulness exercise at the beginning of each session			
Time dedicated to the intervention in each session			
Overall participation in group exercises			
Engagement with the facilitator			
Interaction with other group members			
Homework and take-home exercises			
Expertise of the facilitator			

**Adapted from McCracken et al. (2014)*

Evaluation: Intervention Delivery Type

Aspects of the Intervention	**Satisfied**	**Neither Satisfied nor Not Satisfied**	**Not Satisfied "What could we do instead?**
Process of receiving assessments over-the-phone			

Clarity of the facilitator's voice (e.g. volume)			
Time allocated to questions each session			
Time allocated to group discussion each session			
Total number of technical issues throughout the program (e.g. call dropping, lags/delays, inability to join the call, background noise, echoes, static)			
Proving consent over the phone			
Availability of facilitators to answer questions in-between sessions			
Steps performed to reassure privacy and confidentially			

**Adapted from McCracken et al. (2014)*

Evaluation: Workbook

How thoroughly did you read the workbook before the session? (Select one)

• Read each week's entry thoroughly before each session

• Glanced at each week's entry before each session

• Didn't use the workbook before the session (If so, why?)

If you looked at the workbook before the sessions, did you take notes in preparation for the session? (Select all that apply)

• Wrote notes on the workbook

• Wrote notes somewhere else

• Read it before, but did not take notes

How did you use the workbook during the sessions, if at all (Select all that apply):

• Used it to follow along during the sessions

• Used it to take notes during the sessions

• Did not use it during the session

Complete the sentence: (They can provide more than one thing)

• One thing I didn't like about the workbook was _____

• One thing that would make the workbook better is _____

Was there anything that you felt was unclear in the workbook?

If so, what?

Was there anything you wanted more information on in the workbook?

If so, what?

Was there anything you wanted less information on in the workbook?

If so, what?

What feature(s) would be useful to include in future versions of the workbook (check all that apply)

• Less content

• More content

• Larger font

- More pictures
- Make the content easier to read quickly (skim)
- Include areas to take notes
- Include definitions
- Provide the workbook electronically
- Provide an audio-recorded version of the workbook

Open-ended questions for intervention group:

(1) What aspects did you like about this program being delivered over the phone? What did you dislike about it?

(2) Did this program meet your expectations (if you had any)?

(3) How was your experience interacting with the other group members? What about the group facilitators?

(4) Were there any sessions/content covered, that did not resonate with you?

(5) How did you find practicing the homework exercises and skills you learned in the group?

(6) Do you have specific suggestions that could help us improve this program?

Appendix I

Group Session Rating Scale

When: After each CONNECT session (within an hour of the session)

* Prior to each research-related telephone contact, study coordinator or research assistant will affirm that participant is still interested in continuing in the research component of the program.

* Please let me know if you would like to decline to answer any of the questions, I will move on to the next question.

ID# _____

Session # ____ Date: _____

Please rate today's group by evaluating each area from 0-10 (low to high).

Relationship

I did not feel understood, respected, and/or accepted by the leader and/or the group.	0----------10	I felt understood, respected, and accepted by the leader and the group.

Goals and Topics

We did *not* work on or talk about what I wanted to work on and talk about.	0----------10	We worked on and talked about what I wanted to work on and talk about.

Approach or Method

The leader and/or the group's approach are/is not a good fit for me.	0----------10	The leader and the group's approach are a good fit for me.

Overall

There was something missing in group today—I did not feel like a part of the group.	0----------10	Overall, today's group was right for me—I felt like a part of the group.

Sudden gains question (Client change interview protocol, Elliot, 1999):

What changes, if any, have you noticed in yourself since this program started?

Please describe (Open-ended):

For each change, please rate how much you expected it vs. were surprised by it?

1. Very much expected it
2. Somewhat expected it
3. Neither expected nor surprised by the change
4. Somewhat surprised by it
5. Very much surprised by it

In general, what do you think has caused any rapid or sudden changes you have experienced? In other words, what do you think might have brought them about? (Open-ended)

Open ended question: Do you have any other questions/comments/concerns about this session? (Free to describe anything they want here):

The Heart and Soul of Change Project (https://heartandsoulofchange.com), Barry L. Duncan and Scott D. Miller (2007).

Appendix J

Session Topics Overview

Session 1: Introduction

Session 2: Connecting with the Present Moment & with Yourself by Opening Up to Challenging Emotions

Session 3: Defining Values: What's Guiding You?

Session 4: Watching your Thinking and Practicing Self Compassion

Session 5: Taking Action by Setting Goals: Select, Optimize, Compensate

Session 6: Connecting with Others, CONNECT Summary, & Next Steps

Appendix K

Definition Sheet

Isolated
"Remote and separate physically or socially"
"Being or feeling set or kept apart from others"
Source: https://www.vocabulary.com/dictionary/isolated

Depressed
"Persistent feeling of sadness and loss of interest"
Source: https://www.mayoclinic.org/diseases-conditions/depression/symptoms-causes/syc-20356007

Hopeless
"Having no expectation of good or success"
Source: https://www.merriam-webster.com/dictionary/hopeless

Worthless
"Someone who is described as worthless is considered to have no good qualities or skills"
Source: https://www.collinsdictionary.com/dictionary/english/worthless
"The feeling or fact of not being important or useful"
Source: https://dictionary.cambridge.org/dictionary/english/worthlessness

Helpless
"The feeling or state of being unable to do anything to help yourself or anyone else"
Source: https://dictionary.cambridge.org/dictionary/english/helplessness

Anxiety
"A feeling of fear or apprehension about what's to come"
Source: https://www.healthline.com/health/anxiety#types
"An emotion characterized by feeling of tension, worried thoughts and physical changes like increased blood pressure"
Source: https://www.apa.org/topics/anxiety#:~:text=Anxiety%20is%20an%20emotion%20characterized,certain%20situations%20out%20of%20worry.

Uneasy
"Someone who feels uneasy feels slightly nervous, worried, or upset about something"
"An uneasy situation is not settled or calm, and it could quickly change and get worse"
Source: https://www.macmillandictionary.com/dictionary/british/uneasy