# An explanatory sequential analysis of Irish young-old and old-old older adults' attitudes towards face-to-face and online psychotherapy

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**Declaration**

We, the undersigned declare that this thesis entitled "An explanatory sequential analysis of Irish young-old and old-old older adults' attitudes towards face-to-face and online psychotherapy" is entirely the author's own work and has not been taken from the work of others, except as cited and acknowledged within the text.

The thesis has been prepared according to the regulations of Dundalk Institute of Technology and has not been submitted in whole or in part for an award in this or any other institution.

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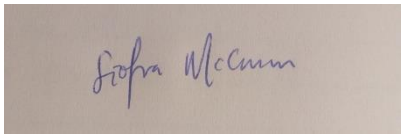
Author Signature: 

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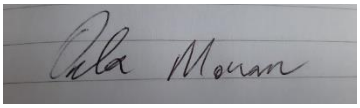
Supervisor Signature:  

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## List of Abbreviations

| | |
|---|---|
| BMHSS-R | Barriers to Mental Health Services Scale-Revised |
| CBT | Cognitive Behavioural Therapy |
| COM-B | Capability Opportunity Motivation-Behaviour Model |
| F2f | Face-to-face |
| FCAS | Face-to-face Counselling Attitudes Scale |
| GP | General Practitioner |
| HSE | Health Service Executive |
| MODE | Motivation and Opportunity as DEterminants Model |
| OCAS | Online Counselling Attitudes Scale |
| PTSD | Post-Traumatic Stress Disorder |
| RCT | Randomized Control Trial |
| SES | Socio-Economic Status |
| STAM | Senior Technology Acceptance Model |
| TAM | Technology Acceptance Model |
| TPB | Theory of Planned Behaviour |
| UTAUT | Unified Theory of the Acceptance and Usage of Technology |

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## Abstract

### A mixed-methods analysis of Irish older adults' attitudes towards face-to-face and online psychotherapy

Síofra McCrum BSc, MSc

Online psychotherapy is a growing research area, particularly as a result of the Covid-19 pandemic. There is little known about the attitudes of older adults towards online psychotherapy via synchronous video call. This research aimed to measure young-old and old-old older adults' attitudes towards face-to-face (f2f) and online psychotherapy and identify predictors of these attitudes via an explanatory sequential mixed-methods design utlising quantitative surveys and qualitative semi-structured interviews. 156 young-old and old-old older adults aged 50+ (109 female, one non-binary, *M*=62.12 years, *SD*=8.29) completed a quantitative questionnaire consisting of four pre-existing, validated scales: Senior Technology Acceptance Model Questionnaire; Barriers to Mental Health Services Scale-Revised; Face-to-face Counselling Attitudes Scale and Online Counselling Attitudes Scale. Participants had higher mean scores on value of f2f than online psychotherapy, and on discomfort with online than f2f. Positive correlations were found between value of f2f and online psychotherapy, and between discomfort with f2f and online psychotherapy. Regression analyses found that more positive attitudes towards f2f psychotherapy and prior experience with online psychotherapy were significant positive predictors of attitudes towards online psychotherapy. Further regression analysis found that experience with f2f psychotherapy was a significant positive predictor of attitudes towards f2f psychotherapy, whilst negative help-seeking beliefs and lack of knowledge and fear of psychotherapy were significant negative predictors of attitudes towards f2f psychotherapy. Five young-old and old-old older adults (three male, *M*=76.8 years, *SD*=6.27) participated in semi-structured interviews. Using thematic analysis, three main themes were identified: Perceptions of online psychotherapy, facilitators of engagement with online psychotherapy, and barriers to engagement of online psychotherapy. These results indicate that improving attitudes towards f2f psychotherapy, increasing awareness and decreasing fear of psychotherapy could improve attitudes towards online and f2f psychotherapy. Recommendations include incorporating initial f2f appointments before moving online and promoting psychotherapy through service user testimonies.

# Chapter 1: Introduction: Older adults' attitudes towards face-to-face and online psychotherapy

## 1.1 Background

Online psychotherapy can be understood as psychotherapy which is carried out remotely via synchronous video call with a psychotherapist. This is an area of research which has grown in recent years as a result of the Covid-19 pandemic and the subsequent need for remote healthcare. Initial evidence indicates that older adults benefitted from the use of online appointments during the pandemic. One study of American physicians demonstrated the efficacy of telehealth (remote healthcare) appointments with older adults during the Covid-19 pandemic (Goldberg et al., 2021). Another found that fear of Covid-19 led to an increase in positive attitudes towards and intentions to use online counselling among American adults, with the opposite effect being true for face-to-face (f2f) counselling (Shin & Ku, 2022). Furthermore, a review of the use of telehealth among different medical disciplines during the pandemic found that psychiatry had the highest uptake of remote appointments, suggesting that this is a potential treatment option for patients when access to f2f services is not available (Drake et al., 2022).

There is, however, limited existing research examining older adults' attitudes towards online psychotherapy. It is well-established by the Theory of Planned Behaviour that one's attitude towards a behaviour will affect their intention to engage in that behaviour (Ajzen, 1985). A review of theories of technology adoption among older adults stated that attitudes must first be changed, and then a habit formed, for older adults to have continued technology usage (Francis et al., 2019). Thus, the present study aimed to examine young-old and old-old older adults' attitudes towards both f2f and online psychotherapy, and the potential variables which may influence these attitudes, in order to determine how to improve the use of online psychotherapy in this age cohort.

Older adults are an important target population for online psychotherapy due to the decreased access to f2f psychotherapy they experience due to age-related physical, psychological and demographic factors. This age group is crucial to study as the global population is aging and older adults will become an increasingly large cohort. The present study took place in Ireland, where the most recently published census results from 2022 saw a 22% rise in the number of adults aged 65+ and a 25% rise in the number of adults aged 85+ since the previous census in 2016 (Central Statistics Office, 2023a). Overall, the largest population increase was seen in the 70+ age bracket (Central Statistics Office, 2023a). According to the World Health Organization, the percentage of adults aged 60+ within the global population will increase from 12% in 2015 to 22% in 2050 (World Health Organisation, 2022).

Furthermore, there is growing evidence that older adults experience mental health difficulties and can benefit from psychotherapy (Raue et al., 2017). According to the World Health Organisation, 15% of older adults aged 60 or over suffer from mental disorders such as Anxiety, Bipolar disorder, and Post-Traumatic Stress Disorder (PTSD), and 7% suffer from depression (World Health Organisation, 2017). A report on older adults' mental health in Ireland by the Mental Health Commission (2020), reported that 10% of older adults aged 50+ in Ireland have clinically significant depressive symptoms, and 18% had sub-threshold levels. For anxiety, 13% had clinically significant symptoms, and 29% had sub-threshold levels. The report also asserted that older adults experience life changes associated with aging that put them at increased risk for anxiety, such as grief, living alone, and experiencing disability and cognitive decline (Mental Health Commission, 2020). Due to a variety of factors including physical and cognitive limitations, cost, and limited access to transportation, older adults face numerous barriers in accessing traditional f2f psychotherapy (Pepin et al., 2015; Pepin, Segal & Coolidge, 2009). Online psychotherapy has the potential to mitigate this issue and provide older adults suffering with mental health issues with the support they need remotely in their homes or care settings.

### 1.2 Defining "psychotherapy"

According to the American Psychological Association (APA), psychotherapy consists of "any psychological service provided by a trained professional that primarily uses forms of communication and interaction to assess, diagnose, and treat dysfunctional emotional reactions, ways of thinking, and behavior patterns" (APA, 2023). The APA asserts that psychotherapy can also be referred to as "talk therapy" or "therapy" (APA, 2023). The APA defines counselling as "professional assistance in coping with personal problems" using techniques such as active listening, testing, discussion and guidance (APA, 2018). In Ireland, the Irish Association for Counselling and Psychotherapy states that both counselling and psychotherapy consist of professionals providing support with personal issues and alleviating difficulties (IACP, 2014). Furthermore, the IACP assert that there are few differences in the practice of counselling and psychotherapy, however, counselling tends to be shorter-term while psychotherapy is usually a long-term treatment (IACP, 2014). The terms are often used interchangeably in the academic literature, thus, both terms will be referred to throughout this thesis, in line with the term used by authors in referenced works. Some prior studies have also examined attitudes towards specific modalities of therapy, both f2f and online, such as Cognitive Behavioural Therapy (CBT) or problem-solving therapy. Evidence from such research was also considered when examining the literature on attitudes towards f2f and online psychotherapy. The present study used an operational definition of online psychotherapy.

### 1.3 Defining "online psychotherapy"

The APA defines telepsychology as "the provision of psychological services using telecommunication technologies" e.g., telephone, videoconferencing, email, internet, and mobile devices (APA, 2013). For the purposes of the present study, "online psychotherapy" referred to psychotherapy which takes place via synchronous video call with a psychotherapist. Previous studies have found positive preliminary results when comparing psychotherapy via video call to other forms of telepsychology such as psychotherapy via telephone call. Choi et al. (2020) found that in a randomized control trial (RCT), participants who received weekly problem-solving therapy or behavioural activation therapy via video call had higher response rates and a greater reduction in depressive symptoms than those who received weekly telephone support calls. Further research also indicates older adults' satisfaction with psychotherapy via video call (Hantke et al, 2020), that its results can be equal to f2f treatment (Egede et al., 2015; Choi et al., 2014a), and in some cases more effective (Choi et al., 2014b). A systematic review examining the impact of psychotherapy via video call in the treatment of unipolar depression in older adults found high levels of patient and provider satisfaction and no significant differences between video and f2f treatment in RCTs (Christensen et al., 2020). Furthermore, a preference for video calls was found due to decreased wait and travel times and feeling less stigmatized (Christensen et al., 2020).

Online psychotherapy has also been found to have a positive impact on comorbid illness, which is common among older adults. Egede et al (2018) found in a RCT of older adults with type-2 diabetes and depression that those who received online psychotherapy had a greater reduction in diabetic symptoms post-intervention than those who attended f2f. However, there were no significant differences observed in depression scores between the treatment and control group. Another study comparing online psychotherapy response among younger and older adults found that both saw significant reductions in depressive symptoms with no significant difference in treatment outcomes (Belanger & Winsberg, 2022). A review of 24 studies examining video consultations with older adults found that remote appointments have been useful in the diagnosis of dementia and depression and have been helpful in nursing home settings to reduce costs and aid staff in treatment of patients (Ramos-Rios et al., 2012). A further systematic review of 76 studies examining the use of telepsychology in psychotherapy, diagnosis, treatment of dementia, etc., among older adults found that psychotherapy interventions via video call were feasible for older adult samples (Gentry, Lapid & Rummans, 2019). In sum, online psychotherapy has shown preliminary positive results in the literature in terms of symptom reduction for mental health concerns, diagnosis, and in the treatment of comorbid illness.

Other forms of telepsychology have been explored among older participants, such as mobile apps and online programs which use self-directed psychoeducation and feedback via email or text message from a psychotherapist. Schneider et al (2018) examined older and younger adults' attitudes

towards using an online self-directed depression intervention which involved completing psychoeducational modules and receiving weekly feedback via email and found that whilst older adults had more positive attitudes towards the intervention, there was no difference in treatment outcome. Knaevelsrud et al (2017) found that an online CBT intervention which involved submitting written assignments and receiving therapist feedback significantly reduced symptoms of PTSD among older adults. Another study examined the impact of participation in a peer-led intervention conducted via video call among older adults, which found participants had significant improvements in depressive symptoms, stress, sleep, and physical activity (Roberts et al., 2022). Gould et al (2021) examined older adults' use of a mobile app intervention involving daily activities and asynchronous messaging with a therapist and other users, and found participants had significant reductions in depression and anxiety symptoms and had high satisfaction with the intervention and its usability. Thus, there is preliminary evidence that various online interventions have potential positive impacts on symptoms of mental health concerns in older adults, and further study in this area is warranted. Furthermore, the use of telepsychology interventions including video calls, mobile apps, internet interventions and smart technology have significant impacts on health outcomes including reductions in hospital visits, depressive symptoms, and improved cognitive function in older adults, according to a review by Harerimana, Forchuk and O'Regan (2019).

**1.4 Why study attitudes?**

Whilst the efficacy of online psychotherapy for older adults has been reported, and indeed there appears to be satisfaction amongst patients with experience of this form of psychotherapy (Hantke et al., 2020), little is known about older adults' attitudes towards online psychotherapy before use. There are various established theories of how variables such as attitude, motivation, opportunity, and capability can influence behaviour. For example, The MODE model posits that attitudes can influence behaviour via two processes, either spontaneously or through deliberation, and Motivation and Opportunity are the DEterminants (MODE) of which process will occur (Fazio, 1990). Spontaneous processes occur when an individual engages in a behaviour simply based on pre-existing attitudes from memory rather than through intentional deliberation (Fazio & Olson, 2014). A deliberative process occurs when an individual has the motivation and opportunity to reflect on a situation and their attitudes before engaging in a behaviour (Fazio & Olson, 2014). However, there have been some critiques of this model. Ajzen & Fishbein (2000) reported that despite the MODE model's assumption that only strong attitudes which are easily accessible in one's memory can be automatically activated, other research has demonstrated that this is not the case, and any attitude can be spontaneously activated. Furthermore, Smith & Terry (2003) found that attitude accessibility had no effect on the relationship between attitudes and behaviour, contrary to the MODE model.

Another similar model is the COM-B system, which suggests that it is Capability, Opportunity, and Motivation which are the sources of an individual's behaviour, and this system was used to design the Behaviour Change Wheel in order to characterise behaviour change interventions (Michie. Van Stralen & West, 2011). The wheel has three layers, with the sources of behaviour (Capability, Opportunity, and Motivation) being the centre layer, nine intervention types being the second layer, and seven types of policy which can be used to implement these interventions being the outer layer (Michie. Van Stralen & West, 2011). Similarly to the MODE model, the behaviour change wheel considers that motivation to engage in a behaviour can be either automatic or reflective, depending on the scenario. However, there has also been criticism of the COM-B model. Whittal, Atkins & Herber (2021) reviewed its use in designing a behaviour change intervention for heart failure self-care and concluded that it was difficult to distinguish between determinants (e.g., Capability and Motivation) and narrow down intervention types, leading to a need for subjectivity when using the model.

The Theory of Planned Behaviour (TPB) states that one's attitudes towards a behaviour will influence their intention to engage in it (Ajzen, 1985). Ajzen (1991, p.188) defines an attitude as "the degree to which a person has a favourable or unfavourable evaluation or appraisal of the behaviour in question". Furthermore, attitudes along with how the behaviour is viewed by important others (subjective norm) and the individual's perceived ability to engage with the behaviour due to having suitable resources or an absence of barriers (perceived behavioural control), determine one's intention to engage in a behaviour (Ajzen, 1985; 1991). Perceived behavioural control can be understood as a combination of self-efficacy (one's confidence in performing a behaviour effectively) and controllability (one's perceived control over their performance of the behaviour) (Ajzen, 2002). In sum, the TPB states that a person's perceived control of internal and external factors which affect performance of a behaviour, as well as the opinion of important others towards the behaviour, will determine their attitudes and intention towards engaging in it (Ajzen, 1985).

The TPB has been applied in previous research to assess attitudes towards help-seeking, and intentions to seek professional help for a variety of health conditions. A review by Armitage & Conner (2001) examined 185 studies applying the TPB and found that it explained 27% of the variance in behaviour and 39% of the variance in intention, providing support for its use in assessing behaviour and behavioural intention. One study which applied a TPB model to examine mental health help-seeking in a sample of older adults with chronic illnesses found that attitudes and perceived behavioural control had stronger associations with help-seeking intentions compared to subjective norm (Adams et al., 2021). Furthermore, the TPB model they applied explained 69.7% of the variance in help-seeking intentions and all three TPB variables were significantly associated with intention (Adams et al., 2021). Similarly, a study of a population sample in Germany applied a TPB model to investigate intentions to seek psychiatric help for depression and found that attitude was most strongly related to intentions, followed

by subjective norm and perceived behavioural control (Schomerus, Matschinger & Angermeyer, 2009). Moreover, a more recent study examining help-seeking behaviour in a German adult sample experiencing depressive symptoms applied a TPB model and found that attitudes, subjective norms and self-efficacy were associated with help-seeking intentions, however controllability was not (Tomczyk et al., 2020). Thus, constructs based on TPB have been shown to influence intentions to seek help for mental health conditions and are therefore applicable in the present study.

These theories demonstrate the importance of psychological factors such as attitude in predicting behaviour. However, the TPB was determined to be most relevant to the present study as this research aimed to examine Irish young-old and old-old older adults' attitudes towards f2f and online psychotherapy in a general sample, not to assess usage behaviour. Moreover, the research was more concerned with identifying factors that predict older adults' attitudes towards online psychotherapy in order to better support them, rather than to develop a specific behavioural intervention. Previous research has also used TPB constructs to examine mental health help-seeking behaviours in general adult samples (Tomczyk et al., 2020; Schomerus, Matschinger & Angermeyer, 2009) and in older adults (Adams et al., 2021), making its application appropriate in this context.

### 1.5 Existing attitudes research

A number of studies have explored attitudes towards mental health generally and f2f psychotherapy in Ireland, however, few studies have examined the perspectives of older adults specifically. Kelly (2020) explored public attitudes towards counselling/psychotherapy in Ireland and found that while they broadly had positive views and felt that it was more acceptable in society, there was still a hesitation to disclose one's own mental health difficulties. It was also found that half of Irish adults surveyed saw no barriers to attending counselling/psychotherapy, but up to one quarter reported affordability may be a barrier (Kelly, 2020). A similar national survey from 2006 found that Irish individuals living in small rural areas and earning lower income were less likely to engage in counselling/psychotherapy, where those aged 18-39 years or 50-64 years, who had private health insurance, and were engaged with GP, psychology, social work or religious services were more likely to attend (Cassells, 2019). Cleary (2017) examined help-seeking and attitudes towards psychological treatment among Irish males who attempted suicide and found young men were hesitant to seek help even after a serious attempt, and barriers included lack of knowledge of symptoms, negative attitudes towards help-seeking and a reluctance to disclose their issues. Doyle & Hannigan (2024) explored the experience of therapy among Black and multi-ethnic Irish clients and found that lack of knowledge of mental health issues, previous negative experiences with services, differing cultural values, and inadequate services were reported barriers to accessing psychotherapy. In sum, this research demonstrates that Irish adults in different cohorts experience barriers to accessing psychotherapy

including stigma, gender, race, and lack of mental health literacy. The present research aimed to expand on this work by exploring the barriers encountered by Irish young-old and old-old older adults in accessing f2f and online psychotherapy.

There is existing research examining attitudes among the general population towards online forms of psychotherapy, such as self-guided online interventions, however, there is limited research examining the attitudes of older adults specifically. A study examining attitudes of the German public towards internet-based psychotherapy interventions found ambivalent attitudes, with most participants recognizing its potential for improving access, but reporting low intentions to use such interventions (Apolinário-Hagen, Vehreschild & Alkoudmani, 2017). Apolinário-Hagen et al. (2018) found that when German adults were asked to rate preference for different types of online interventions, therapist-guided interventions were rated more highly (i.e., online self-help interventions which can be completed in patients' own time with personal feedback from a therapist via email) than psychotherapy via video call. This study also found that older age indicated more positive attitudes towards internet-based guided self-help, suggesting such interventions are acceptable to older adults (Apolinário-Hagen et al., 2018). Another study of a general adult sample in Sweden which examined the preference for internet-based psychological interventions among people without experience of online mental health treatments found a preference for f2f interventions, or a combination of f2f and online, to online alone (Wallin, Mattsson & Olsson, 2016). These findings show that attitudes towards online interventions can vary by type of intervention among general adult samples. However, there is scant research on the attitudes of older adults towards online psychotherapy via video call specifically, and the present study aims to address this gap in the literature.

### 1.6 The present research

The present research examined the attitudes of young-old (aged 50-69) and old-old (aged 70+) older adults in Ireland towards online psychotherapy using an explanatory sequential mixed-methods design (Kroll & Neri, 2009) based on quantitative survey and qualitative interview data. The aim of this research was to gain insights into Irish young-old and old-old older adults' attitudes towards f2f and online psychotherapy and the predictors of these attitudes, such as barriers to accessing psychotherapy. Identifying the barriers older adults face in accessing these services will allow for the identification of areas for improvement in service design and delivery. Furthermore, understanding older adults' attitudes towards these modes of therapy will help to determine whether these services may be acceptable to them. It was theorised that online psychotherapy may be more acceptable for older adults who experience barriers to access due to physical issues, e.g., mobility, or structural issues, e.g., a lack of transport. Online psychotherapy may also be preferable due to the reported stigma that older adults perceive around discussing mental health issues, where they may prefer to engage in such services in the privacy of their

own home. Furthermore, in light of the Covid-19 pandemic, it was theorised that older adults would have experience of online appointments and thus find online interventions more acceptable than previous generations. Thus, this research aimed to explore the barriers young-old and old-old older adults experience when accessing services, and compare how these impact attitudes towards f2f and online psychotherapy, to determine which mode may be more acceptable.

An explanatory sequential design was used in order to firstly explore the research question, "What are young-old and old-old older adults' perceptions of and attitudes towards online psychotherapy?" using quantitative analysis, and then use these findings to inform the design of a second qualitative study to explore the research question in more depth (Kroll & Neri, 2009). The first study involved the development of a comprehensive quantitative survey which was conducted with young-old and old-old older adults aged 50+ either online or using pen and paper. The data were analysed using multiple linear regression models, correlational analysis and descriptive statistics. Based on the results of the first study, the researcher designed a second study to further examine these attitudes through qualitative interviews to gain a richer insight. The second study consisted of the development of an interview schedule which was conducted with young-old and old-old older adults aged 60+ either online using a video call app (e.g., Zoom), over the telephone, or in-person. These interviews were recorded and then transcribed and analysed using thematic analysis (Braun and Clarke, 2006). This methodology allowed for the exploration of attitudes among a larger and more generalisable sample using the quantitative survey, before exploring these concepts in more depth and to provide further context using qualitative interviews.

# Chapter 2: Literature Review

## 2.1 Introduction

To examine the attitudes of young-old and old-old older adults towards online psychotherapy, there are numerous factors to consider. Firstly, attitudes towards technology must be considered when exploring attitudes towards online psychotherapy. For many older adults, engaging with online psychotherapy will involve the use of a new technology, i.e., video call apps. An overview of technology adoption theories will follow with a discussion of potential barriers cited in the literature including physical and cognitive limitations, social support, socio-economic status (SES), education level, technical literacy, gender, and cultural factors. Following this, the present knowledge surrounding older adults' attitudes towards psychotherapy generally and then specifically online psychotherapy will be discussed. A summary of the commonly cited barriers to engaging in psychotherapy will be provided, including gender, stigma, ageism, mental health literacy and accessibility. Finally, a summary of qualitative research in this area will be provided. The study model will be outlined based on the total evidence provided.

## 2.2 Literature review

### 2.2.1 The digital divide & technology acceptance

A phenomenon which describes the differences in technology access and engagement between younger and older people is known as the "digital divide". As discussed by van Dijk & Hacker (2003), the digital divide was originally posed in the late 1990s as a theory describing the differences in access to technology among different groups, including younger versus older adults. However, van Dijk & Hacker (2003) proposed that the divide did not only apply to physically accessing technology hardware, but also to accessing training to develop skills and have prolonged usage of technology. More recent research has corroborated this idea, finding that the digital divide is becoming increasingly complex, with older adults becoming more socially isolated due to the technology usage gap between themselves and younger people (Ball et al., 2017). It is important to recognize the digital divide when studying older adults' attitudes towards new technologies such as online psychotherapy. Technical literacy, i.e., prior experience with technology, may also be an important factor to consider in assessing older adults' attitudes towards new technologies. A systematic review of 57 studies examining older adults' usage of telehealth found that the most commonly reported barriers were technical literacy, cost, and desire to use the technology (Kruse et al., 2020). Other research has found older adults' communication preferences to be predominantly f2f or telephone call, followed by email and video call apps such as Skype being the

least preferred method (Yuan et al., 2016). Thus, the present study considered technical literacy as potential predictors of attitudes towards using online psychotherapy.

Multiple theoretical models have been developed to assess older adults' attitudes towards technology in general, and the potential barriers to their usage of it. One theory which discusses the predictors of and barriers to older adults' usage of technology is the Senior Technology Acceptance Model (STAM) (Chen & Lou, 2020; Chen & Chan, 2014). The STAM was originally posed by Chen & Chan (2014) and incorporates factors relating to the specific characteristics and needs of older adults into traditional models of technology acceptance, such as the Technology Acceptance Model (TAM) (Davis, 1989) and Unified Theory of the Acceptance and Usage of Technology (UTAUT) (Venkatesh et al., 2003). The TAM proposed that perceived usefulness (the extent to which a technology can help you achieve a goal) and perceived ease of use (the amount of effort you will have to put in to use the technology) are the two most important attitudinal factors that impact usage and acceptance of technology (Davis, 1989). The UTAUT builds upon this by stating that performance expectancy (how helpful technology will be in improving job performance), effort expectancy (how easy the technology will be to use) and social influence (whether other important individuals will recommend using the technology) predict one's intention to use a technology, whilst usage behaviour is predicted by behavioural intention and facilitating conditions (the belief that there are structures in place which support the use of the technology) (Venkatesh et al., 2003). Furthermore, the UTAUT posits that gender, age, experience with technology, and the voluntariness of use of a technology moderate the relationships between intention and actual usage behaviours (Venkatesh et al., 2003). The TAM and UTAUT were originally developed to assess technology adoption in workplaces, so are not applicable to the present study directly. However, their concepts have been developed to make more suitable models for assessing the needs of older adults.

The STAM was developed to build upon these theories by extending their key concepts to older adults' technology usage and incorporating the barriers and needs specific to this age cohort. The original STAM posed eleven age-related constructs: Attitude towards using technology, perceived usefulness, perceived ease of use, facilitating conditions, cognitive ability, physical functioning, self-reported health conditions, attitudes towards aging and life satisfaction, social relationships, gerontechnology self-efficacy (feeling of older adults to be able to use technology effectively), and gerontechnology anxiety (feelings of apprehension experienced by older adults when using technology) (Chen & Chan, 2014). The STAM also incorporated four control variables: age, gender, economic status, and education, which are suggested to have an impact on technology acceptance and usage by older adults (Chen & Chan, 2014). A more recent study conducted by Chen & Lou (2020) builds upon the original STAM proposed by Chen & Chan (2014), by reducing its original eleven constructs to four: Attitudinal beliefs (perceived

usefulness and attitudes towards using technology), control beliefs (perceived ease of use, gerontechnology self-efficacy, and facilitating conditions), gerontechnology anxiety, and health (attitude towards aging, social relationships, self-reported health conditions and cognitive ability). This updated model explained up to 81.5% of the variance in actual usage of technology in the study by Chen & Lou (2020), and thus, the present study applied this theoretical model to assess older adults' attitudes towards technology.

### 2.2.2 Potential predictors of attitudes towards technology

There is broad evidence of the impact of the various TAM, UTAUT and STAM variables on attitudes towards and usage of technology among older adults. A review of studies examining older adults aging in place (remaining in their own homes or communities) found that technology acceptance was influenced by six key factors: concerns regarding technology, perceived benefits of the technology, perceived need for the technology, alternatives to technology, social influences, and the characteristics of the elderly (Peek et al., 2014). A survey study of older adults' acceptability of technology found that perceived usability and needs satisfaction were related to the intention to use new technologies (Wang, Rau & Salvendy, 2011). Several studies of technology acceptance have found that age was most strongly related to perceived ease of use (Hauk, Huffmeier & Krumm, 2018) and that this is more important to older than younger adults (Chen & Chan, 2011). self-efficacy, performance expectancy and effort expectancy have all been found to predict intention to use and actual usage of video call technology among older adults (Van Houwelingen et al., 2018). In sum, this evidence demonstrates that STAM variables are relevant to older adults and their attitudes towards and usage of technology. Thus, the present study examined the impact of STAM variables on attitudes towards online psychotherapy.

Some barriers to older adults' usage of new technologies include health issues and quality of life. Individuals with motor issues have more difficulty engaging with new technologies due to the need for fine motor control in using touch screens or keyboards (Freytag et al., 2022; Andrews et al., 2019). However, clinicians reported that using remote appointments with older adults during the pandemic improved access to mental health services for patients with mobility issues (Goldberg et al., 2021). Sensory impairments such as vision and hearing loss can also make engaging with technology more difficult for older people and clinicians have reported difficulties conducting online appointments with these patients (Goldberg et al., 2021; Dham et al., 2018). Clinicians have also expressed concern about the safety of conducting remote online appointments with vulnerable individuals in unsupervised settings, which could pose a potential barrier for older people (Luxton, Sirotin & Mishkind, 2010). Cognitive impairments may also reduce capability to engage with new technologies (Schifeling et al., 2020) with

increased cognitive ability being associated with increased technology use (Czaja et al., 2006; Freese, Rivas & Hargittai, 2006). Executive functioning has also been found to impact technology usage, as well as continued usage over time (Mitzner et al., 2019). In terms of quality of life, increased life satisfaction, relationship satisfaction and positive attitudes towards aging have been associated with increased technology use (Chen & Chan, 2014) and research has shown that older adults are concerned with how a new technology could improve their quality of life (Chen & Chan, 2011). Overall, existing research indicates that there are specific needs of older adults which must be considered in implementing telemedicine and systems should minimize the requirement of skills which decline with age (Stronge, Rogers & Fisk, 2007). Therefore, the present study considered the physical and cognitive limitations of participants as well as their quality of life as potential predictors of their attitudes towards using online psychotherapy.

Perceived social support is another potential predictor of attitudes towards using new technology among older adults. Older adults using new technology can often experience gerontechnology anxiety, which occurs when they have apprehension and fear using new technology, (Chen & Chan, 2014). Schifeling et al. (2020) examined the use of remote visits during the pandemic among older adults and found that patients were more likely to use video appointments when a caregiver was present. Another study found that older adults reported being more likely to use healthcare technologies if they were advised to by family or medical professionals, and to a lesser extent by friends (Harris & Rogers, 2023). Heart & Kalderon (2013) examined older adults' attitudes towards health-related technology at home and found that those living with a partner were six times more likely to use a computer. However, the impact of social support on attitudes is not necessarily straightforward. Peek et al (2014) found that older adults who had an alternative option to technology when completing a task, such as a caregiver, were less likely to use technology, but also found that they were more likely to use it if it reduced the burden on their caregiver (Peek et al., 2014). Based on this evidence, the present study considered social support as a potential predictor of attitudes towards using online psychotherapy.

Gender is another variable which may influence attitudes towards technology and its use among older adults. Research has found that older males are more likely to use technology than older females (Bujnowska-Fedak & Mastalerz-Migas, 2014; Chen & Chan, 2014). However, Chen and Chan (2014) also found there was no gender difference observed in attitudes towards technology. Drake et al (2022) found that whilst females were more likely to use telemedicine overall, males were slightly more likely to use video calls. Gender has also been reported to impact the reasons for using technology, with women being more concerned about cost and access to support and men being more concerned with enjoyment and making usage a habit (Venkatesh, Thong & Xu, 2012). There are also varying findings of gender's importance as a moderator of attitudes. A review of acceptance of health technology found gender to

have no effect on technology acceptance in 84% of studies (Or & Karsh, 2009). Dham et al (2018) found no gender difference in satisfaction with telepsychiatry services among older adults and Choi et al (2014a) found no gender effect on acceptance of online problem-solving therapy among older adults. Thus, previous findings related to gender effects on technology usage have been varied, and the impact of gender on attitudes towards the use of online psychotherapy warrants further investigation in the present study.

It is important to note other demographic variables such as SES, education levels, and cultural factors may impact technology attitudes and usage. Higher SES (Cotten et al., 2016; Chen & Chan, 2014) and higher education levels (Bujnowska-Fedak & Mastalerz-Migas, 2014; Chen & Chan, 2014; Heart & Kalderon, 2013; Niehaves & Plattfaut, 2011; Czaja et al., 2006) have been associated with increased technology usage. Race and ethnicity have also been associated with technology usage, with White older adults being more likely to engage than Black, Asian or Latino older adults (Cotten et al., 2016; Czaja et al., 2006). White older adults have also been found to be more likely to use telemedicine than Black or Non-White older adults (Drake et al., 2022; Schifeling et al, 2020). There is also evidence that older adults living in rural areas may be less willing to use technology, as they may not have access to the internet services required or lack the social support their urban counterparts receive (Freytag et al., 2022). In a study of rural older adults' knowledge of internet-based mental health services, it was found that 75% had never heard of such treatments, and only 13.5% had intention to use them (Handley et al., 2015). Although, remote psychiatry services used by rural older adults have been found to be effective (Dham et al., 2018), and a recent review of psychotherapy for home-bound older adults concluded that remote appointments could help overcome barriers experienced by patients in rural areas (Tegeler et al., 2020). It is important to consider the cultural context in which older adults live when considering their attitudes towards technology. The present research took place in an urban area of Ireland, where in the most recent census in 2022, 87% of people identified as being White Irish or from another White background (Central Statistics Office, 2023b). In order to reduce participant burden in the amount of survey and interview questions, the researcher opted not to include questions on income, education or cultural background. This is acknowledged as a study limitation, and these variables warrant further research.

### 2.2.3 Young-old and old-old older adults

It is important to note that older adults cannot be assumed to be a homogenous group, and there is evidence to suggest that different age cohorts within this group can differ in their attitudes towards technology. A review of telemedicine use among different patient demographics found that older adults aged 56-74 were more likely to use video consultations than older adults aged 75+ (Drake et al., 2022).

A similar study of older adults aged 75+ found that younger participants were more likely to use video appointments (Schifeling et al., 2020). Several studies have reported a relationship between younger age within the older adult cohort and increased usage of technology (Bujnowska-Fedak & Mastalerz-Migas, 2014; Chen & Chan, 2014) and increasing age has been found to have a negative effect on technology usage (Heart & Kalderon, 2013; Niehaves & Plattfaut, 2011). However, health has been found to moderate the effect of age on technology usage. Heart & Kalderon (2013) found that older adults with less physical health concerns aged 70-79 and 80-89 were four and fourteen times more likely respectively to use health-related technology than their unhealthy peers (Heart & Kalderon, 2013). Although, the relationship between age and technology attitudes is not straightforward, as numerous studies have found that increasing age was related to increasingly positive attitudes towards internet-based psychotherapy (Apolinario-Hagen et al., 2018; Apolinario-Hagen, Vehreschild & Alkoudmani, 2017). Based on these mixed findings, the present study examined perceived barriers and attitudes towards f2f and online psychotherapy among "young-old" (age 50-69) and "old-old" (age 70+) older adults.

### 2.2.4 Predictors of attitudes towards mental health and psychotherapy

There are also multiple variables to consider when assessing attitudes towards mental health and psychotherapy among older adults. One study examining the predictors of psychotherapy engagement among older adults with depressive symptoms reported that attitudes were particularly important in predicting engagement with psychotherapy, as well as other issues such as access and stigma (Nurit, Dana & Yuval, 2016). Numerous potential predictors of attitudes towards psychotherapy have been cited in the literature, including gender, ageism, stigma, mental health literacy, accessibility, and therapist factors. In relation to gender, women have been found to hold more positive attitudes towards and increased usage of mental health treatment among older adults (Gellert et al., 2021; Kessler, Agines & Bowen, 2015). Older women have also been found to have a greater perceived need for mental health treatment than their male counterparts (Mackenzie, Pagura & Sareen, 2010). Gender differences have also been found in terms of barriers, with cost and the ability to find a psychotherapist being considered greater barriers by women and perceived stigma being a more significant barrier for men (Pepin, Segal & Coolidge, 2009). Rice et al (2020) examined attitudinal and structural barriers to mental healthcare among men with major depressive symptoms and found that men had a lack of knowledge about the psychotherapy process, a tendency for self-reliance in solving problems, and reluctance to speak to their physicians about symptoms, all of which were barriers to help-seeking. Similarly, Seidler et al (2020) explored the barriers to accessing mental healthcare among men self-reporting a mental health concern and found that the most endorsed barriers were not knowing what to look for in a psychotherapist,

believing a lot of people feel sad and down, and solving one's own problems. These findings warrant further study, thus, the present study considered gender as a potential predictor of attitudes towards psychotherapy.

Another potential predictor of attitudes towards psychotherapy among older adults is perceived stigma. Multiple studies have found stigma to be a barrier, with older adults reporting that their self-sufficiency in dealing with their mental health issues was a sign of strength (Katsounari, 2019) and that they maintain traditional values around self-sufficiency and stoicism, despite a decrease in societal stigma (Hannaford, Shaw & Walker, 2020). Although, stigma has been found to be a societal factor impacting older adults' attitudes towards depression and its treatment in a systematic review (Nair et al., 2020), so both intrinsic and extrinsic stigma need to be considered. Mackenzie, Pagura & Sareen (2010) found that 25% of older adults reported stigma as a barrier to seeking treatment, with the most reported barrier being a desire to handle problems alone. However, other studies have found that older adults dismissed stigma as a major barrier to accessing mental health services (Knight & Winterbotham, 2020), and that others finding out about one using mental health care was the least important barrier to accessing services reported by both younger and older adults (Robb et al., 2003). Some studies have shown that older adults preferred video appointments for depression due to feeling less stigmatized than in a f2f appointment (Christensen et al., 2020) and that older adults seeking help for stigmatized issues (anything they perceived as embarrassing to discuss) had greater preference for online appointments (Wallin et al., 2018). Racial differences in stigma perception have also been reported, with Asian Americans and Latinos expressing greater shame surrounding having a mental health issue than non-Latino whites (Jimenez et al., 2013). In sum, stigma may be an important predictor to consider in assessing older adults' attitudes towards f2f compared to online psychotherapy and thus was investigated in the present study.

Ageism has also been found to impact older adults' attitudes towards mental health treatment. In a systematic review by Nair et al (2020), ageism was found to be a societal factor that impacted on older adults' attitudes to depression and mental health treatment. Ageism may manifest in the belief that symptoms of mental health concerns are a "normal" part of aging and shouldn't be a source of concern for older adults. Pepin, Segal & Coolidge (2009) found that "old-old" participants reported the belief that depressive symptoms are a normal part of aging as a more significant barrier to accessing mental health services than their younger counterparts. Wuthrich & Frei (2015) similarly found that 50% of older adults aged 60+ reported believing that mental health concerns symptoms are normal as a barrier to seeking help. Knight & Winterbotham (2020) also found that older adults had difficulty identifying the need for help due to perceiving symptoms of mental health concerns as normal and relying on their General Practitioners (GPs) to identify the need for help. It has also been found that having more positive perceptions of younger therapists, as well as having positive perceptions of aging, contributes to positive

attitudes towards seeking mental health services among older people (Kessler, Agines & Bowen, 2015). This suggests that ageism towards both patients and providers may affect attitudes towards mental health treatment. However, ageism from service providers was found to be the least important barrier in a study of older and younger adults by Pepin, Segal & Coolidge (2009). The present study examined ageism as a potential predictor of attitudes towards psychotherapy among older adults.

Another potential predictor of attitudes towards mental health treatment among older adults is mental health literacy, or prior experience with mental health concerns and their treatment. Prior experience of and familiarity with psychological therapies have been found to be predictors of engagement with psychotherapy among older adults (Liu & Gellatly, 2021), and having personal experience with a treatment positively influences their attitudes towards it (Kuruvilla et al., 2006), including internet-delivered mental health treatments (Handley et al., 2015). Root & Caskie (2022) analysed the associations between eMental health literacy, barriers, and psychological distress and observed that greater literacy was associated with fewer barriers. Familiarity with and past experiences of depression and its treatment have also been found to influence older adults' attitudes (Nair et al., 2020). Older adults with more negative attitudes towards people with mental health issues are less likely to seek treatment themselves (Segal et al., 2005). Research also indicates poor mental health literacy can have an impact, with a lack of familiarity with psychological terminology being reported by older adults as an important barrier to accessing psychotherapy (Hannaford, Shaw & Walker, 2019). Katsounari (2019) found that whilst older adults had a basic understanding of psychotherapy, they did not associate it with serious mental health issues, and described it more as a problem-solving process rather than a psychological treatment. However, some research has shown that attitudes towards psychotherapy and medication improved with age, although older adults showed a greater preference for psychotherapy (Van der Auwera et al., 2017). Taken together, these findings suggest that mental health literacy and prior experience of psychotherapy are potential predictors of attitudes and therefore were assessed in the present study.

Access is another important predictor of attitudes towards psychotherapy use among older adults. Research has shown that both the physical and mental (having cognitive capacity to make decisions and concentrate) accessibility of treatments are important predictors of willingness to seek treatment (Nurit, Dana & Yuval, 2016; Mackenzie, Pagura & Sareen, 2010). Studies have also shown that older adults have high acceptance of online psychotherapy (Choi et al., 2014b) and at-home treatments (Liu & Gellatly, 2021) due to their increased accessibility. Cost, travel, and the ability to locate a therapist also impact the accessibility of mental health services for older adults (Knight & Winterbotham, 2020; Wuthrich & Frei, 2015; Pepin, Segal & Coolidge, 2009). However, some older adults report that the value of the service could potentially override these barriers (Knight & Winterbotham, 2020). A lack of

knowledge about how to access a psychotherapist can result in a reliance on GPs which can be problematic as there may not be adequate time to address mental health concerns in GP appointments, or older patients may not communicate their symptoms effectively (Hannaford, Shaw & Walker, 2019). A lack of knowledge of mental health services (Khalil et al., 2024; Mackenzie, Pagura & Sareen, 2010) and concerns about psychotherapist's qualifications and training can also present barriers (Nair et al., 2020), with older adults stating a preference for therapists of their same gender and age group (Liu & Gellatly, 2021). Thus, the present study considered beliefs about access to a psychotherapist, as well as perceptions about psychotherapists' qualifications as potential predictors of attitudes towards psychotherapy, both f2f and online.

### 2.2.5 Existing research of attitudes towards face-to-face versus online psychotherapy

Several studies have examined attitudes towards f2f and online counselling among student populations, finding an overall preference for f2f appointments (Moussa & Assender, 2022; Bird, Chow & Yang, 2020; Wong et al., 2018). Bird, Chow & Yang (2020) also found that there were significantly higher levels of discomfort reported towards online counselling. However, Wong et al (2018) found that 35% of students reported that they would be likely to use online text-based counselling rather than f2f, and it was found that students who had more positive attitudes towards online counselling were more likely to report a preference for only using online rather than f2f (Wong et al., 2018). Moussa & Assender (2022) found a positive relationship between attitudes towards f2f and online counselling attitudes. Other studies explored how these attitudes relate to other factors such as stigma, alienation and race among students. Bird et al (2018) found that students had more positive attitudes towards f2f counselling than online counselling via videoconferencing, with non-athletes reporting greater value in both types than athletes. Ballesteros & Hilliard (2016) found that Latina and Latino students had generally positive attitudes towards both f2f and online counselling, and that online counselling attitudes were found to be negatively related to self-stigma, and positively predicted by previous experience with counselling.

Several studies have also explored the attitudes of a wider range of age groups towards online and f2f psychotherapy. Shin & Ku (2022) found that fear of Covid-19 predicted positive attitudes towards online counselling among American adults, indicating the acceptability of this format in times when f2f appointments are not possible. Knetchel & Erickson (2020) found that whilst American adults (aged 18-77 years) preferred f2f psychotherapy to online psychotherapy via video call or text-based programs, individuals who had more exposure to online psychotherapy valued it equally to f2f. Furthermore, this study found no significant relationship between age and reported value of online psychotherapy, meaning older and younger adults showed no significant difference in their attitudes towards these modes

(Knetchel & Erickson, 2020). A further study examined Chinese adults' attitudes towards online and f2f counselling and the intergenerational differences in these attitudes between millennials (born 1980-1994) and generation Z (born 1995-2009) participants (Teo et al., 2020). It was found that older participants were significantly more influenced by the relationship between computer self-efficacy and perceived behavioural control, and that the older generation's attitudes had a greater impact on their intentions to use online counselling (Teo et al., 2020). Taken in sum, prior studies have found varying results in the relationships between online and f2f psychotherapy attitudes. However, the majority find a preference for f2f overall, with prior experience of psychotherapy and positive attitudes towards f2f psychotherapy predicting more positive attitudes towards online psychotherapy. The present study aimed to address several gaps in the current literature, as previous studies have typically examined attitudes among student and general adult samples rather than the attitudes of older adults specifically. Furthermore, previous studies did not often define "online counselling" explicitly as online psychotherapy conducted via video call. To the author's knowledge, the present study was the first of its kind exploring the barriers to accessing psychotherapy as predictors of the attitudes of young-old and old-old older adults towards online psychotherapy.

### 2.2.6 Qualitative research of attitudes towards f2f and online psychotherapy

There have been several studies examining attitudes towards f2f psychotherapy among older adults using qualitative methods. Hansen, Ghafoori & Diaz (2020) found that older adults aged 50+ reported barriers to accessing mental health treatment associated with their life stage, used faith and relationships as coping strategies, and felt embarrassed to be seeking mental health treatment late in life. They also reported that there were societal expectations on older people to manage their distress and a lack of awareness of the impact of trauma among their age cohort (Hansen, Ghafoori & Diaz, 2020). McGowan & Midlarsky (2012) also found that religious older adults may prefer to seek help from religious settings than traditional mental health services. Hannaford, Shaw & Walker (2019) found that there was a lingering stigma related to traditional expectations of stoicism and self-efficacy, despite changing societal attitudes, and that accessing mental health services through their GP was problematic for Australian older adults due to short appointment times and a lack of mental health literacy. Similarly, Katsounari (2019) found that participants reported they were familiar with the term "psychotherapy" but weren't aware of the process involved as they reported a need to remain stoic and self-sufficient in dealing with mental health issues. Taken in sum, these findings suggest that stigma, religiosity, lack of mental health literacy, and expectations of self-efficacy in dealing with mental health issues among older adults act as barriers to seeking psychotherapy.

There have been several studies examining attitudes towards online forms of psychotherapy using qualitative methods. Some research has shown that technical literacy impacts attitudes towards using online forms of psychotherapy. Beattie et al (2009) examined the expectations and experiences of an online CBT program among patients experiencing depression and found that online CBT was acceptable to certain patient groups, such as those familiar with computers. Similarly, Xiang et al (2021) investigated the experiences of homebound older adults using a digital CBT intervention for depression and found that participants experienced difficulties engaging with the program due to low digital literacy. Pywell et al (2020) examined the barriers to engagement with mental health applications among older adults and participants reported a lack of trust in digital applications and their use in mental health care, preferring f2f treatment. Posselt, Baumann & Dierks (2024) examined acceptance of digital interventions among patients experiencing mild to moderate depression and also found that digital interventions were not considered to be a substitute for f2f treatment with differing levels of digital literacy noted as a potential barrier. Arnaert et al (2007) examined attitudes towards the use of problem-solving therapy via video call among older adults experiencing depression and found that participants' attitudes pre-intervention depended on their openness to using technology, with participants who had technical problems reporting ambivalent attitudes and other patients who were more comfortable with technology reporting positive attitudes. Moreover, Christensen et al (2021) found that patients who had more positive attitudes towards video call in the beginning were more likely to have a positive experience with online psychotherapy, and these positive attitudes mitigated the potential negative impact of experiencing technical issues. These findings highlight the importance of examining older adults' technical literacy as a factor influencing their attitudes towards online psychotherapy.

A need for relatedness and therapeutic alliance in online psychotherapy has also been reported. Beattie et al (2009) found that some patients using an online CBT programme had concerns that the absence of the visual cues and immediate responses associated with f2f interaction could contribute to their depression and negative thoughts. Holst et al (2017) similarly examined the experiences of online CBT among patients experiencing depression and found that patients reported a need and desire for f2f contact with a psychotherapist alongside the program and that the self-directed nature of the program could appeal to some patients but leave others feeling alone. However, Kysely et al (2020) examined the experiences of couples attending online psychotherapy via video call and found that while couples initially had doubts about the ability to connect with a psychotherapist online, most experienced a positive change in expectations, and found online psychotherapy enhanced alliance and the distance allowed them to feel more comfortable and in control during their sessions. These findings suggest that one size does not fit all when it comes to using online psychotherapy approaches and a need for relatedness and therapeutic alliance must be considered. Thus, improving aspects of relatedness for

patients may improve their willingness to persist with online forms of therapy. This research is important to consider when examining attitudes towards online psychotherapy as due to the synchronous nature of video calls, this medium may be more acceptable to patients.

Other research has explored potential motivators for using online forms of psychotherapy. Donkin & Glozier (2012) explored patients' motivations to persist with online CBT for individuals with cardiovascular problems experiencing depression and found several reported motivators including feeling a sense of control while completing the program, having values around task completion, and being able to identify with the program content. Similarly, Xiang et al (2021) found that older participants reported that hearing stories of other older adults throughout a CBT program was a key facilitator to keeping engaged, as well as having prior experience with depression treatment. Beattie et al (2009) found that patients reported that the convenience of accessing an online CBT program from their home computer was an advantage. Posselt, Baumann & Dierks (2024) found that patients experiencing depression noted that a doctor's recommendation of a digital tool would motivate them to engage with it. GP signposting may improve accessibility as older adults have reported that whilst GPs are their first point of contact when seeking mental health treatment, they often don't have the mental health expertise needed to provide support and appointment times are too short to deal with such issues (Pywell et al., 2020). These findings indicate the importance of considering age-related motivators in the design of online psychotherapy interventions.

Research has shown that a blended approach of online and f2f psychotherapy, such as online CBT along with f2f support from a psychotherapist may be most acceptable to patients. Sanchez-Ortiz et al (2011) examined the views of patients using self-guided CBT with email support from a psychotherapist for treatment of bulimia nervosa and related disorders and found that patients felt positively about the flexibility and anonymity of the program, however most desired more psychotherapist support, and preferably some f2f contact alongside the online program. Wilhelmsen et al (2013) examined the use of an online CBT intervention alongside f2f consultations with a psychotherapist among patients experiencing depression and found that patients felt motivated to continue their treatment when their need for relatedness was satisfied, through interacting with their psychotherapist, relating to the content, and having good personal relationships. Christensen et al (2021) explored the experiences of older adult patients and providers with online psychotherapy for depression and found that both agreed that video call could not replace all f2f interactions and may be best suited for use in shorter follow-up appointments. Both also reported a desire for an initial f2f contact to establish a relationship between patient and psychotherapist before progression to online appointments. Similarly, Posselt, Baumann & Dierks (2024) found that patients reported digital tools may be more suitable for those with less experience of depression and mental health treatment, or those with less symptoms, and

that f2f support would be more appropriate for chronic patients. Thus, a blended approach may be more acceptable to patients than accessing online psychotherapy as a lone intervention.

### 2.2.7 Conclusion

In sum, previous research demonstrates the need to consider both attitudes towards technology and psychotherapy when examining older adults' attitudes towards online psychotherapy. Previous studies have also found evidence for the role of various predictors on attitudes towards psychotherapy, in both quantitative and qualitative research. The findings from the existing research presented in this literature review informed the explanatory sequential design (Kroll & Neri, 2009) of this research as well as the aims, hypotheses, and potential predictors of attitudes explored. The following chapters will describe the aims, hypotheses, methodology and results of each study, as well as a comparison of the results from both the quantitative and qualitative methods utilised. The researcher is a graduate of psychology and clinical neuroscience and is of a White Irish background. The researcher made a conscious effort to be aware of potential biases she may have as a result of her personal and academic background, particularly when conducting the thematic analysis of the qualitative data.

# Chapter 3: Study 1: A quantitative survey study of young-old and old-old older adults' attitudes towards face-to-face and online psychotherapy

## 3.1 Introduction

The first study assessed the attitudes of young-old and old-old older adults towards both f2f and online psychotherapy using a quantitative survey. The Barriers to Mental Health Services Scale Revised (BMHSS-R) (Pepin et al., 2015) was used to attribute a score to each participant based on their perceived barriers to mental health treatment. This score was then examined as a potential predictor of scores on the Face-to-face Counselling Attitudes (FCAS) and Online Counselling Attitudes (OCAS) scales (Rochlen, Beretvas & Zack, 2004). Furthermore, the Senior Technology Acceptance Model (STAM) (Chen & Lou, 2020) questionnaire was used to provide a score for each participant on their perceived barriers towards the usage of new technologies. This STAM score was assessed as a potential predictor of the participant's score on the OCAS.

This study aimed to address several gaps in the current literature by providing a quantitative analysis of the predictors of Irish young-old and old-old older adults' attitudes towards both f2f and online psychotherapy. Furthermore, the research was based on established theories and measures of age-related barriers towards technology usage and mental health treatment. Prior studies among older adults have tended to examine only one of these variables or have done so using qualitative methods. The use of a concrete definition of online psychotherapy as being synchronous video call with a psychotherapist also addressed the need for clarity in the literature, where terms like "telemedicine", "telehealth", and "online intervention" are often used in multiple different contexts. Much of the existing literature surrounding attitudes and perceived barriers related to the use of specific apps or self-directed interventions, and often looked at attitudes after usage as a means of testing the feasibility of these methods. To the author's knowledge, this was the first study which examined the relationship between and predictors of attitudes towards f2f and online psychotherapy as defined here, among older adults generally and without the use of any specific intervention. There were four main objectives for this research:

1. Conduct an in-depth examination of attitudes towards both f2f and online psychotherapy.
2. Examine the relationship between young-old and old-old older adults' attitudes towards f2f and online psychotherapy.
3. Explore and identify the variables that predict young-old and old-old older adults' attitudes towards f2f psychotherapy.
4. Explore and identify the variables that predict young-old and old-old older adults' attitudes towards online psychotherapy.

The hypotheses for the present study were as follows:

Hypothesis 1: More positive attitudes towards f2f psychotherapy will predict more positive attitudes towards online psychotherapy.

Hypothesis 2: Greater levels of perceived barriers towards accessing mental health services will predict more negative attitudes towards both f2f and online psychotherapy.

Hypothesis 3: More positive attitudes towards using new technologies will predict more positive attitudes towards online psychotherapy.

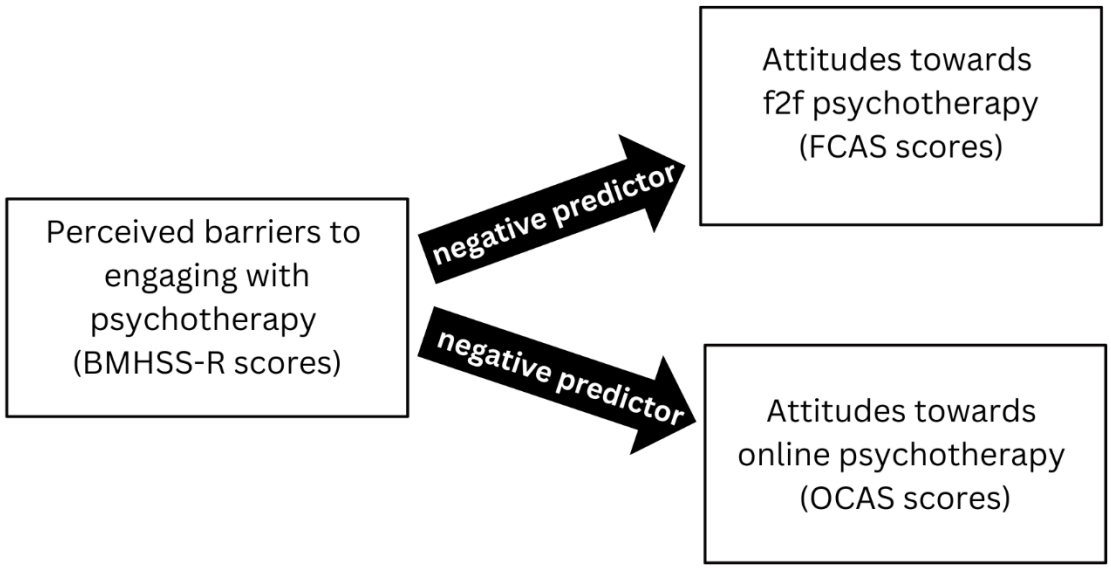


**Figure 1.** Illustration of model for hypothesis two


**Figure 2.** Illustration of model for hypothesis three

## 3.2 Methodology

### 3.2.1 Study design

The present study was the first of two studies in an explanatory sequential design (Kroll & Neri, 2009) and utilised a cross-sectional quantitative survey design. A cross-sectional design was selected as this allowed for the examination of multiple attitudes and their potential predictors among a convenience sample of older adults at one timepoint (Wang & Cheng, 2020). Participants' attitudes towards using new technologies (based on the STAM questionnaire), as well as their perceived barriers towards accessing psychotherapy (based on the BMHSS-R), were assessed as predictors of their attitudes using regression analyses. Furthermore, demographic information such as age, prior experience with psychotherapy and experience with technology was inputted into the regression analysis. The use of a multivariable regression analysis is recommended in descriptive cross-sectional studies (Wang & Cheng, 2020). A cross-sectional design was selected for this research as prior studies have generally focused on one aspect of attitudes towards online therapy, either exploring attitudes towards technology (Chen & Lou, 2020; Van Houwelingen et al., 2018; Peek et al., 2014; Heart & Kalderon, 2013), or attitudes towards psychotherapy generally (Hansen, Ghafoori & Diaz, 2020; Katsounari, 2019; Nurit, Dana & Yuval, 2016; Kessler, Agines & Bowen, 2015; Pepin, Segal & Coolidge, 2009). The present study examined both potential predictors in one sample to compare their predictive impact.

Furthermore, a systematic review of studies of older adults using online questionnaires found that this is a feasible method for surveying adults in areas where internet access is widely available (Remillard et al., 2014), as was the case in the setting of the present study. The use of pre-existing scales allowed for a reliable quantitative design, as each scale has previously been reported as reliable and valid (Chen & Lou, 2020; Pepin et al., 2015; Rochlen, Beretvas & Zack, 2004). Prior studies of older adults' attitudes towards psychotherapy and technology often used qualitative methods such as interviews and focus groups (Hansen, Ghafoori & Diaz, 2020; Hannaford, Shaw & Walker, 2019; Katsounari, 2019; Nurit, Dana & Yuval, 2016; Yuan et al., 2016; Bujnowska-Fedak & Mastalerz-Migas, 2014). In contrast, a positivist approach was selected for this study to provide a method of obtaining measurable attitudinal data, with the focus of examining the current state of young-old and old-old older adults' attitudes in a general sample. Therefore, the present study aimed to extend the research in this field by establishing a quantitative method for comparing older adults' attitudes towards f2f and online psychotherapy and exploring multiple variables that potentially predict these attitudes.

### 3.2.2 Ethics

This study was approved by the School of Health and Science Ethics Committee at Dundalk Institute of Technology. The statement of ethical approval can be found in Appendix A. Participants were provided with a participant information leaflet (see Appendix B) outlining the research aims and the nature of the questions they would be asked, as well as how their data would be stored. Participants were made aware that they would be asked questions related to attitudes towards psychotherapy, that they could withdraw from the study at any time, and refrain from answering any questions they were uncomfortable with. Participants were informed that whilst the questionnaires related to the topic of psychotherapy, they would not be asked specific questions about their own mental health. They were informed that there was one question where they would be asked if they had prior experience of attending psychotherapy online or f2f, and that they could choose not to answer this question, or any other question they were uncomfortable with answering. The sample was a general, non-clinical sample, meaning participants did not necessarily have any history of mental health issues or attending mental health services. However, participants were informed of the nature of any potentially upsetting questions, and details of support services were provided should they need them.

After reading the participant information sheet, participants were asked to indicate their consent to begin the survey using "yes" or "no". If participants said "no" to providing consent, they were automatically exited from the survey if completing online and were excluded from the study if completing the questionnaire using pen-and-paper**.** Participants who completed the survey online were not asked for their name and were provided with a respondent ID in Qualtrics, thus their data was anonymized. The online responses were stored in a secure laptop only accessible to the Master's student, which was password protected. For participants who completed the survey using pen-and-paper, their signed consent forms (see Appendix C) were separated from their survey responses, and they were assigned a participant ID number by the researcher. The paper data was stored in a locked drawer only accessible by the Master's student.

### 3.2.3 Sample

The sample was a general, non-clinical sample of 156 community-dwelling older adults aged 50+ years. Whilst the study was originally aimed at older adults aged 60+, an ethical amendment was applied for to extend this age range to 50+ due to issues with recruitment and prioritizing adequate power. The approval of this amendment can be found in Appendix D. The age bracket of 50+ was selected to allow comparison between the attitudes of "young-old" (aged 50-69) and "old-old" (aged 70+) older adults. This age bracket is reflected in previous studies of older adults' acceptance of technology and

psychotherapy (Choi et al., 2014a; Choi et al., 2014b; Handley et al., 2015; Russell et al., 2015; Schneider et al., 2018; Choi et al., 2020; Hansen, Ghafoori & Diaz, 2020; Kruse et al., 2020). The proposed sample size of 150-200 participants was calculated based on the guidelines for regression analysis proposed by Tabachnik & Fidell (2007), that the number of predictors in the analysis multiplied by 8 plus 50 will calculate the sample size. GPower 3.1 (Faul et al., 2009) was also used to calculate a proposed sample size of 135 participants for the regression models.

A non-clinical sample was selected to examine the attitudes of older adults in the general population towards psychotherapy, rather than examining a specific clinical cohort, such as those with hypertension (Harris & Rogers, 2023), depressive symptoms (Liu & Gellatly, 2021; Nurit, Dana & Yuval, 2016), or chronic illness (Adams et al., 2021). Participants were asked to self-report any history or previous diagnosis of memory or cognitive impairment prior to giving consent in order to self-identify as cognitively able to take part (see Appendix C). These exclusion criteria were selected to ensure a general sample, not including participants with conditions such as Alzheimer's, Dementia or Stroke, to ensure participants were able to understand the questionnaire and give fully informed consent. Participants were informed that any individuals with such a history were excluded from the study. Participants were also excluded from the study if they self-reported that they had a below conversational level of English.

### 3.2.4 Recruitment

Participants were recruited through the community. A gatekeeper letter was sent to non-clinical community groups including Alone, Men's Sheds Ireland, and Age Well (see Appendix E). Information flyers were also left in local community locations such as the local library (see Appendix F). Participants were also recruited through the NetwellCASALA living lab by sharing the information flyer in the newsletter. The researcher also attended events with the local older people's council and Age Friendly Louth where community members were invited to take part using the information flyer and through word-of-mouth. The information flyer was also shared via social media. Participants were invited to email the postgraduate student to access the online questionnaire or to complete the study in-person.

### 3.2.5 Materials

Participants first completed a demographic questionnaire designed for the present study (see Appendix G) with questions relating to their gender, age and any prior experience with technology and mental health services. Binary "yes" or "no" answers to the questions of prior experience with video call

applications, f2f psychotherapy and online psychotherapy were coded as "yes" = 1, "no" = 0. Similarly, gender was coded as "male" = 1, "female" = 2, "non-binary" = 3. Acceptance of new technologies were assessed using the STAM questionnaire (Chen & Lou, 2020) (see Appendix H). Attitudes towards using mental health services generally were assessed using the BMHSS-R (Pepin et al., 2015) (see Appendix I). Finally, attitudes towards f2f psychotherapy were assessed using the FCAS and attitudes towards online psychotherapy were assessed using the OCAS (Rochlen, Beretvas & Zack, 2004) (see Appendix J).

*Senior Technology Acceptance Model questionnaire*

The STAM questionnaire is a 14-item scale designed to assess older adults' attitudes towards using new technologies (Chen & Lou, 2020). The scale was designed by Chen & Lou (2020) based on concepts from the STAM model (Chen & Chan, 2014). The STAM questionnaire assesses usage and attitudes using the theoretical framework of the STAM and can be applied to assess attitudes towards technology more generally than other measures which focus on the use of specific devices or completing certain tasks. There are four subscales assessing attitudinal beliefs, control beliefs, gerontechnology anxiety and health conditions. The attitudinal and control beliefs subscales were developed based on concepts from technology acceptance theory including perceived usefulness, perceived ease of use, self-efficacy and facilitating conditions. Gerontechnology anxiety is defined by Chen & Chan (2014) as the apprehension experienced when a person is faced with using a gerontechnology, a technology which assists older adults with age-related challenges. Chen & Chan (2014) found gerontechnology anxiety to significantly decrease perceived ease of use and usage behaviour, indicating the importance of considering anxiety as a predictor. Whilst the statements in this subscale are not specific to a geriatric population, the overall scale was designed based on the STAM model to capture predictors of attitudes towards technology specific to older people. However, this subscale only contains two items and may not capture all anxieties an older adult may experience when using new technology. The health conditions subscale also allows self-reported physical health, quality of life and cognition to be considered as a predictor of attitudes towards technology, in line with previous research (Schifeling et al., 2020; Chen & Chan, 2011).

Participants rate statements from each subscale from "1 = strongly disagree" to "10 = strongly agree". For example, "you feel apprehensive about using technology" is one such statement under the "Gerontechnology anxiety" subscale. Items on the "Health conditions" subscale each have their own rating labels, for example "1 = very poor" to "10 = very good" in response to the question "How are your general health conditions?" . Scores on each subscale were added and higher scores indicated higher

technology acceptance, with items reverse scored on the "Gerontechnology anxiety" subscale. Scores from this questionnaire were used as the measure for participants' attitudes towards technology in the present study. The STAM questionnaire has shown good reliability and validity in prior research examining older adults' attitudes towards taking part in exercise classes via Zoom (Gell, Hoffman & Patel, 2021) and their attitudes towards using health technologies (Park, Chung & Ha, 2023), making it a suitable measure for the present study. The STAM questionnaire was utilised in the present study to determine predictors of attitudes towards online psychotherapy by assessing the perceived barriers participants have to using technology in general. Cronbach's alpha for the STAM in the present study was $\alpha$=.7.

*Barriers to Mental Health Services Scale-Revised*

The BMHSS-R is a 44-item scale which assesses levels of perceived barriers to accessing mental health services, originally designed by Pepin, Segal & Coolidge (2009), with a revised form (BMHSS-R) developed by Pepin et al. (2015). The BMHSS-R is a self-report questionnaire, designed to measure the extent to which age-related barriers determine willingness to seek psychotherapy. Thus, the BMHSS-R was used in the present study to assess older adults' perceived barriers to accessing mental health treatment, and scores on this scale were measured as potential predictors of attitudes towards f2f and online psychotherapy. This scale uses the terms "psychotherapy" and "counselling" interchangeably, which was highlighted to participants throughout the questionnaire. It is designed to measure intrinsic and extrinsic age-related barriers, with five subscales for each. For intrinsic barriers this includes "help-seeking", "stigma", "knowledge and fear of psychotherapy", "belief about inability to find a psychotherapist", and "belief that depressive symptoms are normal". For extrinsic barriers this includes "insurance/payment concerns", "ageism", "concerns about psychotherapists' qualifications", "physician referral", and "transportation concerns". Participants were asked to rate statements from "1 = strongly disagree", "2 = disagree", "3 = agree", to "4 = strongly agree". An example of a statement from the "stigma" subscale is "normal people do not go to psychotherapy (counselling)". Scores for each subscale were added up with higher scores indicating higher levels of perceived barriers to accessing psychotherapy. Scores on this questionnaire were used to determine participants' attitudes towards psychotherapy generally in the present study. The BMHSS-R has shown good reliability and validity in prior studies (Knight & Winterbotham, 2020; Pepin et al., 2015), making it a suitable measure for the present study. Cronbach's alpha for the BMHSS-R for the present study was $\alpha$=.96.

*Face-to-face Counselling Attitudes Scale and Online Counselling Attitudes Scale*

The Face-to-face Counselling Attitudes Scale (FCAS) is a further scale for exploring attitudes towards f2f psychotherapy, originally published by Rochlen, Beretvas & Zack (2004), alongside an identical scale measuring attitudes towards online psychotherapy, the Online Counselling Attitudes Scale (OCAS). The FCAS and OCAS are each made up of ten statements which allow respondents to self-report their attitudes towards both types of counselling based on their perceived value of and discomfort with each. Participants were told that for the purposes of the present study, "psychotherapy" and "counselling" were used interchangeably, and a definition of "online psychotherapy" was once again provided at the start of the scale. Each scale contains 10 statements which participants rate from "1 = strongly disagree", "2 = disagree", "3 = somewhat disagree", "4 = somewhat agree", "5 = agree", to "6 = strongly agree". There are two subscales measuring "Value of face-to-face/online counselling" and "Discomfort with face-to-face/online counselling". The perceived value component is measured using questions related to how worthwhile and helpful both forms of counselling could be to them, and the discomfort component assesses how difficult discussing their issues with a counsellor would be in each format. An example of a statement from both scales is "Using face-to-face/online counselling would help me learn about myself". Items on the "Discomfort with face-to-face/online counselling" subscales were reverse-scored. Scores on each subscale were added to give a total score for each questionnaire, with higher scores indicating more positive attitudes, for use in the regression analyses.

Scores from the FCAS and OCAS were used as the measure of participants' attitudes towards f2f and online psychotherapy respectively in the present study. Despite the scales being designed in 2004 and having no further refinements since, the FCAS and OCAS have demonstrated good reliability and validity in recent research (Shin & Ku, 2022; Bird, Chow & Yang, 2020; Knetchel & Erickson, 2020), making them suitable scales for use in the present study. These scales provided a directly comparable score for attitudes towards both f2f and online counselling, making them applicable to the present study. Moreover, their short length made them more appropriate for use among an older adult sample, reducing the risk of respondent fatigue. The scales were originally designed using an American sample, and have been used in subsequent research in American (Shin & Ku, 2022; Bird, Chow & Yang, 2020; Knetchel & Erickson, 2020; Bird et al., 2018; Lewis et al., 2015), Latina/Latino American (Ballesteros & Hilliard, 2016), Malaysian (Wong et al., 2018), and Emirati (Moussa & Assender, 2022) samples, indicating its suitability for use across different cultures. Whilst originally designed based on a general adult sample, these scales have previously been utilised and found to have high internal consistency and test-retest reliability with a sample aged 18-77 (Knetchel & Erickson, 2020). Cronbach's alpha for the OCAS Value scale in the present study was $\alpha$=.93, and for the Discomfort scale was $\alpha$=.94. For the FCAS Value scale, Cronbach's alpha was $\alpha$=.88 and for the Discomfort scale was $\alpha$=.93.

### 3.2.6 Procedure

After reading the participant information leaflet and completing the consent form participants were given the opportunity to complete the questionnaire online via Qualtrics (Qualtrics, Provo, UT, 2023), or using pen and paper, and invited to contact the researcher by email to opt in and select their preferred mode. Participants wishing to complete the survey using pen-and-paper were given the option to complete the form at home and return at a later date, or a time could be arranged for the researcher to complete the survey with the participant. Completion of the questionnaire took participants approximately 30 minutes. After data was collected it was inputted into SPSS version 27.0 (IBM, 2020) and prepared for statistical analysis.

### 3.2.7 Statistical analysis

All statistical analyses were carried out using SPSS version 27.0 (IBM, 2020). The data was first screened for missing data using a missing data analysis in SPSS. Schlomer, Bauman & Card (2010) recommend that it is best practice for counselling psychology researchers to report on levels of missing data and consider the patterns of missingness carefully when addressing it. The missing data analysis in SPSS determined that 3.76% of the overall data were missing, with 27.56% of participants having some missing data, and there was missing data for 92.86% of the variables. A bar chart and scatterplot of the missing data was generated and it was determined that the most common pattern was that no data were missing across all variables. Any other patterns were much less prevalent and approximately equal. Little's MCAR test was performed and it was determined that missing data were missing completely at random based on the result of the chi-square analysis. Thus, multiple imputation was identified as an appropriate way to address the missing data, as this is considered a more robust method than single imputation (IBM Corp., 2021) or other methods such as mean substitution (Schlomer, Bauman & Card, 2010). A multiple imputation was then completed to generate aggregate values for the missing data points. This is based on the recommendation from the SPSS manual that linear regression analysis allows for the replacement of missing values with mean values (IBM Corp., 2021). A data set was pooled from five imputations and this data set was then used for the subsequent data analysis. Descriptive statistics were used to determine the attitudes towards f2f and online psychotherapy. Correlational analysis was used to determine the relationship between attitudes towards f2f and online psychotherapy. Regression analysis examined: (a) whether attitudes towards technology predict attitudes towards online psychotherapy, and (b) whether perceived barriers towards accessing mental health services will predict attitudes towards both f2f and online psychotherapy.

All predictors input in the regression models were initially examined for significant relationship with the outcome variable before inclusion in the models. Data from the demographic questionnaire was thus selected for inclusion in the regression models as well as based on evidence from previous research, including age (Drake et al., 2022; Schifeling et al., 2020; Apolinario-Hagen et al., 2018;Apolinario-Hagen, Vehreschild & Alkoudmani, 2017), technology use (technical literacy) (Posselt, Baumann & Dierks, 2024; Christensen et al., 2021; Kruse et al., 2020; Beattie et al., 2009; Arnaert et al., 2007), and prior experience with psychotherapy (mental health literacy) (Root & Caskie, 2022; Liu & Gellatly, 2021; Nair et al., 2020; Handley et al., 2015; Kuruvilla et al., 2006). Correlational and regression analysis provided quantitative results allowing direct comparison of attitudes towards f2f and online psychotherapy. Furthermore, multiple regression analysis allowed for the assessment of the predictive power of each variable. The variables were input based on the correlational analysis and the order in which they were input in previous literature. For example, Knight & Winterbotham (2020) conducted multiple regression analysis on BMHSS-R data, and input the demographic variables first in their model, followed by the attitudinal data.

## 3.3 Results

### 3.3.1 Demographic data

The sample consisted of 156 older adults with 109 females, 46 males, and 1 non-binary participant. The mean age of the sample was 62.12 years (SD=8.29) and the age range was 50-91 years. See table 1 for frequencies of demographic data. Of particular note, 82.1% of the sample were young-old older adults aged 50-69 years, 94.2% reported using technology daily, and 87.8% reported having prior experience using video call applications. These figures would indicate this sample is a relatively young sample of older adults with high technical literacy, which may have resulted from the use of online recruitment strategies, e.g., recruiting via social media, targeting a particular cohort of older people.

Preliminary analyses were conducted to ensure no violation of the assumptions of normality, linearity, and homoscedasticity. This was the rationale used for inclusion in the regression models. Previous research has indicated that multicollinearity can be examined in numerous ways, including using correlation coefficients and variance influence factors (VIFs) (Shrestha, 2020). All variables were checked for linearity by analysing scatterplots of their relationships, as well as their correlations. Collinearity was checked for each model based on VIF values, which were all between 1 and 5, indicating moderate correlation and no concern for collinearity (Shrestha, 2020). All skewness and kurtosis values for these variables fall within the range for excellent reliability (George & Mallery, 2001). As less than 1% of quantitative data were identified as outlying based on z scores +/- 3.29 (Tabachnick & Fidell, 2007), these data are retained. Type-1 error was controlled for by calculating the rough discovery rate to decrease the *p* value by multiplying it by (n+1/2n), according to the recommendations by Benjamini & Hochberg (1995). Using this method, the *p* value was reduced to *p*=.02567 for the 37 correlational analyses, and *p*=.0375 for the two regression analyses.

**Table 1.**

Frequencies of demographic data

| Variable | Frequency | Percentage |
|---|---|---|
| Age Bracket | | |
| Young-old (50-69) | 128 | 82.1 |
| Old-old (70+) | 28 | 17.9 |
| Gender | | |
| Male | 46 | 29.5 |
| Female | 109 | 69.9 |
| Non-binary | 1 | .6 |

| | | |
|---|---|---|
| How often do you use technology in your daily life? | | |
| Never | 5 | 3.2 |
| Occasionally | 4 | 2.6 |
| Daily | 147 | 94.2 |
| Do you have any prior experience using online video call apps? | | |
| Yes | 137 | 87.8 |
| No | 19 | 12.2 |
| Do you have any prior experience attending psychotherapy in-person? | | |
| Yes | 70 | 44.9 |
| No | 86 | 55.1 |
| Do you have any prior experience attending psychotherapy remotely? | | |
| Yes | 30 | 19.2 |
| No | 126 | 80.8 |

### 3.3.2 Descriptive statistics and correlational analyses

144 participants completed the survey online, and 13 completed the survey using pen-and-paper. One participant who completed the survey using pen-and-paper was excluded as they did not complete the participant consent form. A paired samples t-test was conducted to determine if there were any significant differences in participants' scores on the item "how often do you use technology in your daily life?" from the demographic questionnaire, and their total scores for the STAM, BMHSS-R, FCAS and OCAS scales. The only significant differences in scores observed between participants who completed the survey online and using pen and paper were the STAM ($t$=2.215; df=154; $p$=.028) and OCAS ($t$=2.328; df=154; $p$=.021) scores. Participants who completed the survey online were found to have significantly higher mean scores on the STAM ($\bar{x}$=112.1) than participants who completed using pen and paper ($\bar{x}$=100.17), and significantly higher mean scores on the OCAS ($\bar{x}$=41.47) than participants who completed using pen and paper ($\bar{x}$=33.33). The data of the participants who completed the survey using pen-and-paper were retained for power.

Participants had higher mean scores on value of f2f ($\bar{x}$=24.12) than online ($\bar{x}$=20.62) psychotherapy, and higher mean scores on discomfort with online ($\bar{x}$=14.83) than f2f ($\bar{x}$=11.81). Positive correlations were found between value of f2f and online psychotherapy ($r$=.445, $p$<.001), and between discomfort with f2f and online psychotherapy ($r$=.503, $p$<.001). Correlational analysis was carried out on all variables for input in the regression models with the two outcome variables, OCAS and FCAS total scores. The relationships between the demographic variables of age, gender, technology usage (how often technology is used, e.g., daily, occasionally, etc.), and prior experience with video call applications, f2f psychotherapy and remote psychotherapy with FCAS and OCAS total scores were analysed.

Significant relationships were observed between age ($r$=-.226, $p$=.005), technology usage ($r$=.191, $p$=.017), video call application experience ($r$=.258, $p$=.001), f2f psychotherapy experience ($r$=.217, $p$=.007), and remote psychotherapy experience ($r$=.333, $p$<.001) with OCAS total score. However, only video call application experience ($r$=.241, $p$=.002), f2f psychotherapy experience ($r$=.380, $p$<.001), and remote psychotherapy experience ($r$=.229, $p$=.004) were found to be significantly correlated with FCAS total score. For full results, see Table 1.

The relationship between total scores on the FCAS and OCAS was found to be significant ($r$=.484, $p$<.001). Relationships between the ten subscales of the BMHSS-R and OCAS and FCAS total score were examined. All except for the "belief that depressive symptoms were normal" and the "insurance/payment concerns" subscales were found to be significantly related to both OCAS and FCAS total scores. See Table 1 for full results. Finally, the relationships between the four subscales of the STAM questionnaire and OCAS total scores were examined. Significant relationships were found between the "attitudinal beliefs" ($r$=.350, $p$<.001), "control beliefs" ($r$=.423, $p$<.001), and "gerontechnology anxiety" ($r$=-.316, $p$<.001) subscales with OCAS total score. See Table 1 for full results.

**Table 2.**

Results of correlational analyses of variables

| Variable | OCAS total score (*r*) | FCAS total score (*r*) |
|---|---|---|
| Age | -.226* | -.143 |
| Gender | -.041 | .032 |
| Technology usage | .191* | .147 |
| Video call application experience | .258** | .241* |
| F2f psychotherapy experience | .217* | .380** |
| Remote psychotherapy experience | .333** | .229* |
| FCAS total score | .484** | |
| Help-seeking | .381** | -.642** |
| Stigma | -.330** | -.516** |
| Knowledge and fear of psychotherapy | -.427** | -.642** |
| Belief about inability to find a psychotherapist | -.376** | -.564** |
| Belief that depressive symptoms are normal | .026 | -.064 |
| Insurance/payment concerns | -.146 | -.110 |
| Ageism | -.348** | -.555** |
| Concerns about therapists' qualifications | -.356** | -.566** |
| Physician referral | -.234* | -.423** |
| Transportation concerns | -.178 | -.261** |
| Attitudinal beliefs | .350** | |

| | |
|---|---|
| Control beliefs | .423** |
| Gerontechnology Anxiety | -.316** |
| Health Conditions | -.010 |

**sig at .001, *sig at .02567

### 3.3.3 Regression analysis

*Regression model 1: Examining the predictive value of demographic variables on attitudes towards online psychotherapy*

Regression model 1 explored the impact of age, technology usage, experience with video call applications, f2f psychotherapy experience, remote psychotherapy experience, FCAS total score, eight of the ten subscales of the BMHSS-R, and three of the four subscales of the STAM on the outcome variable of OCAS total score. It was found that remote psychotherapy experience ($t$=2.68, $p$=.008) and FCAS total score ($t$=3.28, $p$=.001) were significant predictors of OCAS total score (see Table 3 for full results). The unstandardized B values indicate that for participants who had remote psychotherapy experience (yes=1), there was a 6.294 point increase in OCAS total score, compared to participants who did not have remote psychotherapy experience (no=0) (see Table 3). The unstandardized B values indicate that for every 1.0 unit increase in FCAS total score, there was a .451 unit increase in OCAS total score (see Table 3). The standardized Beta values indicate that FCAS total score (β=.323) had a stronger predictive effect on OCAS total score than remote psychotherapy experience (β=.211). The overall model was found to be significant ($F$(17,138)=5.849, $p$<.001), and 34.7% of the variance in OCAS total score can be attributed to these predictors. See multiple regression scatterplot in Figure 3.

**Table 3.**

Results of regression model 1

| Model | $R$ | $R^2$ | | Adjusted $R^2$ | Standard Error |
|---|---|---|---|---|---|
| Model 1 | .647 | .419 | | .347 | 9.535 |
| Predictors | | | t | Unstandardized B | 95% CI |
| Age | | | -1.516 | -.154 | (-.355, .047) |
| Technology usage | | | -.315 | -.350 | (-2.550, 1.850) |
| Video call application experience | | | -.351 | -1.002 | (-6.651, 4.648) |
| F2f psychotherapy experience | | | -.895 | -1.691 | (-5.428, 2.045) |
| Remote psychotherapy experience | | | 2.680* | 6.294 | (1.650, 10.938) |
| FCAS total score | | | 3.280** | .451 | (.179, .723) |

| | | | |
|---|---|---|---|
| Help-seeking | -.810 | -.529 | (-1.819, .762) |
| Stigma | .160 | .078 | (-.882, 1.038) |
| Knowledge & fear of psychotherapy | -.789 | -.448 | (-1.570, .674) |
| Fear about inability to find a psychotherapist | .558 | .250 | (-.635, 1.134) |
| Ageism | .210 | .125 | (-1.057, 1.308) |
| Concerns about therapist's qualifications | -.106 | -.066 | (-1.299, 1.167) |
| Physician referral | .001 | .001 | (-1.219, 1.221) |
| Transportation concerns | .783 | .240 | (-.366, .846) |
| Attitudinal beliefs | 1.385 | .209 | (-.089, .507) |
| Control beliefs | 1.862 | .328 | (-.020, .676) |
| Gerontechnology Anxiety | 1.548 | .257 | (-.071, .586) |

Dependent predictor variable = OCAS total score

95% CI = 95% Confidence Interval for B

**sig at .001, *sig at .0375

**Table 4.**

The unstandardized and standardized regression coefficients for significant predictor variables in model 1

| Predictor | Unstandardized B | Standard Error | Standardized β | ***p*** |
|---|---|---|---|---|
| Remote psychotherapy experience | 6.294 | 2.349 | .211* | .008 |
| FCAS total score | .451 | .137 | .323** | .001 |

**sig at .001, *sig at .0375

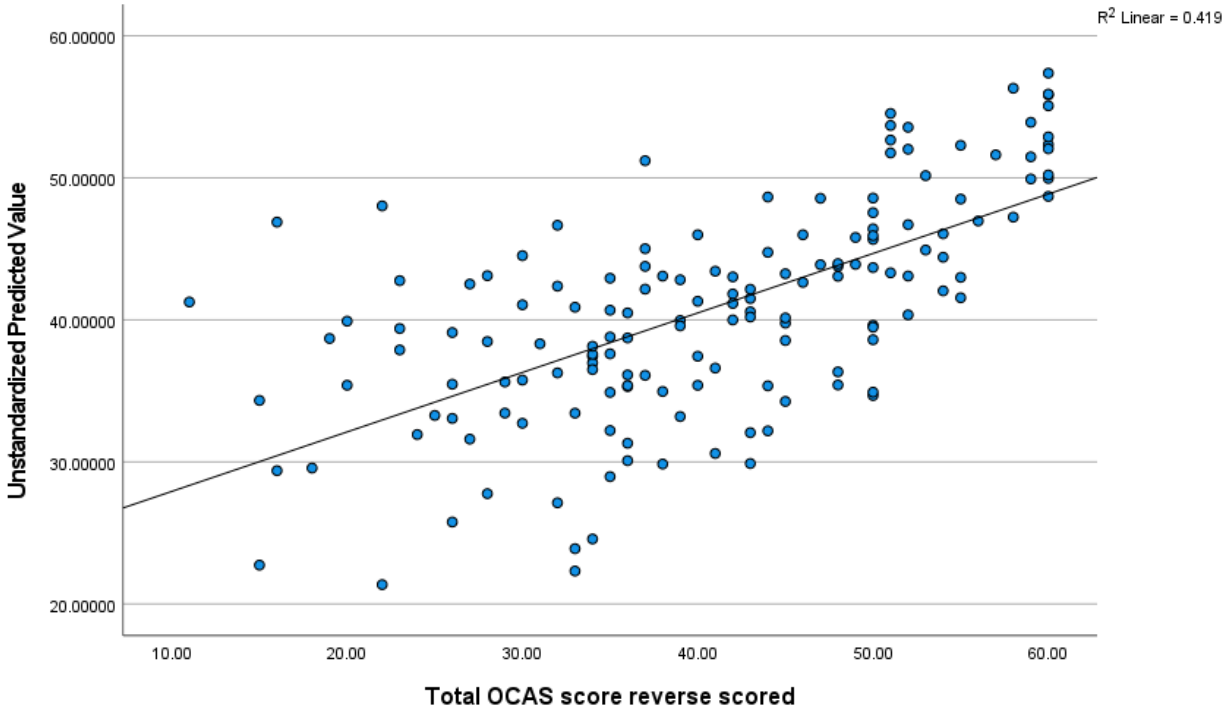


**Figure 3.**

Multiple regression scatterplot of model 1

*Regression model 2: Examining the predictive value of barriers to psychotherapy on attitudes towards f2f psychotherapy*

Model 2 examined the impact of video call application experience, f2f psychotherapy experience, remote psychotherapy experience, and eight of the ten subscales of the BMHSS-R on FCAS total score. It was found that f2f psychotherapy experience ($t$=3.004, $p$=.003), help-seeking beliefs ($t$=-3.386, $p$<.001), and knowledge and fear of psychotherapy ($t$=-3.371, $p$<.001) were significant predictors of FCAS total score (see Table 4 for full results). The unstandardized B values indicate that for participants who had f2f psychotherapy experience (yes=1), there was a 3.4 unit increase in FCAS total score, compared to participants who did not have f2f psychotherapy experience (no=0) (see Table 4). The unstandardized B values indicate that for every 1.0 unit increase in scores on the BMHSS-R help-seeking subscale there was a –1.299 unit decrease in FCAS total score and for every 1.0 unit increase in scores on the BMHSS-R knowledge and fear of psychotherapy subscale there was a –1.108 unit decrease in FCAS total score (see Table 4). The standardized Beta values indicate that knowledge and fear of psychotherapy scores had the strongest predictive effect (β=-.389), with help-seeking scores having a similar predictive effect (β=-.325) and both being negative predictors. Having previous f2f

psychotherapy experience had a lesser, but positive, predictive effect on FCAS total score (β=.200). The overall model was found to be significant ($F(12,143)=14.696$, $p<.001$), and 51.5% of the total variance in FCAS total score can be attributed to these predictors. See multiple regression scatterplot in Figure 4.

**Table 5.**

Results of regression model 2

| Model | $R$ | $R^2$ | | Adjusted $R^2$ | Standard Error |
|---|---|---|---|---|---|
| Model 2 | .743 | .552 | | .515 | 5.896 |
| Predictors | | | t | Unstandardized B | 95% CI |
| Age | | | -.632 | -.039 | (-.161, .083) |
| Video call application experience | | | .730 | 1.146 | (-1.958, 4.250) |
| F2f psychotherapy experience | | | 3.004* | 3.400 | (1.163, 5.636) |
| Remote psychotherapy experience | | | .401 | .574 | (-2.258, 3.406) |
| Help-seeking | | | -3.386** | -1.299 | (-2.058, -.541) |
| Stigma | | | 1.477 | .426 | (-.144, .995) |
| Knowledge & fear of psychotherapy | | | -3.371** | -1.108 | (-1.757, -.458) |
| Fear about inability to find a psychotherapist | | | .290 | .078 | (-.453, .609) |
| Ageism | | | -.703 | -.254 | (-.967, .460) |
| Concerns about therapist's qualifications | | | -.475 | -.182 | (-.937, .574) |
| Physician referral | | | -1.085 | -.410 | (-1.157, .337) |
| Transportation concerns | | | 1.354 | .250 | (-.115, .615) |

Dependent predictor variable = FCAS total score

95% CI = 95% Confidence Interval for B

**sig at .001, *sig at .0375

**Table 6.**

The unstandardized and standardized regression coefficients for significant predictor variables in model 2

| Predictor | Unstandardized B | Standard Error | Standardized β | $p$ |
|---|---|---|---|---|
| F2f psychotherapy experience | 3.400 | 1.132 | .200* | .003 |
| Help-seeking | -1.299 | .384 | -.325** | <.001 |
| Knowledge & fear of psychotherapy | -1.108 | .329 | -.389** | <.001 |

**sig at .001, *sig at .0375

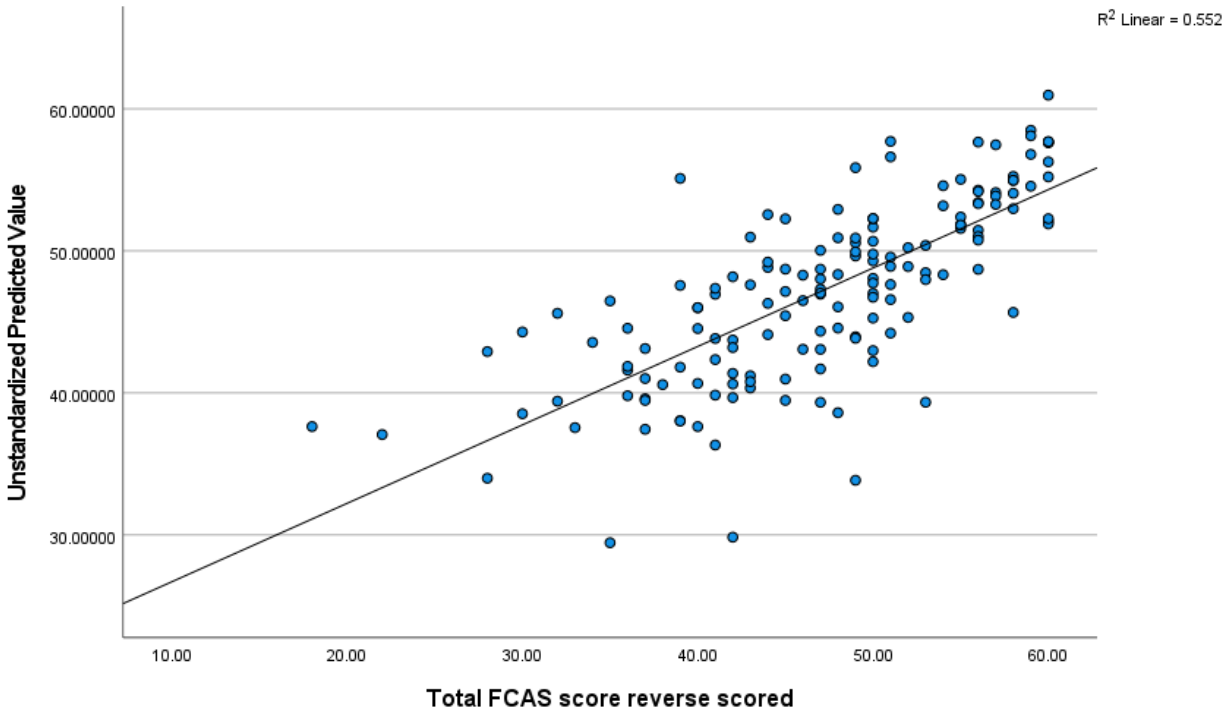


**Figure 4.**

Multiple regression scatterplot of model 2

In sum, regression analyses found that attitudes towards f2f psychotherapy ($t$=3.28, $p$=.001) and prior experience with online psychotherapy ($t$=2.68, $p$=.008) were positive predictors of attitudes towards online psychotherapy. Further regression analysis found that prior experience with f2f psychotherapy ($t$=3.004, $p$=.003), having negative help-seeking beliefs ($t$=-3.386, $p$<.001) and having a lack of knowledge and fear of psychotherapy ($t$=-3.371, $p$<.001) were significant predictors of attitudes towards f2f psychotherapy.

## 3.4 Discussion

The present study explored the attitudes of young-old and old-old older adults towards f2f and online psychotherapy using a cross-sectional, quantitative survey design. The survey was designed based on existing research and theory, including the TPB (Ajzen, 1985) and the STAM (Chen & Chan, 2014). This study was the initial quantitative research within an explanatory sequential mixed-methods design. The results indicate that prior experience with online psychotherapy and positive attitudes towards f2f psychotherapy are significant positive predictors of attitudes towards online psychotherapy. Furthermore, previous experience with f2f psychotherapy was a significant positive predictor of attitudes towards f2f psychotherapy, and negative beliefs around help-seeking, lack of knowledge and fear of psychotherapy were significant negative predictors of attitudes towards f2f psychotherapy. The results indicate that hypothesis one was supported, hypothesis two was partially supported, and hypothesis three was not supported. Significant positive correlations were observed between the value of f2f and online psychotherapy, and discomfort with f2f and online psychotherapy. Secondly, multiple linear regression analysis explored the impact of attitudes towards f2f psychotherapy on attitudes towards online psychotherapy and found that more positive attitudes towards f2f was a significant predictor of more positive attitudes towards online. These findings support the first hypothesis, that more positive attitudes towards f2f psychotherapy will predict more positive attitudes towards online psychotherapy.

Furthermore, regression analysis was used to examine the predictive effect of perceived barriers to accessing mental health services on attitudes towards both f2f and online psychotherapy. This analysis found that negative help-seeking beliefs and greater knowledge and fear of psychotherapy were significant negative predictors of attitudes towards f2f psychotherapy. However, when the same model was applied to attitudes towards online psychotherapy, none of the examined barriers were found to be significant predictors. This suggests that the second hypothesis, that greater levels of perceived barriers towards accessing mental health services will predict more negative attitudes towards both f2f and online psychotherapy, was partially supported. Finally, regression analysis was used to examine the predictive effect of older adults' acceptance of new technologies on attitudes towards online psychotherapy. It was found that none of the three subscales on the attitudes towards technology STAM questionnaire included in the regression model were significant predictors of attitudes towards online psychotherapy (attitudinal beliefs, control beliefs, and gerontechnology anxiety). This suggests that the third hypothesis, that more positive attitudes towards using new technologies will predict more positive attitudes towards online psychotherapy, was not supported. Overall, the results observed were partially in line with the study's initial hypotheses.

There were some surprising findings in relation to predictors which were previously found to be significant in other research that were not reflected in this sample. The findings in relation to demographic variables were somewhat unexpected. Whilst age was found to be significantly negatively correlated to OCAS score, it was found to have no significant relationship with FCAS score, and was not found to be a significant predictor in either regression model. Similarly, gender was found to have no significant correlation with either FCAS or OCAS score and was not included in any of the regression models. This finding differs from previous research which establishes both age and gender effects in engaging with technology and psychotherapy generally. For example, men have been found to be more likely to use technology (Bujnowska-Fedak & Mastalerz-Migas, 2014; Chen and Chan, 2014), whilst women have been found to be more likely to engage in therapeutic services (Gellert et al., 2021; Kessler, Agines & Bowen, 2015). Although, other studies have found no significant gender effects on acceptance of remote psychotherapy services, so findings have been varied (Dham et al., 2018; Choi et al., 2014a). One limitation of the present study was the homogeneity of the sample, which was majority female (69.87%) and young-old (mean age 62.12 years, SD=8.29) older adults.

Another demographic finding which was surprising was that whilst prior experience using video-call applications was found to significantly correlate with both FCAS and OCAS scores, it was not found to be a significant predictor in the regression models. Moreover, technology usage was found to significantly correlate to OCAS score, however, it was not found to be a significant predictor in the regression models. This may be explained by the fact that the large majority of the sample reported using technology daily (94.2%). These findings contrast previous reports that increased technology usage and technical literacy predicts more openness to new technologies (Kruse et al., 2020). Moreover, the large majority of the sample (n=144) completed the survey online, whilst only 12 participants completed the survey using pen-and-paper. A paired samples t-test determined that the only significant differences in scores observed between participants who completed the survey online and using pen and paper were in the STAM and OCAS scores, whilst scores on the technology usage item from the demographic questionnaire, BMHSS-R scores, and FCAS scores showed no significant differences. Participants who completed the survey online were found to have significantly higher mean scores on the STAM and OCAS than participants who completed using pen and paper. These results suggest that participants who completed the survey online had more positive attitudes towards technology and online psychotherapy than those who completed using pen-and-paper. Thus, since the sample was made up of majority online completers, the results of this study may be biased in favour of technology and therefore may not be generalisable to older adults who do not use technology often or are not comfortable with it.

However, prior experience with online/remote psychotherapy was found to significantly positively correlate with both FCAS and OCAS scores and was a significant positive predictor of OCAS

score in the regression models. The same was found for prior experience with f2f psychotherapy. It is important to note that there were relatively high numbers of participants with prior psychotherapy experience, with 70 (44.9%) participants reporting prior f2f experience, and 30 (19.2%) reporting prior online experience. This is a higher rate than in previous literature, such as a study of access to voluntary and community counselling services in the United Kingdom, which found that 24.5% of service users were aged 50+, lower than the population proportion of this age category (34.6%) (O'Donnell et al., 2021). However, the findings that prior experiences was correlated with both f2f and online attitudes are in line with previous studies that indicate prior experience with psychotherapy, or mental health literacy, is associated with attitudes towards mental health treatment (Liu & Gellatly, 2021; Nair et al., 2020; Handley et al., 2015; Kuruvilla et al., 2006).

Similarly, in the analysis of the predictive effect of barriers towards engaging in psychotherapy on attitudes towards both f2f and online psychotherapy, it was surprising to find that no barriers were significant in predicting online psychotherapy attitudes in the regression models. Moreover, only two of the ten barriers studied were found to be significant predictors of attitudes towards f2f psychotherapy: knowledge and fear of psychotherapy and help-seeking. This finding is in line with previous research which has found mental health literacy and fear of psychotherapists being unable to help them as key factors in older adults' psychotherapy attendance and attitudes (Nair et al., 2020; Hannaford, Shaw & Walker, 2019; Mackenzie, Pagura & Sareen, 2010). Moreover, this is in line with previous Irish research which found that a lack of knowledge of symptoms of mental health concerns, reluctance to disclose mental health concerns and negative help-seeking attitudes were barriers to engaging with mental health services for men who had survived a suicide attempt (Cleary, 2017).

However, these findings are in contrast to previous studies which have demonstrated the relationship between barriers towards accessing psychotherapy and psychotherapy engagement, such as stigma, cost, ageism, etc. (Nair et al., 2020; Nurit, Dana & Yuval, 2016; Pepin, Segal & Coolidge, 2009). Furthermore, a previous study conducted in Ireland found that half of Irish adults perceived no barriers to attending counselling/psychotherapy, however one quarter of Irish adults perceived affordability as a potential barrier (Kelly, 2020). Whilst stigma, belief about the inability to find a psychotherapist, ageism, concerns about psychotherapists' qualification, physician (GP) referral, and transportation concerns were each found to be significantly correlated to both OCAS and FCAS scores, they were not found to be significant predictors of either in the regression analyses. Belief that depressive symptoms were normal and insurance/payment concerns were the only barriers studied that were found to have no significant correlation to OCAS or FCAS scores. This finding differs from previous research which has found that both belief that depression is a normal aspect of aging and the cost of treatment affect help-seeking behaviour (Knight & Winterbotham, 2020; Wuthrich & Frei, 2015; Pepin, Segal & Coolidge, 2009). The

fact that few barriers were found to be significant predictors of attitudes in this sample may be partly explained by the high proportion of the sample that had previously attended psychotherapy, and thus may not feel impeded by barriers.

The findings around stigma were somewhat surprising. Prior studies have found varying results when assessing stigma, with some citing that most older adults did not consider it a barrier (Knight & Winterbotham, 2020) and others finding that it was the least important barrier experienced (Robb et al., 2003). However, these findings are in line with prior research in Ireland which has found that the Irish public have positive views of counselling/psychotherapy, and feel that it is more accepted in modern Ireland than in times past (Kelly, 2020). Therefore, it is possible that the participants in this study reflect this Irish viewpoint and may not see stigma as a significant barrier to attending psychotherapy. It has also been reported that older adults found online psychotherapy as preferable as they felt less stigmatized attending remote appointments (Christensen et al., 2020) and this could be beneficial for those experiencing stigmatized conditions (Wallin et al., 2018). Thus, it is possible that participants in the present sample did not consider stigma to be a significant barrier to access. Moreover, these barriers were assessed in the regression models along with demographic variables and prior experience with psychotherapy, so it is possible that these variables had such predictive effect that they overpowered the barriers.

Similarly, the findings around ageism contradict previous research which has found that the age of therapists and the representation of older adults in psychotherapy settings can affect attitudes around attendance (Kessler, Agines & Bowen, 2015). However, other research has found that ageism in service providers was found not to be a significant barrier to seeking help (Pepin, Segal & Coolidge, 2009). Similarly, concerns about service providers' qualifications have been found to be a barrier in previous studies (Liu & Gellatly, 2021; Nair et al., 2020; Mackenzie, Pagura & Sareen, 2010), but not in the present study. Equally, reliance on GP referral for appointments with mental health services has previously been reported as a barrier (Hannaford, Shaw & Walker, 2019), but not in this study. It was also surprising to find no significant predictive effect of transportation concerns, as it was hypothesized that this would be a significant positive predictor of attitudes towards online psychotherapy. Previous research has found that accessibility of remote treatments has been seen as promoting acceptance of them among older adults (Liu & Gellatly, 2021; Choi et al., 2014b). Moreover, accessibility was reported as a barrier to seeking treatment in prior studies (Nurit, Dana & Yuval, 2016; Mackenzie, Pagura & Sareen, 2010).

In relation to the STAM questionnaire, none of the three subscales included in the regression analysis were found not to be significant predictors of attitudes towards online psychotherapy (attitudinal

beliefs, control beliefs, and gerontechnology anxiety). However, both the attitudinal beliefs and gerontechnology anxiety subscales were found to have significant correlations with OCAS score. The health conditions subscale was not found to be significantly correlated to OCAS score and was excluded from the regression model. The finding that technology control beliefs, which assesses perceived ease of use, self-efficacy and facilitating conditions, was not a significant predictor of attitudes towards online psychotherapy is in contrast with previous findings (Hauk, Huffmeier & Krumm, 2018; Van Houwelingnen et al., 2018; Chen & Chan, 2011). Moreover, the other variables not being significant predictors is at odds with previous research finding them to be significant predictors of attitudes towards using new technologies (Chen & Lou, 2020; Chen & Chan, 2014; Peek et al., 2014; Chen & Chan, 2011; Wang, Rau & Salvendy, 2011).

### 3.4.1 Strengths

This study provides an initial examination of young-old and old-old older adults' attitudes towards both f2f and online psychotherapy using a quantitative methodology in a new context. To the author's knowledge, such an examination of older adults' attitudes towards both f2f and online psychotherapy (as defined in the present research as psychotherapy via synchronous video call), with an exploration of potential predictors using quantitative regression analysis has not been done in previous literature. Furthermore, little is known about the attitudes towards psychotherapy among older adults in the Irish context. Thus, the present research outlines a potential starting point for Irish mental health practitioners and policy makers to increase acceptance of and engagement with f2f and online psychotherapy among young-old and old-old older adults. This is particularly important as Ireland's older adult population continues to rise (Central Statistics Office, 2023a), and the available mental health services for older adults in Ireland are not matching this increase (Mental Health Commission, 2020). Finally, the use of pre-existing validated scales allowed for the valid and reliable quantitative analysis of these concepts, allowing for replication of this methodology in future studies.

### 3.4.2 Limitations

However, the present study has several limitations. The sample was homogenous in its lack of gender balance, and disproportionate representation of young-old older adults. Other demographic variables found to have related to attitudes towards technology and psychotherapy in previous literature were not examined, including race (Drake et al., 2022; Schifeling et al, 2020; Cotten et al., 2016; Czaja et al., 2006), SES (Cotten et al., 2016; Chen & Chan, 2014), and education levels (Bujnowska-Fedak &

Mastalerz-Migas, 2014; Chen & Chan, 2014; Heart & Kalderon, 2013; Niehaves & Plattfaut, 2011; Czaja et al., 2006). The sample had a high proportion of participants who had previous experience attending psychotherapy both f2f and online. This may have led to a bias in the results which may not be generalizable to all older adults, as it is well-reported that this age group underutilise mental health services (O'Donnell et al., 2021). Furthermore, the large majority of participants completed the survey online and reported using technology daily, meaning older adults with lesser technical literacy may be under-represented in this sample, making the results less widely generalisable. This may also have biased the results to be more favourable of technology since the large majority of the sample had experience engaging with it. Given the recruitment of a relatively small community sample in an Irish context the conclusions drawn from this data may not necessarily be generalizable to wider populations of older adults. Furthermore, previous research has demonstrated a significant link between living in rural or urban areas and the impact of this upon online psychotherapy attitudes and attendance (Freytag et al., 2022; Tegeler et al., 2020; Dham et al., 2018; Handley et al., 2015). Moreover, previous research in Ireland found that Irish adults who lived in rural areas and had lower incomes were less likely to attend counselling/psychotherapy (Cassells, 2019), and these factors were not explored in the present study. Other aspects of cultural context were not explored which have been shown in previous research in Ireland to have an impact on accessing psychotherapy, such as having private health insurance and being engaged with services e.g., psychology, social work, GP or religious services (Cassells, 2019), as well as differing cultural values (Doyle & Hannigan, 2024). Finally, other factors such as motivation and opportunity which may impact on attitudes and behaviour as suggested by the MODE (Fazio, 1990) and COM-B (Michie, Van Stralen & West, 2011) models were not considered in this study.

### 3.4.3 Future directions

Future researchers may extend this research to more diverse populations in terms of age, gender, race, and SES. Furthermore, this study applies specifically to the Irish context, which may differ globally. Further examination of the impact of barriers to accessing online psychotherapy is required to determine if these barriers differ to those impacting f2f psychotherapy attendance, as examined in the present study. Qualitative analysis of older adults' attitudes may garner richer insights than those provided by the quantitative, pre-determined questionnaires used in this research, which is one of the aims of the present study's explanatory sequential mixed-methods design. Furthermore, a greater understanding of what elucidates fear of the therapeutic process among older adults may lend itself to designing more acceptable treatments for this age group. Analysis of these phenomena in old-old samples is also needed to address the disparity in psychotherapy attendance between young and old people. Moreover, further exploration

of the reluctance to seek out psychotherapy and mental healthcare in this age cohort would inform the design of mental health policy and promotion.

### 3.4.4 Conclusion

This research provides a starting point for the improvement of mental health promotion, policy and services as it pertains to older adults. The results of this study conclude that negative help-seeking beliefs and a lack of knowledge and fear of the therapeutic process can have a negative impact on attitudes towards attending f2f psychotherapy, in turn, impacting attitudes towards online psychotherapy. Thus, it can be concluded that based on the evidence presented here, a focus on education around psychotherapy may be beneficial to older adults in promoting their engagement with f2f and online psychotherapy. Moreover, promoting positive help-seeking beliefs and reducing fear of the therapeutic process may encourage higher attendance of mental health services in this age group. Furthermore, the findings suggest that older adults who have prior experience with psychotherapy and more positive attitudes towards f2f psychotherapy have more positive attitudes towards online psychotherapy. This suggests that clinicians may have more success promoting online psychotherapy to older adults who have higher mental health literacy or who have previously engaged with mental health services, whereas f2f approaches may be more suitable for those attending for the first time.

# Chapter 4: Study 2: A qualitative semi-structured interview study of young-old and old-old older adults' attitudes towards online psychotherapy

## 4.1 Introduction

This was the second study in the explanatory sequential analysis, and aimed to gain more detailed insights into Irish young-old and old-old older adults' attitudes towards online psychotherapy using qualitative interviews. This study aimed to further explore these attitudes based on the findings of the initial quantitative survey study, which found that perceived intrinsic barriers to engaging in mental health services were significant predictors of attitudes towards f2f psychotherapy and prior experience and having more positive attitudes towards f2f psychotherapy were found to be significant predictors of attitudes towards online psychotherapy. An interview schedule was developed based on the questions from the quantitative surveys used in study one to gain further insight into these barriers and provide the opportunity for further elaboration on the understanding of and attitudes towards online psychotherapy among older adults. A semi-structured interview design allowed for this elaboration, with open-ended questions. This research aimed to extend on existing qualitative research into attitudes towards psychotherapy among older adults, by applying this to online psychotherapy via video call specifically, and in an Irish context.

## 4.2 The Present Study

The present research examined Irish young-old and old-old older adults' attitudes towards online psychotherapy via video call in a general, non-clinical sample. This research aimed to extend the existing literature surrounding older adults' attitudes towards digital mental health interventions by exploring their attitudes towards psychotherapy via video call specifically, rather than a specific application or intervention, using qualitative analysis. Furthermore, the examination of these attitudes in a general sample aimed to build upon existing research which has often focused on specific patient populations, e.g., older adults experiencing depression or multi-morbidity. The present study aimed to further inform the quantitative findings of study one by examining if the qualitative themes would echo, or differ from, the findings of the quantitative survey study, as well as to capture any insights that may not have been reflected in the quantitative scales. This research aimed to address the research question: "What are young-old and old-old older adults' perceptions of and attitudes towards online psychotherapy?", and had two primary objectives:

1. Explore young-old and old-old older adults' perceived barriers to accessing psychotherapy and their attitudes towards f2f and online psychotherapy using qualitative interviews.

2. Identify themes within their attitudes using thematic analysis as recommended by Braun & Clarke (2006) and explore them in light of the quantitative results from study one.

## 4.3 Methodology

### 4.3.1 Study design

This study was the second of two studies in an explanatory sequential design (Kroll & Neri, 2009). This second study used a qualitative, semi-structured interview design to examine the attitudes of young-old and old-old older adults towards online psychotherapy. This approach was selected to build upon the quantitative survey findings of study one utilising an explanatory sequential mixed-methods design to answering the research question. This is in line with the definition of mixed-methods research design given by Schoonenboom & Burke Johnson (2017), that mixed-methods research involves the use of elements of quantitative and qualitative approaches for the purpose of deep understanding. Furthermore, the initial use of quantitative methods to inform deeper exploration of findings using qualitative methods is in line with explanatory sequential mixed-methods design as described by Kroll & Neri (2009). The researcher's epistemological perspective was considered throughout this process in order to prevent bias in interpreting the study's results. The researcher has an academic background in psychology and clinical neuroscience and is a female of White Irish background.

### 4.3.2 Ethics

This study was approved by the School of Health and Science Ethics Committee at Dundalk Institute of Technology. The statement of ethical approval can be found in Appendix K. The same procedures were followed as in study one (see section 3.2.2). Participants were provided with a participant information leaflet (see Appendix L) outlining the aims of the research and the nature of the questions they would be asked, as well as how their data would be stored. Participants were informed that interviews would be audio-recorded, with only the research team having access to the recordings. They were also informed that their data would be anonymized, and they would be provided with a pseudonym for any of their quotes, e.g., "Participant 1".

After reading the participant information sheet, participants were asked to sign the consent form (see Appendix M). For participants being interviewed online, the participant information leaflet and consent form were sent to them online via email by the researcher, signed by participants and sent back to the researcher prior to the interview. These digital consent forms were stored on a secure password-protected laptop only accessible by the Master's student. For f2f interview participants, participants were sent copies of the information leaflet and consent form via email in advance and signed the consent form with the researcher in-person on the day of the interview. For participants who completed the consent form using pen-and-paper, their signed consent forms were stored in a locked drawer only accessible by the Master's student. The interview recordings were made on a secure, password-protected mobile phone

and iPad only accessible by the Master's student, and uploaded as audio files to the password-protected laptop for transcription. All audio files were named only with a participant ID for anonymity. Once transcribed, the transcribed files were uploaded to NVivo for thematic analysis.

### 4.3.3 Sample

The sample was a general, non-clinical sample of five community-dwelling young-old and old-old older adults aged 60+ years. As in study one, a non-clinical sample was selected to examine the attitudes of older adults in the general population towards psychotherapy, rather than examining a specific clinical cohort. The same inclusion and exclusion criteria applied as in study one. The age bracket of 60+ was selected, rather than the 50+ age bracket for the survey study, as the sample obtained for study one was a relatively young sample, and the researcher wished to target older participants to gain insight into this cohort in the interviews. This age bracket is reflected in previous qualitative research of older adults' attitudes towards online psychotherapy (Xiang et al., 2021). The proposed sample size of 5-20 participants was calculated based on previous similar qualitative studies with older adults (Posselt, Baumann & Dierks, 2024; Christensen et al., 2021; Pywell et al., 2020; Donkin & Glozier, 2012).

Furthermore, previous research by Guest, Bunce & Johnson (2006) evaluated sample size and data saturation (the point at which further interviews yield no new themes) for qualitative research and determined that the large majority of codes and themes could be identified within six to twelve interviews. Moreover, Malterud, Siersma & Guassora (2016) developed a model for computing sample size in qualitative research based on information power, the idea that the more relevant information a sample yields, the less participants need to be recruited. They posit that studies which have narrow research aims, samples with dense specificity, apply established theories, have strong dialogue between researcher and participant, and utilise case analysis have increased information power and require a smaller sample size (Materud, Siersma & Guassora, 2016). The present study had specific aims informed by the initial quantitative survey study and the interview schedule was developed in order to create a strong dialogue with participants which focused on specific topics relevant to existing theory (TPB (Ajzen, 1985), STAM (Chen & Chan, 2014)). Furthermore, the study required a specific and hard-to-reach sample of older adults aged 60+. Thus, it was determined that a smaller sample size would be sufficient to reach data saturation and information power.

### 4.3.4 Recruitment

Participants were recruited through the community, including the NetwellCASALA "Living Lab" and Age Friendly Louth, via advertisements in email newsletters. Information flyers were also left in local community locations such as the local library (see Appendix N). The information flyer was also shared via social media. Participants were invited to email the postgraduate student to express their interest and partake in interviews online, over the phone, or in-person. Participants were given the option of completing interviews in-person in the research centre, or in a location they chose. They were also given the option of completing the interviews online via Zoom, or over the phone.

### 4.3.5 Materials

The researcher developed the interview schedule based on the findings from study one, to further explore the barriers and facilitators identified as significant predictors (see full interview schedule in Appendix O). The interview schedule consisted of seven open-ended questions to allow for in-depth discussion, and the interview followed a semi-structured approach. This allowed the researcher to let the participant lead the conversation, whilst ensuring all questions were answered. The first question aimed to firstly identify young-old and old-old older adults' understanding of the term "online psychotherapy", to ensure their comprehension of the concept before proceeding with the interview. Furthermore, this question assessed their knowledge of psychotherapy, which was found to be a significant predictor of attitudes in study one: "What is your understanding of the term 'online psychotherapy'?" The second question aimed to assess their awareness of how to access psychotherapy in order to further explore their knowledge of psychotherapy, which was again found to be a significant predictor in study one: "How do you think you may go about accessing online psychotherapy?"

The third question aimed to explore their perceived benefits of online psychotherapy, to expand on the concept of value in the FCAS/OCAS from study one, as well as to identify any positive attitudes they may have: "Do you think there could be any benefits to seeking online psychotherapy? If so, what?" The fourth question aimed to identify their perceived barriers to accessing online psychotherapy, as an extension of the BMHSS-R scale from study one, as well as the discomfort subscale of the FCAS/OCAS: "Do you think there could be any factors that may prevent you from seeking online psychotherapy? If so, what?"

Question five aimed to examine their help-seeking beliefs, as this was found to be a significant predictor of attitudes in study one. "Do you think you would be willing to engage with online psychotherapy?" Question six aimed to identify if they had any prior experience with psychotherapy, as this was found to be a significant predictor of attitudes in study one. "Do you have any personal

experience attending psychotherapy, either face-to-face or online?" Finally, question seven gave participants the opportunity to add any thoughts that may not have been captured in the other questions: "Is there anything you wish to add or that you think would be helpful for me to know?" Participants were also provided with prompts if they did not answer questions with enough detail or did not understand the original question.

### 4.3.6 Procedure

There was no pilot study due to limited time and resources. Once the interview schedule was developed and the study had been granted ethical approval, recruitment began using the channels described above. Participants who were interested in taking part based on the study advertisements contacted the researcher to gain access to the participant information leaflet and consent form. Once the participant had time to review these, the researcher then arranged a suitable time to meet for an interview, either online or in-person. The researcher went through the participant information leaflet before commencing the interview, allowing participants to ask any questions or raise any concerns they may have before agreeing to participate. The consent form was then signed by the participant, and the interview began. The researcher confirmed that the participant was happy for the interview to be recorded and began recording before asking the first question. Interviews were recorded on an iPad and mobile phone, in case one recording failed. The interviews lasted approximately twenty minutes.

Once the interviews were completed, the researcher stopped and saved the recordings, and the participants were thanked for their participation. The audio files were named with the participants' pseudonyms, e.g., "Participant 1", for anonymization. The audio files of the recordings were then uploaded to Microsoft word and transcribed using the "dictate" function. The researcher then listened to each recording and made any necessary corrections to the transcript. Once transcription was completed, the transcribed files were uploaded to NVivo 1.7.2 for thematic analysis.

### 4.3.7 Thematic analysis

The transcribed interviews were analysed using inductive thematic analysis, as outlined by Braun & Clarke (2006). This method of analysis was chosen to allow for an in-depth examination of the qualitative data, generating themes based on the participants' insights, and ultimately drawing conclusions which could be compared to the quantitative results from study one. Thematic analysis was conducted using the six-step framework outlined by Braun & Clarke (2006). Braun & Clarke (2006) describe the first step as the researcher becoming familiar with the data, through transcription, active re-reading, and beginning to take notes of initial ideas about the data. The researcher in the present study

began by transcribing the audio files and reading through them several times to become familiar with the data. The researcher also took notes after each interview on her reflections and initial thoughts based on the conversation, so these were also considered in this initial phase. Once the data were trancribed, each participant's trancript was uploaded to NVivo to begin thematic analysis.

Braun & Clarke's (2006) second phase involves the generation of initial codes in the data. The researcher in the present study initially coded the transcripts based on elements relevant to the research question, "What are young-old and old-old older adults' perceptions of and attitudes towards online psychotherapy?". This was done using NVivo, with relevant codes from each participant's transcripts highlighted and organised into an initial codebook. This was done using a semantic approach, where participants' quotes were examined on a surface level, and the researcher was not aiming to derive any deeper meaning to the codes beyond what the participants had stated. Braun & Clarke (2006) describe phase three as beginning to search for themes within the data, by arranging the codes generated in phase two into groups and subgroups, The researcher in the present study began by reviewing the initial codes in the NVivo codebook and grouping them into subthemes, through which main themes were identified and organised.

Braun & Clarke's (2006) fourth phase involves reviewing the candidate themes identified in the third phase, both at the individual code level, and by looking at how they fit into the overall data set. Thus, the codebook of the initial themes and subthemes identified in the present study were repeatedly reviewed to ensure their distinction from one another and their relevance to the overall data set, ensuring that they reflected what participants had said. A thematic map of the themes and subthemes was also drafted during this phase to assist with the review process. According to Braun & Clarke (2006), the fifth phase consists of defining the themes and naming them based on the essence of what they describe within the dataset. Thus, the present study's themes and subthemes were named and a description added to the codebook, and thus, the thematic map was finalized. The sixth and final phase of Braun and Clarke's (2006) method is the writing up of the findings from the thematic analysis, providing vivid examples for each theme and subtheme, and making arguments about how the data answers the research question. Thus, the researcher in the present study wrote the following results section, using quotes which she felt best illustrated each theme and subtheme and captured the key messages within the data.

## 4.4 Results

### 4.4.1 Demographic data

Five participants took part in interviews, three males and two females. The age range was 66-84 years, with a mean age of 76.8 years (SD=6.27 years). Two participants took part in online interviews via Zoom, and three participants took part in f2f interviews, two in their homes, and one in the NetwellCASALA research centre at Dundalk Institute of Technology. One participant had experience of attending an online mindfulness course, but no experience of attending f2f or online psychotherapy. Two participants had experience attending f2f psychotherapy, one of whom previously worked as a psychotherapist, but neither had experience of attending online psychotherapy. Two participants had no experience attending psychotherapy of any kind. See Table 6 below for demographic data.

**Table 7**

Demographic data of study two participants

| Participant ID | Age | Gender | F2f experience | Online experience |
|---|---|---|---|---|
| 1 | 66 | Male | No | No* |
| 2 | 80 | Male | No | No |
| 3 | 74 | Male | No | No |
| 4 | 80 | Female | Yes | No |
| 5 | 84 | Female | Yes | No |

*Attended online mindfulness course, but not online psychotherapy via video call

### 4.4.2 Thematic analysis

Following Braun & Clarke's (2006) six-phase approach, the thematic analysis of the transcribed interviews revealed three main themes in the data. These themes were, in order of most to least code references: perceptions of online psychotherapy, facilitators of engaging with online psychotherapy and barriers to engaging with online psychotherapy. Each main theme had several subthemes. The subthemes for perceptions of online psychotherapy were, in order of most to least code references, desire for initial f2f contact, openness, accessibility, awareness and comfort with technology. The subthemes for facilitators of engaging with online psychotherapy were distance and anonymity, prior experience of psychotherapy, having a listening ear, GP referral, and having a properly qualified psychotherapist. Finally, the subthemes for barriers to engaging with online psychotherapy were stigma, need for trust and respect, self-efficacy, and lack of therapeutic space. These themes will be discussed below, with reference to the participants' quotes which were coded into each theme. See figure 2 for a thematic map illustrating the themes and subthemes. The NVivo codebook used for the analysis can be found in Appendix P.

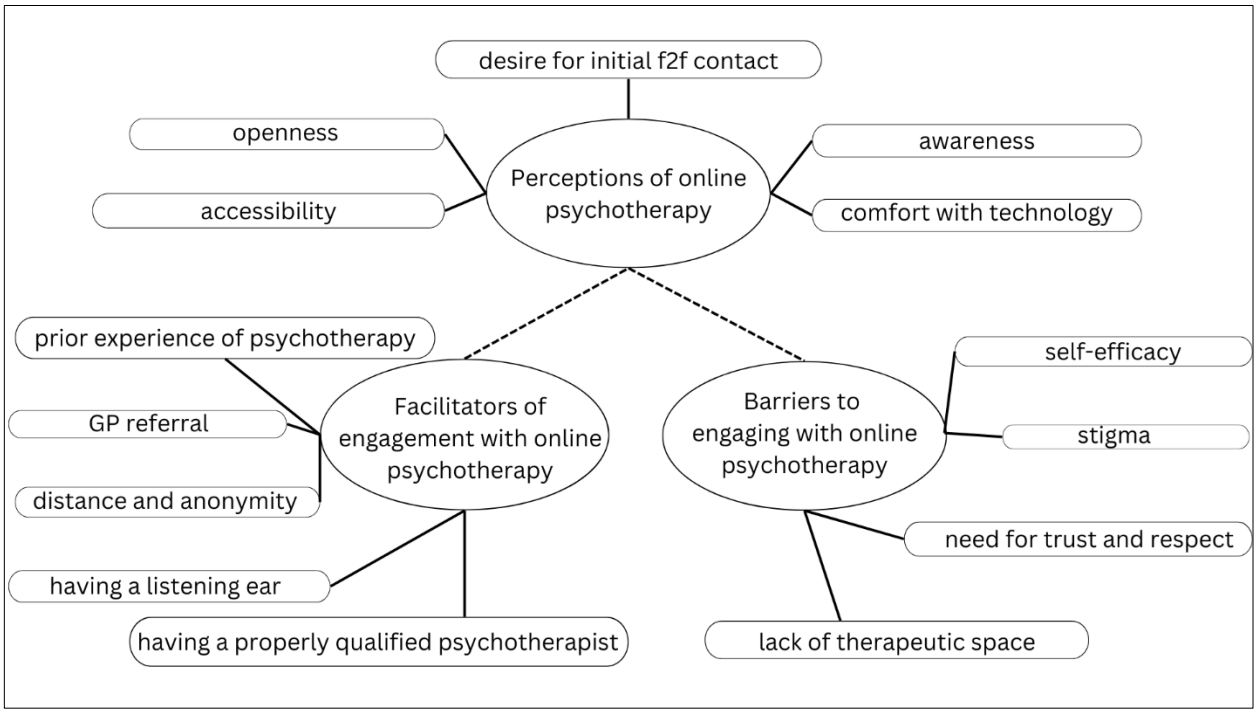


**Figure 5.** Thematic map of themes from study two

#### 4.4.3 Theme 1: Perceptions of Online Psychotherapy

One theme which was continuously referenced by participants surrounded their existing perceptions of online psychotherapy, positive, negative and ambivalent. These perceptions fell into various categories, such as their perceptions of what is involved in the process of attending a psychotherapy appointment online, their perception of the use of technology in the process, and their individual openness to and awareness of online psychotherapy. This theme captured participants' general understanding and perceptions of online psychotherapy, which are factors not necessarily seen as barriers or facilitators. The perceptions observed within this theme provide valuable insights to inform service design and delivery, such as older adults potentially having a desire for an initial f2f contact with a psychotherapist before accessing online appointments, and the use of storytelling and television advertising to promote awareness of online psychotherapy among older adults. This theme also demonstrates older adults' openness to online psychotherapy, their perceptions of its accessibility, and the importance they place on being comfortable with using technology.

### *Subtheme 1: Desire for initial f2f contact*

One subtheme which was consistently mentioned by participants was a desire for an initial f2f appointment with a psychotherapist before moving to online appointments. Participants mentioned feeling as though they would need an initial f2f contact to establish a relationship with a psychotherapist. Some participants suggested this could be a short meeting, simply to introduce themselves and be introduced to the psychotherapist, and afterwards, they would be satisfied with moving to online appointments. Participants also spoke about the importance of body language and cues which may be missed online, and how this may impact their comfort in an appointment. Participants suggested that this may be especially important for older adults, who would be more familiar with attending f2f appointments and building rapport that way, compared to their younger counterparts who may be more used to establishing relationships online. This subtheme demonstrated the importance of considering generational perspectives when designing therapeutic interventions.

*"The only reservation I would have is that I'm a great believer in initial face to face contact. I think that even if it's only a very brief interview. [...] I feel certainly with younger generations, no problem, they sort of live in that sort of online world anyway. But for people of my generation an initial physical interaction is, I think, is very important, face to face interaction. Breaks down all the barriers, off you go, no problem then with an online situation."*

Participant 2, male, aged 80.

*"I think if you have a face-to-face appointment, you'd probably develop a rapport quicker. [...] I just feel that getting to know the person I mean, there's obviously huge pickup in body language and things like that. Like I can see your head now and your shoulders [...] if that's all you're going to see of the person, you're not necessarily going to see if they're fidgeting or if they're comfortable or uncomfortable. [...] I sort of would prefer initially at least to face to face, to get to know [them]."*

Participant 3, male, aged 74.

*"Personally, I think I'd prefer face to face because people can assess one another better, I feel, by gestures and that, that might be missed online. Not so much facial expressions, which would show up online as well, but body posture [...] I suppose I would seek maybe face to face first, but [then] I'd be happy enough."*

Participant 4, female, aged 80.

### *Subtheme 2: Openness*

This subtheme captured the idea that some participants had that older adults may be more open to discussing mental health and accessing online psychotherapy than in the past. Participants often mentioned having a general openness to the idea of psychotherapy, both f2f and online, for various reasons. Participants also emphasised the importance of having an open mind when engaging with new technologies. This subtheme demonstrated the changing perspectives of older generations in light of new

technologies and experiences such as the Covid-19 pandemic. Firstly, one participant mentioned a need to be open to the idea of psychotherapy in order to engage with it and get the most out of the process.

*"All you have to do is you know, allow yourself to open up that little bit and you would get a result from it. […] showing up and sitting down and paying attention and participating with an open mind to realize that it's, you can only get from it what you put into it and what you listen to and follow."*

Participant 1, male, aged 66.

One participant mentioned being open to online appointments due to the difficulties they experienced in accessing f2f healthcare appointments in the past. Another mentioned being open to attending online should they need to attend psychotherapy, and that they'd be grateful to have access to an appointment, regardless of it being online.

*"[Online] would be more difficult for me, than face to face, but I certainly wouldn't rule it out. You know, I'd be glad if I needed therapy, I'd be glad to have therapy. So, I'd be willing to."*

Participant 4, female, aged 80.

*"To be honest with you, it's so hard to get an appointment with the GP now that we actually considered it recently, doing some of the Zoom [...] I think I would prefer face to face [...] it is good for you to meet people. But again, if needs must, and if that's the only way you can get an appointment and this kind of thing, then that's the way we have to go."*

Participant 3, male, aged 74.

One participant mentioned being open to the idea of attending online psychotherapy due to hearing about online appointments being offered during the Covid-19 pandemic.

*"I know myself, I would be very happy to do it online and I know during Covid there were therapists online. Which, you know, made me think about it then, you know, that's a good idea."*

Participant 5, female, aged 84.

Finally, one participant mentioned being open to the idea of online psychotherapy, as they had gotten used to speaking on the telephone when it first emerged as a new technology. This demonstrates the adaptability of this generation of older adults, who have witnessed the introduction of many new technologies during their lifetime.

*"We got used to telling people stuff on the telephone, so I don't see now that you can see more of them [...] it should be OK. [...] I think everything is just a matter of doing it and getting used to it."*

Participant 3, male, aged 74.

***Subtheme 3: Accessibility***

Another theme which came up throughout the participant interviews was how they would go about accessing online psychotherapy. Some participants mentioned they would look online, such as on

the Health Service Executive (HSE) website in the first instance if they were looking to access psychotherapy online. Some participants said they would contact their GP to get more information, while others said this would be difficult to do and would opt to seek information online. This subtheme provided important information about how older adults may access online psychotherapy, which could inform service design and delivery.

*"If I was to look to access something, I would probably initially look at the HSE website. And alternatively, then go to my doctor and see if there was anything available like that."*

Participant 1, male, aged 66.

*"We look online, and we look for people online and we look to see what they've said. […] We wouldn't be averse to that at all. […] I think I would find it very hard to go to say go to the GP and say I need to speak to a psychologist."*

Participant 3, male, aged 74.

*"I would probably go on to the Internet to see where it's available. […] Possibly the registered psychotherapy, uh, website, yeah. […] I think I'd prefer to go online because I'm not sure where I'd start looking otherwise."*

Participant 5, female, aged 84.

One participant mentioned that they would check and see if they could access online psychotherapy through their health insurance provider. All participants seemed satisfied that they knew where they could go to access information about online psychotherapy.

*"My health insurance [...] I think they have some people who provide that, online doctors and there may be an online psychotherapist"*

Participant 4, female, aged 80.

Participants also spoke about how online psychotherapy appointments may be more accessible to them than f2f appointments, due to the long wait lists they experience when looking to see their GP.

*"It would take away some of the pressures on the doctor [...] if you try to get an appointment with one of them, it's going to take you a week or two. […] Getting that out there will minimize doctors' problems, doctors' workloads, nurses and the HSE in general before it becomes a total sad state of affairs."*

Participant 1, male, aged 66.

***Subtheme 4: Awareness***

This subtheme captured participants' awareness of online psychotherapy. Participants seemed to have a good understanding of the process, they understood that this involved being on a call with a psychotherapist, via an application like Zoom or Skype, and talking about how they feel. However,

despite the participants themselves having a good awareness of the process, most mentioned that they felt their generation were not aware of psychotherapy and mental health services in general. Some participants mentioned a need to better promote these services to increase public awareness. One participant suggested promoting f2f services in local communities, for example by telling stories of positive psychotherapy experiences. Another participant suggested promoting online services using television advertisements. This subtheme demonstrated participants' awareness of online psychotherapy, as well as their insight into how this awareness might be better promoted among their age group, giving valuable suggestions for service delivery.

*"I would be on a video call with a therapist. […] I would see it as a therapist listening to me talk about my feelings and work through whatever problems that I might feel I needed to see her, him or her, for."*

Participant 5, female, aged 84.

*"I think it needs to be more out there promoted better. [...] Relating the positive benefits you can get from something like that, even if it's just to sit down with a cup of coffee or tea and just do a little recitation or something that you've learned during one of those sessions just to calm down. You know, and make you realize that things are pretty good all in all."*

Participant 1, male, aged 66.

*"If they don't know it's available, you know, how can they decide? And how do they find out? [...] You'd be thinking more of a [face-to-face], and not understand that maybe you could do online. […] I'm not sure if, without an ad or something, you know, […] on the television. They might be surprised when they would see, you know, it can be done online."*

Participant 5, female, aged 84.

***Subtheme 5: Comfort with technology***

Finally, this subtheme focused on participants' ideas about older adults' comfort with technology. Participants had mixed views on the impact of technology on older adults' willingness to engage with online psychotherapy. This subtheme provided context for how older adults consider technical literacy to relate to accessing online psychotherapy, as well as groups who may experience barriers, identifying key considerations for service design. Most participants mentioned feeling comfortable with technology themselves, and that this wouldn't pose a barrier to their engagement.

*"I certainly know that friends, colleagues, […] my age, from all over the world, [have] no problem with the technology. Now, we wouldn't be whizz kids, but I mean, we do a lot of work on Zoom"*

Participant 2, male, aged 80.

*"We're not adverse to going online and I suspect that for people my age we're maybe a bit different, but we were given laptops at work in the mid-1990s, you know. So, we were given training and that so I'm not, I'm not completely afraid of the thing you know."*

Participant 3, male, aged 74.

However, other participants mentioned having concerns around using technology and needing help in accessing online psychotherapy via video call. They also spoke about how this may be a barrier to engaging with online psychotherapy for some older adults, for example those with motor difficulties, or those with lower technical literacy.

*"I do use technology, but I wouldn't be, you know, as clued in as younger people and might have some difficulty in setting it all up. I've done FaceTime […] but I've never done a zoom call, never. No. So that would have to be set up."*

Participant 4, female, aged 80.

*"I personally associate apps [Zoom] with mobile phones and tablets and I don't like small screens [...] I prefer laptops, so I prefer Skype […] I have neuropathy in my fingertips. So they're not as sensitive as they should be. So probably that's why I prefer using the mouse and not touching things."*

Participant 3, male, aged 74.

*"If they're not used to being online, there's always that. So, it would be a hindrance. […] I suppose it would be a very new thing to be doing it online […] people might be slow to think about that."*

Participant 5, female, aged 84.

#### 4.4.4: Theme 2: Facilitators of Engaging with Online Psychotherapy

The second major theme to emerge from the participant interviews was related to their perceived facilitators of engagement with online psychotherapy. Participants mentioned a variety of factors which may promote the engagement of older adults with online interventions, such as the potential benefits of the process, having prior experience, and logistical aspects such as GP referral and psychotherapist factors. This theme provided useful examples of how older adults may be encouraged to access online psychotherapy, which could inform the promotion and design of online services. For example, by promoting the aspects of distance and anonymity and having a listening ear. It also identified the importance of GP referral and psychotherapists being properly qualified in order for older adults to trust online psychotherapy services. Finally, this theme demonstrated the impact of having prior experience of psychotherapy on attitudes, even if this experience is indirect, such as through loved ones.

### *Subtheme 1: Distance and anonymity*

Participants' most reported facilitator of engagement with online psychotherapy was the distance and anonymity of this medium. This subtheme captured the idea that the distance and anonymity involved in attending online psychotherapy compared to f2f appointments may alleviate barriers such as transport and stigma. This subtheme demonstrates the importance of these benefits to older adults, identifying a potential selling point for encouraging older adults to move to online psychotherapy. Firstly, participants mentioned that it would be more convenient than having to travel to a psychotherapy office. Other participants spoke about the benefits for older people who are physically frail, or who may not like leaving their homes post-Covid-19.

*"Well, the benefits would be […] distance. I don't drive anymore since I retired. […] Distance from me is the main thing. I wouldn't have any hesitation in doing it if I needed it."*

Participant 1, male, aged 66.

*"I kind of like the idea of online therapy. I've never experienced it, but having experienced the [face-to-face], yeah, I think I would. I would like the idea that I could do it, you know, without having to say, go to a centre […] it would be more convenient. […] You're at home and the person is there for you then."*

Participant 5, female, aged 84.

*"If somebody wasn't as able or was a bit frail, there certainly would be [benefits]."*

Participant 4, female, aged 80.

*"I think one of the problems is [...] after Covid [...] you have to push yourself to go out, you know."*

Participant 3, male, aged 74.

Participants also mentioned that the privacy of attending appointments online would be a facilitator of their engagement. They also discussed how attending online may lend itself to more anonymity, and a feeling of being more comfortable as a patient. One participant mentioned that being online may make one feel as if they are talking to themselves in a mirror, allowing greater anonymity.

*"It might give a perception of anonymity and distance. […] The general perception of therapy is you sit in a circle with other people, telling them all of your deepest, darkest secrets. […] Online lends, a sense of anonymity to it. It's like you're distant from the doctor."*

Participant 1, male, aged 66.

*"The interaction in an online sense […] it's almost, you're allowed to become a mirror for the patient. They're talking to you, but they're really talking to themselves. You know you're not sitting across the table, you're not on a couch you know that, and that you allow that to evolve, and you get an awful lot more from it."*

Participant 2, male, aged 80.

*"Distance is the wrong word because you're you are face to face with the other person. […] It's very private. You know that you're doing this from home, in your own house."*

Participant 5, female, aged 84.

***Subtheme 2: Prior experience of psychotherapy***

This subtheme identified participants' perceptions of the impact having prior experience of psychotherapy has on attitudes towards online psychotherapy. Participants mentioned that prior experiences they had of psychotherapy made them more open to the idea of engaging with online psychotherapy. The findings from this subtheme demonstrated that participants who had some prior experience, directly or indirectly, with psychotherapy may be more open to accessing online psychotherapy. This may be useful for clinicians to know when identifying which patients may be most open to online psychotherapy. Some participants spoke of having personal experience of attending psychotherapy and mindfulness interventions, and how these interventions helped them to gain coping skills and tools.

*"From seeing friends attend and having done that mindfulness course and just being curious. I yeah, I think it's there's nothing wrong with it at all. […] It was good fun and there were things I remembered afterwards that [...] whenever anything stressful does come up, I would reflect back on […] The value I got out of the previous things I've done […] was realizing that it's not a weakness, it's something that has value."*

Participant 1, male, aged 66.

*"I feel [others] might be a bit more reluctant. But, because I've experience of it, I would be willing. […] I did have therapy for anxiety and panic attacks years ago, and I found it very beneficial, and it gave me tools. For when anxiety came up again, tools to cope with it. […] It was nice having face to face therapy. So, not having any experience of online, it's difficult to say, but all I can say is I certainly wouldn't rule it out."*

Participant 4, female, aged 80.

Other participants spoke of having no personal experience with psychotherapy, or having only seen loved ones experience it. However, these participants still recognised the value in psychotherapy for others and expressed an openness to it.

*"I haven't got really any great experiences of it at all, attending therapy and I really can't think of anyone I know who has confided in me that they have got therapy you know, but it is worthwhile."*

Participant 3, male, aged 74.

*"I was only at one therapy session that was with a girlfriend who had depression a long, long, long time ago, and it was nice. It was comfortable and enjoyable face to face. I didn't participate that much; I was more there as a shoulder. She got a lot out of it. The woman was quite professional, and I could see the value it had to her so, I have no problem with that."*

Participant 1, male, aged 66.

***Subtheme 3: Having a listening ear***

Participants also spoke about one of the potential facilitators of older adults engaging with online psychotherapy could be having the psychotherapist as a listening ear. This subtheme identified that emphasising the value of online psychotherapy in providing a listening ear may be a key facilitator for certain older adults, especially those who are isolated. Some participants spoke about how having someone to talk to could alleviate loneliness for some older adults, particularly post-Covid-19.

*"These days I could see somebody availing of it if they get lonely."*

Participant 1, male, aged 66.

*"There's a good few retired people around us and [...] some of them are widows or widowers […] You'd notice people would come out because they'd be expecting someone to pass and talk to them. So, they like a bit of face to face or some sort of interaction with people, you know."*

Participant 3, male, aged 74.

Other participants discussed the value of listening and having someone to talk to when experiencing a mental health concern. They spoke about how having a psychotherapist as a listening ear, even attending online, could be potentially beneficial.

*"It's great in life to always be aware that there is a listening ear somewhere. […] When people are in tender mental conditions, I think [listening is] so important [...] because you may miss something vital. […] There's always somebody on the end of the line, there's now always somebody on a Zoom call. That's the way, to know that that is there."*

Participant 2, male, aged 80.

*"I do realize it's a way of talking the thing over in your own head, kind of settling yourself [...] when I meet people now and they start telling me [things], I realize this is only after happening to them, so they're unloading it"*

Participant 3, male, aged 74.

One participant also emphasised the importance of listening to older adults, as they can often feel patronized when they feel that their opinions are disregarded. This participant spoke about the

importance of psychotherapists ensuring older patients know that they are being listened to, and their voice matters.

*"Speaking of people of my age and the common problem is feeling patronized, you know? [...] they're pretending they're listening to you, and you know that they're not. So, it's a two-way thing. It's important to be listened to. But I think it's important to realise again that, particularly with older people, that not only are you being listened to, but that you're being listened to with effect. Like, that it's not just a question of in and out, you know, that something that you say is going to stick in there with somebody."*

Participant 2, male, aged 80.

***Subtheme 4: GP referral***

Another potential facilitator that participants repeatedly mentioned was GP referral. This subtheme captured the importance of GP referral, and how the support of GPs for online psychotherapy may impact awareness and openness to it among older adults. This provides useful context for service design, as increasing GPs' awareness of online psychotherapy services, and therefore GP referral, may be an important facilitator to older adults accessing online psychotherapy. Participants spoke about how having a GP refer them to see an online psychotherapist would increase their trust in such services, as opposed to self-referring or being recommended to attend by a friend or family member.

*"People just don't realize that it's out there. Doctors don't push it as they should, and instead they just give out the prescriptions, 'have another one.' So definitely, if it became a natural, normal thing to do, you could enroll into it for a few weeks at a time or to a particular course as prescribed by a doctor and as preventative rather than reactive."*

Participant 1, male, aged 66.

*"If I was looking for therapy of any description, medical therapy, I would expect to be referred by a GP, you know, I'd expect to be referred by a doctor."*

Participant 3, male, aged 74.

One participant suggested that not only having a GP referral to online psychotherapy, but having a GP arrange an initial f2f consultation between the psychotherapist and patient, would help to further establish trust.

*"I think the GP should have a good enough relationship with the patient to be able to say this is only a sort of introductory thing. It won't take [long], you know, and you won't be interrogated, but it's just to see that you're dealing with a real person."*

Participant 2, male, aged 80.

***Subtheme 5: Having a properly qualified psychotherapist***

Finally, this subtheme related to the importance of psychotherapists having the appropriate qualifications and the online psychotherapy interaction to be as professional as a f2f appointment.

Participants mentioned that having a psychotherapist who is professional and is properly qualified would act as a facilitator to engaging in psychotherapy, both f2f and online. This theme demonstrated that emphasising online psychotherapists' qualifications in any service promotion may be an important facilitator of online psychotherapy attendance among older adults. In particular, one participant mentioned it being important not only that the psychotherapist has the necessary qualifications, but that they are respectful of their patient and recognize that the patient may have qualifications of their own.

*"OK, [psychotherapists] may have certain credentials. It's important for professionals to realise that the people on the other side of the of the counter or on the other side of the table may also have different qualifications and that it's not this idea of I'm talking down to you, I'm telling you what to do. The listening aspect is so crucial […] It's very important I think, with online interaction that the professional is professional in that sense."*

Participant 2, male, aged 80.

*"I wouldn't have a problem talking to someone face to face as long as they're properly qualified."*

Participant 1, male, aged 66.

### 4.4.5: Theme 3: Barriers to Engaging with Online Psychotherapy

The final major theme which emerged from the participant interviews was in relation to potential barriers to engaging with online psychotherapy that participants perceived for older adults. These included stigma around seeking mental health treatment, a need for trust and respect, feelings of self-efficacy in relation to emotional problems, and a lack of therapeutic space when attending online. This theme identified important barriers which need to be alleviated in order to improve older adults' attitudes towards online psychotherapy. The findings of this theme provide important cultural context which must be considered when promoting the use of online psychotherapy to older adults, particularly around stigma and feelings of self-efficacy in dealing with mental health concerns. Furthermore, clinicians must consider the importance of trust and respect to this cohort, as well as the potential impact of a lack of therapeutic space on their comfort attending online when designing online services.

#### *Subtheme 1: Stigma*

This subtheme related to the impact of societal attitudes towards mental health and seeking psychotherapy, particularly past negative attitudes which are in the memory of older adults. Participants referred to stigma as being a barrier to older adults seeking psychotherapy generally. They spoke about how although society is progressing forward, there are still lingering stigmas from the past. This subtheme identified important generational considerations for clinicians to keep in mind when working with older adults, and when trying to encourage them to access online psychotherapy. This subtheme

further identified the impact of stigma in society at large, such as in the language used when discussing mental health treatment, or in depictions of mental health treatment in the media, and how this creates barriers to access. One participant also spoke about how older men may feel more stigma around accessing mental health treatment than older women.

*"When I was younger, I was of the mind frame that oh, I must be [weak] if I have to look for therapy, grow up and be a man sort of thing. […] Maybe women having a better circle of friends. [...] They can they confide in each other more? I think men generally don't tend to talk about anything to do with that, even among their friends. So, God forbid I had to go look elsewhere for something like that. […] It's just the mindset needs to change."*

Participant 1, male, aged 66.

However, one other participant mentioned that whilst stigma may linger for some of his generation, he is glad that the conversation around mental health treatment is changing.

*"To me as a child, the idea anybody would have mental difficulties of any sort… There was, putting it exactly as it was rated at the time, a lunatic asylum [...] and 'ship them there' […] Nobody referred to it as a mental hospital, it was a lunatic asylum. [...] It was so cruel, you know? And I think it's wonderful that the whole concept of mental health, the spotlight is on it [now]."*

Participant 2, male, aged 80.

Other participants spoke about stigma in terms of ageism, and the perception some older people have that they are 'too old' to access psychotherapy late in life. One participant spoke about how she has seen this hold others back from attending psychotherapy.

*"I suppose there is a thing about, as you get older, you feel, you know, [...] you wouldn't really be bothered going. I can't see any reason why they should have a problem with it or would hesitate to go for it. But I know that some people do feel because of their age, that it's not really […] It's not for them or that they might be judged differently, perhaps."*

Participant 5, female, aged 84.

Finally, one participant mentioned that there may be stigma around the process of psychotherapy, due to depictions of psychotherapy in media. This participant spoke about how these inaccurate depictions may be off-putting to some older adults, acting as a barrier to their engagement with psychotherapy, online or f2f.

*"When people think of therapy, I, it's my opinion that the first thing they see is an American style, Jerry Springer talk show sort of showboat where you divulge everything in front of a mass of people and it is seen as a total sign of needless, trivial. […] I wouldn't say put it in the newspapers, you know, 'Therapists after sessions.' You see these American things, you know, like 'Online therapy 24 hours a day.' […] That's a bit too Americanized"*

Participant 1, male, aged 66.

### *Subtheme 2: Need for trust and respect*

This subtheme referred to the importance older adults placed on trust and respect in the therapeutic relationship, and the difficulties online psychotherapy might pose for establishing this. Participants referenced the importance of feeling that they could trust an online psychotherapist, and that there would be respect in the therapeutic relationship. This subtheme provided context around some concerns older adults may have when entering the therapeutic relationship. One participant spoke about the importance of establishing trust with an online psychotherapist, and how he had concerns about the ability to establish that trust without meeting the psychotherapist f2f.

*"I can't honestly say that I would have the ability to sit down in front of the screen, speak to somebody that I'd never met. And be able to frankly discuss very, very serious problems that people are talking about in these situations. […] For me, the great problem is, can you absolutely trust somebody that you've never actually met personally? […] I still feel that if you're sitting there doing a Zoom call, are you really being yourself? […] It is so important that there can be that respect and trust. They're the two things you've got to have. And they both have to be mutual."*

Participant 2, male, aged 80.

Similarly, the same participant spoke about the importance of the psychotherapist being respectful of the patient and establishing that they are working together as equals during the therapeutic process.

*"The idea of mutual respect in health care of any sort, I think it's very important. That if you establish the fact that there's not a sort of master slave situation, you know that we're working as equals in this, you know. […] it's so important that anybody in healthcare, their respect for patients, be it physical or mental, is vitally important."*

Participant 2, male, aged 80.

### *Subtheme 3: Self-efficacy*

This subtheme centered around the idea among older adults that they can solve their problems alone, and do not think psychotherapy is for them. Participants spoke of a feeling of self-efficacy among older adults when it comes to dealing with emotional problems. Participants cited this as a barrier which may hold them back from seeking psychotherapy either f2f or online, if they feel an obligation to solve their own problems, if they feel their issues are the same issues everyone else is dealing with, or if they feel that they don't need help. This subtheme provided insight into the help-seeking behaviours of older adults, and how this may impact attitudes towards online psychotherapy.

*"I'm inclined to think things over in my head and come to a conclusion whether right or wrong and stick with it. […] because I think there's nothing bothering me I'd say that doesn't bother everyone that's getting old, you know. I mean the same things you worry about, you see people dying of different things all around you. […] I'm just not the kind of person, I think, that finds it easy to open up"*

Participant 3, male, aged 74.

*"It's knowing that you do need it, I think, is what's stopping a lot of them."*

Participant 1, male, aged 66.

*"It's almost as though you feel it's, you're beyond it now. You know, you just get on with whatever is going on for you."*

Participant 5, female, aged 84.

***Subtheme 4: Lack of therapeutic space***

The final potential barrier to engagement with online psychotherapy that participants mentioned was the lack of therapeutic space when attending online. This subtheme considered the potential negative impact of not having a dedicated therapy space when attending online psychotherapy appointments, like a traditional therapy room. Participants spoke about some people potentially feeling that attending online, at home, would be too informal a process. Other participants spoke about how some people may feel the need to be in the same room as a psychotherapist for both the psychotherapist and the patient to feel they knew each other and could make sense of the therapeutic process. This subtheme highlighted the need for ensuring older adults are comfortable and have an appropriate space in their home to attend online appointments.

*"Maybe it loses some of its impact if you don't have that sense of attending something that's more formal. [...] If you're in a therapist's office, you're in an office with that stereotypical leather sofa and just, you know, in front of the little library on the wall and the peaceful paintings. You are in the comfort of your own home and sometimes they may think it is not as professional. It's not real therapy if you're just talking about it online."*

Participant 1, male, aged 66.

*"I think you'd get a better sense of the therapist, and maybe they'd get a better sense of you when you're in a room with them."*

Participant 5, female, aged 84.

## 4.5 Discussion

This study was the second in the explanatory sequential analysis and aimed to utilise qualitative interviews to further explore the research question, "What are young-old and old-old older adults' perceptions of and attitudes towards online psychotherapy?" The design of the interview schedule was informed based on the findings from the initial quantitative survey study, in line with an explanatory sequential design. Three main themes emerged: perceptions of online psychotherapy, facilitators of engaging with online psychotherapy, and barriers to engaging with online psychotherapy. Each main theme had several subthemes. For theme one, perceptions of online psychotherapy, there were five subthemes: desire for initial f2f contact, openness, accessibility, awareness and comfort with technology. The subthemes for theme two, facilitators of engaging with online psychotherapy were: distance and anonymity, prior experience of psychotherapy, having a listening ear, GP referral, and having a properly qualified psychotherapist. Finally, the subthemes for theme three, barriers to engaging with online psychotherapy, were: stigma, need for trust and respect, self-efficacy, and lack of therapeutic space.

### 4.5.1 Comparison of qualitative results to quantitative findings

The findings were mostly consistent with those of study one which utilised the quantitative survey. In particular, the subtheme of prior experience of psychotherapy falling under the main theme of facilitators of engaging with online psychotherapy is consistent with the quantitative findings of study one. In particular, that prior experiences of f2f and online psychotherapy were significant positive predictors of attitudes towards f2f and online psychotherapy, respectively. Based on the qualitative interview findings, participants who had previous experience with psychotherapy reported these experiences as being positive, which made them feel more open to engaging with online psychotherapy. Some participants spoke of having no personal experience of attending psychotherapy, but having seen the positive impact it had for others was enough for them to feel more open to the idea of attending psychotherapy, either f2f or online. One participant spoke of attending an online mindfulness course, and whilst this is not online psychotherapy specifically, this participant reported feeling open to attending online psychotherapy due to having had a positive experience with this course. These qualitative findings gave greater insights and more context to the quantitative findings, allowing older adults to expand on the reasons why having prior experience with psychotherapy may influence their attitudes towards online psychotherapy.

The subtheme of awareness under the main theme of perceptions of online psychotherapy is also in line with the quantitative findings of study one, that having a lack of knowledge and fear of psychotherapy was a significant negative predictor of attitudes towards f2f psychotherapy. Participants

spoke of the need for more awareness-raising among older adults of online psychotherapy, with some participants suggesting promotion strategies such as having service users share their experience, having community outreach programs, and creating a television advertisement. Despite feeling that most of their generation weren't aware of online psychotherapy services, the participants themselves had a good awareness of what may be involved in the process of attending psychotherapy online. However, it is important to note that participants were provided with information leaflets before participating in interviews, which included an operational definition of online psychotherapy for the purposes of the present research. All in all, participants felt that a lack of awareness of online services in the public generally may act as a barrier to engagement with online psychotherapy. These qualitative findings provide valuable recommendations for the promotion of online psychotherapy services to older adults, bolstering the quantitative data with deeper insights.

The subtheme of self-efficacy under the main theme of barriers to engaging with online psychotherapy is in line with the quantitative findings of study one, that having negative help-seeking beliefs was a significant negative predictor of attitudes towards f2f psychotherapy. Participants reported feeling that there is a belief among older adults that they should deal with their emotional problems themselves. Participants spoke about some older people believing that they were "too old" to go to psychotherapy. Some participants mentioned feeling that the problems they faced were universal problems experienced by all people their age, and that this made them feel they could manage by themselves and would not seek out psychotherapy. This qualitative data elaborated on the quantitative findings by clarifying the sort of negative beliefs older adults are experiencing. This provides useful information on how online psychotherapy may be promoted so as to combat these beliefs, as well as helpful insight for clinicians into what intrinsic barriers older adults face when considering attending psychotherapy.

Also consistent with the quantitative findings of study one was the emergence of the subtheme of accessibility of online psychotherapy under the main theme of perceptions of online psychotherapy. This is in line with the finding that the BMHSS-R subscale "belief about inability to find a psychotherapist" was not a significant predictor of attitudes towards f2f or online psychotherapy. This implies that older adults do not consider knowing where to find an online psychotherapist to be a barrier, in fact, the qualitative interview findings suggest that older adults feel comfortable seeking out this information. This qualitative data built on the quantitative findings by providing further detail into how older adults would go about accessing online psychotherapy. In particular, participants of the qualitative study said they may seek information about accessing online psychotherapy from the HSE website, through their GP or health insurance provider. One participant even spoke about the potential value of online psychotherapy in reducing GP burden and thus the long wait times they experience trying to get

an appointment with their GP. This qualitative data provides key insights into how older adults go about accessing mental health services, and thus can inform how online psychotherapy services may be best targeted to older people.

However, there were some findings in contrast to the quantitative findings in study one. For example, stigma, transportation concerns, physician referral, concerns about psychotherapist's qualifications, and ageism were not found to be significant predictors in study one. Despite this, these potential barriers and facilitators are reflected in the qualitative subthemes of stigma, distance and anonymity, GP referral, having a properly qualified psychotherapist, and the need for trust and respect, which emerged in the qualitative interviews. This difference may be due to the differences in the samples of study one and study two. The sample in study one had a large proportion of participants who reported having previously attended psychotherapy both f2f and online. However, the sample in study two only had two participants who had previously attended f2f psychotherapy, and none who had attended online. There were also three males in study two, and hearing from them more in-depth may have allowed for more discovery of barriers such as stigma than in study one, where the majority of the sample was female. Thus, the sample in study two may have felt there were more barriers to access than the sample in study one. There were also numerous themes which were not explored using the quantitative survey in study one which emerged in the present study, including a desire for initial f2f contact, openness, having a listening ear, the need for trust and respect, and lack of therapeutic space. This may be due to the qualitative nature of study two, which may have allowed for the reporting of variables that were important for participants but were not reflected in the quantitative questionnaires used in study one.

The subtheme of comfort with technology under the main theme of perceptions of online psychotherapy was also in contrast with the quantitative findings. None of the three subscales of the STAM questionnaire included in the regression model (attitudinal beliefs, control beliefs, and gerontechnology anxiety) were found to be significant predictors of attitudes towards online psychotherapy in study one. In the qualitative interviews, participants spoke about how their generation was generally more comfortable with technology than previous generations of older adults. All participants reported that they would be open to engaging with online psychotherapy, and most reported that they had prior experience of using video call applications like Zoom or Facetime. This was in line with the demographic data from the quantitative study, where the sample reported high levels of technology use. One participant in the qualitative study referenced how the current generation of older adults had adapted to previous technological advancements, such as speaking on the telephone, and that this may lead them to be more adaptable to online video call technology than previous generations. However, some participants acknowledged that this may not be the case for all older adults and may act as a barrier to some who may need extra assistance in setting up the technology needed. The qualitative

data allowed for further elaboration on the quantitative findings, giving further insight into older adults' attitudes towards technology.

### 4.5.2 Comparison of results to findings from previous studies

*Theme one: perceptions of online psychotherapy*

Most of the present study's findings are consistent with those found in previous qualitative research of attitudes towards online psychotherapy and other forms of online mental health treatment. In relation to theme one, perceptions of online psychotherapy, one significant finding was the suggestion by participants that there be an initial f2f consultation prior to attending online appointments with a psychotherapist. This has been echoed in previous research in the area, where participants have expressed a need for f2f contact alongside using an online CBT program (Holst et al., 2017), and alongside attending psychotherapy via video call (Christensen et al., 2021). Accessibility, another subtheme of theme one, showed participants felt that online psychotherapy was accessible to them, and that they felt they knew where to go to get information about accessing it. They reported that they would use the internet to find more information, a finding which has also been reported in previous research. Bujnowska-Fedak & Mastalerz-Migas (2014) reported that older adults had an openness to using the internet as a source of mental health information.

Similarly, the finding that participants in this study reported a need to raise awareness of online interventions among older adults has been reported in previous literature (Root & Caskie, 2022; Pywell et al., 2020). One suggestion made by participants to raise awareness was to have older adults tell their stories of engaging with online psychotherapy to encourage others. This is similar to a finding from Xiang et al (2021), where participants of an online CBT program liked to hear stories of real people in the program content. Participants felt that older adults have differing levels of technical literacy and comfort with technology would be an important factor to consider in attending online psychotherapy, consistent with previous findings in this area (Posselt, Baumann & Dierks, 2024; Chow et al., 2007). Finally, the subtheme of openness was a surprising finding as all participants reported a general openness to online psychotherapy in this study, which is a finding not found in previous literature, which reports that older adults do not see online psychotherapy as a substitute for f2f treatment (Posselt, Baumann & Dierks, 2024). This may be due to the fact that all participants in the present study reported feeling confident using technology.

*Theme two: facilitators of engaging with online psychotherapy*

For theme two, the subtheme of distance and anonymity is one which has been echoed in previous research, where it has been found that having some distance from the psychotherapist, and some anonymity in attending online, can be seen as a facilitator (Kysely et al., 2020; Beattie et al., 2009). Similarly, the subtheme of having prior experience of psychotherapy was similar to findings from Xiang et al (2021) where participants reported prior experience of depression treatment as a facilitator of engaging with an online CBT program. However, this is in contrast to the findings of Posselt, Bauman & Dierks (2024), who found that having prior experience of mental health treatment may deter chronic patients from using digital therapeutic interventions, and that these interventions may be more suitable for mild to moderate patients. Thus, it can be concluded that there are differing levels of acceptance of online psychotherapy among different patient groups. As the present study was of a general, non-clinical sample, it cannot be determined how much prior experience the participants had with mental health treatment, or whether this impacted their attitudes. Participants were asked if they had prior experience of attending psychotherapy online or f2f, but this was self-reported and no further detail was requested unless provided voluntarily by the participant.

The subtheme of GP referral being an important facilitator of engagement with online psychotherapy is one which has also been reported in previous literature. Pywell et al (2020) reported that older adults found GP referral to be an important factor in their acceptance of digital mental health interventions. In particular, participants reported feeling more trust in these interventions when their GPs endorsed them (Pywell et al., 2020), similar to the findings of the present study, and other research in this area (Posselt, Baumann & Dierks, 2024). Finally, the subthemes of having a listening ear and having a properly qualified psychotherapist were surprising as they have not been reported in previous qualitative studies and provide insight into potential facilitators of engagement with online psychotherapy. Although, concerns about psychotherapist's qualifications are a barrier which has been reported in previous quantitative studies, and was measured in study one using the BMHSS-R (Pepin et al., 2015). It is possible that the importance of a psychotherapist as a listening ear was not reported in previous research due to the fact that most of this research has been done with service users. Most of the participants in the present study had no prior experience with psychotherapy, so may have viewed the process differently to those with experience of accessing services, and may have seen it more as a listening tool than a psychological treatment.

*Theme three: barriers to engaging with online psychotherapy*

Finally, for theme three, the subtheme of stigma as a barrier to engaging with online psychotherapy is one which has been reported in previous literature. In particular, participants in the

present study reported feelings that psychotherapy was “not for” older adults, who were at too late a life stage to engage with it. This has been echoed in previous research in this area (Hansen, Ghafoori & Diaz, 2020). Similarly, participants in the present study reported an expectation of self-efficacy among older adults in dealing with emotional problems by themselves, which acts as a barrier to help-seeking, another finding which has been reported in previous research (Hannaford, Shaw & Walker, 2019). The subtheme of having a need for trust and respect acting as a barrier to engaging with online psychotherapy is similar to previous findings. In particular, one study found that older adults had less trust of digital applications in general, but especially around their use in mental health treatment, and that f2f contact can improve feelings of trust (Pywell et al., 2020). Finally, the subtheme of having a lack of therapeutic space was an unexpected one which has not been reported in previous qualitative literature in this area and provides insight into further potential barriers to uptake of online psychotherapy. This may have been raised as an issue in the present study as it dealt with online psychotherapy via video call specifically, which would require a private space in the home where a service user would not be seen or heard by anyone else during their appointment. This may not have been relevant in previous research examining different types of asynchronous online interventions which did not require a therapeutic space.

### 4.5.3 Strengths

This study had several strengths, particularly in its use of qualitative interviews as part of an explanatory sequential analysis to build on the quantitative survey findings and gain deeper insights into older adults' attitudes towards online psychotherapy. The use of open-ended questions in a semi-structured interview format allowed for deep analysis and allowed the participants to lead the discussions. The use of NVivo software to conduct thematic analysis under the guidelines of Braun & Clarke (2006) is best practice in this area. The interview schedule being developed based on existing validated scales used in the quantitative survey in study one gives credence to the concepts examined and discussed in the present study. Furthermore, the interview schedule was designed based on the quantitative survey findings, in line with an explanatory sequential research design. This allowed for the ability to compare the qualitative results to the quantitative findings from study one, and further explain them. Finally, the participants were of different generations of older adults, providing insights into the attitudes among different age cohorts, and also had varying prior experiences with psychotherapy, providing insight into the general, non-clinical population.

### 4.5.4 Limitations

However, there are several limitations of the present study to note. As in study one, other factors potentially influencing attitudes such as motivation, opportunity, and capability, as cited in theoretical models such as MODE (Fazio, 1990) and COM-B (Michie, Van Stralen & West, 2011), were not considered in the present research. The interviews were relatively short due to a desire to prevent participant burden, taking into account that the study was being carried out with older participants. Having more questions could have garnered more insights. Furthermore, there was no pilot study conducted to get participant feedback on the questions, which may have provided valuable insights. The study was conducted with a relatively small sample, and having more participants may have allowed for more insights, and for more generalizable conclusions to be drawn. The small sample size was due to difficulties with recruiting participants, and limited time and resources. Thus, a more targeted recruitment strategy, more time to recruit, and perhaps interviewing participants multiple times may have yielded richer data. The sample was also all White Irish in ethnicity, meaning the findings of this study may not necessarily be generalizable, and other demographic factors and social determinants which may contribute to attitudes were not considered. Therefore, the results of the study have to be interpreted with caution as this sample was a very specific group of older adults. Moreover, the inclusion criteria being older adults aged 60+ (mean age = 76.8 years, age range 66-84 years) compared to study one's inclusion criteria being older adults aged 50+ (mean age = 62.12 years, age range 50-91 years) mean that comparison between the sample must be done with caution. Finally, this study didn't examine those with experience of online psychotherapy and whilst this could be seen as an advantage, it also means that conclusions can't be drawn about actual online psychotherapy acceptance after usage.

### 4.5.5 Future directions

Future research in this area should examine the attitudes towards online psychotherapy via video call among a general sample of older adults after usage to examine the impact of initial attitudes on engagement and experience with online psychotherapy. Further research into the stigma experienced by older adults in relation to help-seeking should be explored, to understand how this can be alleviated and help-seeking promoted in this cohort. In particular, the findings around feelings that psychotherapy is not worthwhile in later life warrant further exploration. The impact of demographic factors like gender, ethnicity, socio-economic factors and other social determinants should be examined in this age cohort to determine target groups for implementation of online psychotherapy. Similarly, further research exploring methods to improve mental health literacy in this age group is needed in order to facilitate

wider engagement with online interventions. Finally, an examination of the impact of having an initial f2f appointment prior to engaging with a psychotherapist online could be conducted to determine whether this would increase acceptability among older adults.

### 4.5.6 Conclusion

The findings of this qualitative analysis suggest that whilst older adults are generally open to the idea of online psychotherapy, particularly those who have prior experience with psychotherapy, there are still barriers to engagement which need to be addressed. This is in line with the results of the quantitative survey study, and provides further context to these findings. In particular, age-related stigma around mental health help-seeking and a lack of trust of online interventions seem to be particularly prevalent. However, there are notable facilitators to engagement, including GP referral, aspects of distance and anonymity, and having a qualified psychotherapist who acts as a listening ear. Older adults emphasised the need for increased promotion of online offerings to improve awareness, as well as having an initial f2f consultation with a psychotherapist before moving online. These barriers, facilitators, and recommendations by older adults should be considered in the design and implementation of online psychotherapy treatment.

# Chapter 5: Conclusion

## 5.1 Overview of findings

The present research consisted of two studies, resulting in an explanatory sequential mixed-methods analysis of young-old and old-old older adults' attitudes towards online psychotherapy. Study one utilised a quantitative survey which aimed to explore attitudes towards both f2f and online psychotherapy, examine the relationships between these attitudes, and identify potential predictors of attitudes towards both f2f and online psychotherapy. Study two was a qualitative semi-structured interview study which also aimed to explore young-old and old-old older adults' attitudes towards online psychotherapy and identify themes in their attitudes using thematic analysis. Furthermore, the qualitative interview schedule was designed based on the results from the initial quantitative study and aimed to provide further context and understanding to these findings. This explanatory sequential mixed-methods approach was employed to gain a deeper understanding of older adults' attitudes towards online psychotherapy among a general, non-clinical, Irish sample, which aimed to extend upon the existing literature in this area.

Study one found that there were positive correlations between participants' perceived value of and discomfort with f2f and online psychotherapy, in line with hypothesis one. This suggests that participants who valued f2f psychotherapy more highly were more likely to value online psychotherapy highly. Similarly, participants who reported greater discomfort with f2f psychotherapy were more likely to report greater discomfort with online psychotherapy. Furthermore, regression analysis of the quantitative survey data found that attitudes towards f2f psychotherapy and prior experience with online psychotherapy were predictors of attitudes towards online psychotherapy. Further regression analysis found that experience with f2f psychotherapy, help-seeking beliefs and knowledge and fear of psychotherapy were predictors of attitudes towards f2f psychotherapy. These findings were partially in line with the study's hypotheses, with hypothesis one supported, hypothesis two partially supported, and hypothesis three not supported.

Study two identified three main themes from the qualitative interviews using thematic analysis: perceptions of online psychotherapy, facilitators of engaging with online psychotherapy and barriers to engaging with online psychotherapy. Each main theme had several subthemes. The subthemes for theme one, perceptions of online psychotherapy, were: desire for initial f2f contact, openness, accessibility, awareness and comfort with technology. The subthemes for theme two, facilitators of engaging with online psychotherapy, were: distance and anonymity, prior experience of psychotherapy, having a listening ear, GP referral, and having a properly qualified psychotherapist. Finally, the subthemes for

theme three, barriers to engaging with online psychotherapy, were: stigma, need for trust and respect, self-efficacy, and lack of therapeutic space.

Several findings were reported in both studies, including that prior experiences with psychotherapy were found to impact attitudes towards online psychotherapy. In study one, prior experience with online psychotherapy was found to be a positive predictor of attitudes towards online psychotherapy, and the same was found for f2f psychotherapy. This was echoed in study two, where prior experiences with psychotherapy was a subtheme of theme two, facilitators of engaging with online psychotherapy. Participants who had positive personal experience with psychotherapy, or knew of others who had positive experiences, were more accepting of the idea of online psychotherapy. Another finding across both studies related to help-seeking beliefs among older adults and how this may impact attitudes towards online psychotherapy. In study one, having negative help-seeking beliefs was found to predict less positive attitudes towards psychotherapy. In study two, self-efficacy in dealing with one's emotional problems on one's own was found to be a subtheme of theme three, barriers to engaging with online psychotherapy. Participants reported a belief among their age group that emotional problems are private and to be handled alone, and that this creates a barrier to accessing mental health services. Finally, both studies found that mental health literacy has an impact on attitudes towards psychotherapy. In study one, having less knowledge and greater fear of psychotherapy was found to predict less positive attitudes towards psychotherapy. Similar findings were reported in study two in the awareness subtheme of theme one, perceptions of online psychotherapy. Participants reported a lack of awareness of therapeutic services among older adults, particularly online services, and stated that this may hinder engagement.

There were also several findings which emerged from study two that were not found in study one. Some were assessed in the quantitative survey in study one but were found not to be significant predictors of attitudes towards psychotherapy in the regression analyses: accessibility, stigma, GP referral, and having a properly qualified psychotherapist. One possible reason that these were not found as significant barriers on the BMHSS-R (Pepin et al., 2015) in study one is the fact that a large proportion of the sample in study one had previously attended psychotherapy. Thus, they may not have as many perceived barriers as the sample in study two, the majority of whom had not attended psychotherapy. This may be due to the fact that those who had previously attended psychotherapy may be more knowledgeable on referral pathways and not see accessibility as such a key issue, for example. Furthermore, having previously attended psychotherapy, they may be less likely to stigmatize the process, therefore may not perceive stigma to be a barrier. There were several findings from study two that were not assessed in the quantitative survey in study one: desire for initial f2f contact, openness, distance and anonymity, having a listening ear, a need for trust and respect, and a lack of therapeutic space. This

demonstrates the value of conducting explanatory sequential mixed-methods research in using qualitative methods to extend quantitative analysis.

### 5.2 Implications

The findings of this research have broad implications in terms of service design, promotion, and delivery. The quantitative findings demonstrated that prior experience with psychotherapy and having positive attitudes towards f2f psychotherapy predicted more positive attitudes towards online psychotherapy, which was echoed in the qualitative finding. These findings indicate that older adults who have previously attended f2f psychotherapy may be more likely to attend online psychotherapy, therefore, future research should explore how attitudes can be improved among all older adults, including those who have no experience attending psychotherapy. Similarly, knowledge & fear of psychotherapy was found to be a significant predictor of attitudes towards f2f psychotherapy in the initial quantitative study, whilst awareness was found to be a subtheme within the qualitative interviews. These findings imply that older adults who have greater mental health literacy may be more likely to attend online psychotherapy, therefore, future research should examine how mental health literacy can be improved in this cohort. The qualitative findings included recommendations from participants around the use of storytelling and television advertisements as promotional strategies, and the importance of GPs' awareness of services was emphasised for onward referral. Help-seeking beliefs were also found to be a significant quantitative predictor of attitudes towards f2f psychotherapy, which aligned with the qualitative subthemes of stigma and self-efficacy. These findings suggest that campaigns targeting stigma reduction and promoting help-seeking among older people may improve psychotherapy attendance among this cohort. Moreover, promoting the aspects of distance and anonymity around online psychotherapy may alleviate stigma and improve accessibility for older adults. Finally, the qualitative theme of a desire for initial f2f contact suggests that clinicians having a f2f appointment before moving online may help to build rapport with older clients and alleviate their anxieties, particularly around issues of trust.

### 5.3 Future directions

Future research could extend on this work by assessing older adults' attitudes towards online psychotherapy via video call pre- and post-engagement with such an intervention. The present research may also be conducted with different populations of older adults, including more diverse populations, particularly those managing chronic health conditions which are prevalent in this age bracket

(Chowdhury et al., 2023). Previous studies have examined the impact of demographic factors not explored in this study such as ethnicity (Drake et al., 2022; Schifeling et al., 2020; Cotton et al., 2016; Czaja et al., 2006), SES (Cotton et al., 2016; Chen & Chan, 2014), and education level (Bujnowska-Fedak & Mastalerz-Migas, 2014; Chen & Chan, 2014; Heart & Kalderon, 2013; Niehaves & Plattfaut, 2011; Czaja et al., 2006) on attitudes towards online psychotherapy, and these effects could be further investigated. Moreover, whilst this study aimed to examine attitudes among a general, non-clinical sample of young-old and old-old older adults, many of the participants in study one had previous experience of attending psychotherapy. Future studies should aim to explore attitudes towards psychotherapy among samples with no prior experience of psychotherapy to determine the attitudes of the wider population of older adults. This is particularly crucial as older adults underutilize mental health services in proportion to their population size when compared to other age groups (O'Donnell et al., 2021). Further research examining help-seeking behaviours, mental health literacy, and stigma among older adults is needed to understand the particular needs of this age group when designing novel technological interventions. One key finding which emerged from study two was that older adults would see having an initial f2f consultation with a psychotherapist as a facilitator to engaging with online psychotherapy. Research exploring this in terms of feasibility, acceptability and efficacy may improve the usage of online psychotherapy among older adults.

### 5.4 Conclusions

In conclusion, Irish young-old and old-old older adults have more positive attitudes towards f2f than online psychotherapy, however, they report an openness to online psychotherapy. They report barriers to engaging with psychotherapy including feeling a sense of self-efficacy in dealing with their emotions, stigma, and lack of awareness of services. Furthermore, particularly relating to online psychotherapy, perceptions that there will be a lack of trust, respect and therapeutic space in accessing psychotherapy online act as barriers to engagement. However, older adults reported several facilitators to engagement, including feeling comfortable using technology and having a sense of distance and anonymity online. Other facilitators included having prior experience of psychotherapy, seeing a psychotherapist as a listening ear, obtaining a GP referral, and attending a properly qualified psychotherapist. Participants noted that whilst they may not personally wish to use online psychotherapy services, they recognized the value they could provide to others their age in terms of increased accessibility. Overall, older adults reported an openness to online psychotherapy, and recommended the implementation of initial f2f appointments to alleviate anxieties and make the process more approachable. These findings provide deeper insights into the attitudes of young-old and old-old older adults towards

both f2f and online psychotherapy, and recommendations which should be considered when implementing such services moving forward.

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**Appendix A**

Statement of ethical approval for study one

DKIT
An Scoil Sláinte & Eolaíochta
School of Health and Science

Ms Siofra McCrum,
Department of Nursing, Midwifery & Early Years,
Dundalk Institute of Technology,
Dundalk,
Co. Louth

22nd March 2023

**Re: Exploring Older Adults' Attitudes Towards Online and Face-to-face Psychotherapy**

Dear both,

The above study was discussed at the Ethics Committee on the 6th March 2023. I acknowledge receipt of your amendments dated the 22nd March 2023. This study is now granted ethical approval. Wishing you the best of luck with your research.

Yours sincerely,

Edel Healy

_____

Dr.Edel Healy
Chair of School of Health & Science Ethics Committee

Cc: Dr Jemma McGourty/Dr. Orla Moran

## Appendix B

Participant information leaflet for study one

### Participant Information Leaflet

**Study title:** Exploring Older Adults' Attitudes Towards Online and Face-to-face Psychotherapy

**Researcher Name:** Síofra McCrum
**Email address of Researcher:** siofra.mccrum@dkit.ie
**Research Supervisor Name:** Dr. Jemma McGourty & Dr. Orla Moran

You are being invited to take part in a research study to be carried out at Dundalk Institute of Technology (DkIT). Before you decide whether or not you wish to take part, you should read the information provided below carefully and, if you wish, discuss it with your family or friends. Take time to ask questions – don't feel rushed and don't feel under pressure to make a quick decision.
You should clearly understand the risks and benefits of taking part in this study so that you can make a decision that is right for you. This process is known as 'Informed Consent'. You can change your mind about taking part in the study any time you like. Even if the study has started, you can still opt out. You don't have to give us a reason.

**Why is this study being done?**
This study aims to examine older adults' attitudes towards face-to-face and online psychotherapy/counselling. Older adults often face barriers to accessing traditional face-to-face (in-person) psychotherapy/counselling, such as physical limitations, limited access to transport, cost, stigma and lack of awareness of mental health services. This research aims to determine to what extent these factors affect attitudes towards psychotherapy, both face-to-face and online. Online psychotherapy/counselling is defined in this study as partaking in psychotherapy via video call with a psychotherapist over the internet, such as via applications like Zoom or Skype.

**Who is organising and funding this study?**
This study is being conducted by a postgraduate student in DkIT for the purpose of obtaining a Master's degree. This student is funded by the Higher Education Authority under the Technological University Transformation Fund.

**Why am I being asked to take part?**
You are being asked to participate in this research as you satisfy the necessary eligibility criteria for this study:

- You are aged 50 or older

You cannot take part if you have any of the following:

- A below conversational level of English
- A diagnosis of memory/Cognitive impairment such as Stroke, Dementia, Alzheimer's disease.

**How will the study be carried out?**
You will have the opportunity to complete the study online or in-person. You will be asked to complete a consent form before taking part in the study. If you agree to take part you will complete a questionnaire, the questions will surround your experience using technology and mental health services, and how you feel about attending psychotherapy/counselling in different settings. You are not obliged to answer any questions you are uncomfortable with and can exit the study at any time for any reason.

**What will happen to me if I agree to take part?**
If you agree to take part, you will be asked to complete a questionnaire, which will take approximately 30 minutes. You can complete these questionnaires online or in-person. All your answers will be anonymised and your data will only be accessible to the primary researchers in this study, the Master's student (Síofra McCrum) and their supervisors (Dr. Jemma McGourty and Dr. Orla Moran).

**What are the benefits?**
Taking part in this study will broaden the knowledge base of older adults' attitudes towards online and face-to-face psychotherapy and the factors which affect their attitudes. This will help us to identify ways in which we can better support older adults.

**What are the risks?**
No greater risks are foreseen from participating in this research than those encountered on an everyday basis. However, if you become upset or distressed at any point during the research, it is important that you let someone know. You may bring this to the attention of the researcher, psychologist, doctor or a friend or family member. If you prefer, you may also contact some of the confidential support services listed below:
**AWARE:** www.aware.ie or 1890-303302
**Samaritans:** www.samaritans.org 1850-609090
Remember this research is entirely voluntary in nature and you may decide not to participate or to withdraw at any point without giving a reason.

**Is the study confidential?**
Your identity will remain confidential at all times. The information that we collect from you during this study will be stored securely. Any identifiable information (e.g. your signed consent form) will be stored separately from your questionnaire data. Only the researchers mentioned in this leaflet will have access to your anonymised data. This data may contain information such as your age but will not contain any other identifiable information such as your name, address, phone number or email address.

We will use results from the study in research reports and publications, but we will never use your name or other identifying information in these. We are happy to share the findings of the study with you, once the study has ended and the information collected has been analysed. The data collected in this study may be used for future research projects. We will not keep the

information collected during the study for more than 5 years. After this time, we will ensure all information is destroyed. This is in line with Data Protection Legislation.

**Where can I get further information?**

If you need any further information now or at any time in the future, please contact: siofra.mccrum@dkit.ie

## Appendix C

Participant consent form for study one

**Participant Consent Form**

**Study title:** Exploring Older Adults' Attitudes Towards Online and Face-to-face Psychotherapy

Please tick the box (yes/no) that you wish to select:

| | | |
|---|---|---|
| I have read and understood the **Information Leaflet** about this research project. The information has been fully explained to me and I have been able to ask questions, all of which have been answered to my satisfaction. | **Yes** | **No** |
| I confirm that I have never been diagnosed with a cognitive/memory impairment (e.g., stroke, dementia, Alzheimer's disease) and give my full informed consent to participate in this study. | **Yes** | **No** |
| I understand that I don't have to take part in this study and that I can opt out at any time. I understand that I don't have to give a reason for opting out and I understand that opting out won't affect my future. | **Yes** | **No** |
| I am aware of the potential risks of this research study. | **Yes** | **No** |
| I have been assured that information about me will be kept private and confidential. | **Yes** | **No** |
| I am aware I can request a copy of the Information Leaflet, and this consent form for my records. | **Yes** | **No** |
| **Storage and future use of information:** I give my permission for information collected about me to be stored or electronically processed for the purpose of research and to be used in related studies or other studies in the future but only if the research is approved by a Research Ethics Committee. | **Yes** | **No** |

| | | |
|---|---|---|
| Participant Name (Block Capitals) | Participant Signature | Date |

**To be completed by the Researcher:**

I, the undersigned, have taken the time to fully explain to the above participant the nature and purpose of this study in a way that they could understand. I have explained the risks involved as well as the possible benefits. I have invited them to ask questions on any aspect of the study that concerned them.

| | | | |
|---|---|---|---|
| Name (Block Capitals) | Qualifications | Signature | Date |

**Appendix D**

Ethical amendment approval

DKIT
An Scoil Slainte & Eolaiochta
School of Health and Science

Ms Siofra McCrum,
Department of Nursing, Midwifery & Early Years,
Dundalk Institute of Technology,
Dundalk,
Co. Louth

22nd March 2023

**Re: Exploring Older Adults' Attitudes Towards Online and Face-to-face Psychotherapy**

Dear both,

The above study was approved by the Ethics Committee on the 22nd March 2023. I acknowledge receipt of your amendments dated the 10th October 2023. On behalf of the Committee under Chair's action I approve these amendments. Wishing you the best of luck with your research.

Yours sincerely,

Edel Healy

Dr.Edel Healy
Chair of School of Health & Science Ethics Committee

Cc: Dr Jemma McGourty/Dr. Orla Moran

## Appendix E

Gatekeeper letter for study one

Dear [Gatekeeper Name]

My name is Síofra McCrum and I'm currently beginning a research project for my Master's degree at Dundalk Institute of Technology.

The project has been approved by the DkIT Research Ethics Committee and will assess older adults' attitudes towards face-to-face and online psychotherapy using a questionnaire.

I'm writing to ask your permission to be allowed access to your [e.g. mailing list, facility] to distribute the questionnaire. This should take participants approximately 30 minutes to complete and can be conducted at a convenient time and date to be arranged. Alternatively, the flyer attached can be circulated among your members should they wish to partake in the study online. They can contact me via email to gain access to the study.

All answers and results from the research are kept strictly anonymous and confidential and the results will be reported in a research paper available to all participants on completion.

Participants are invited on a voluntary basis and are free to withdraw from the study at any time, for any reason.

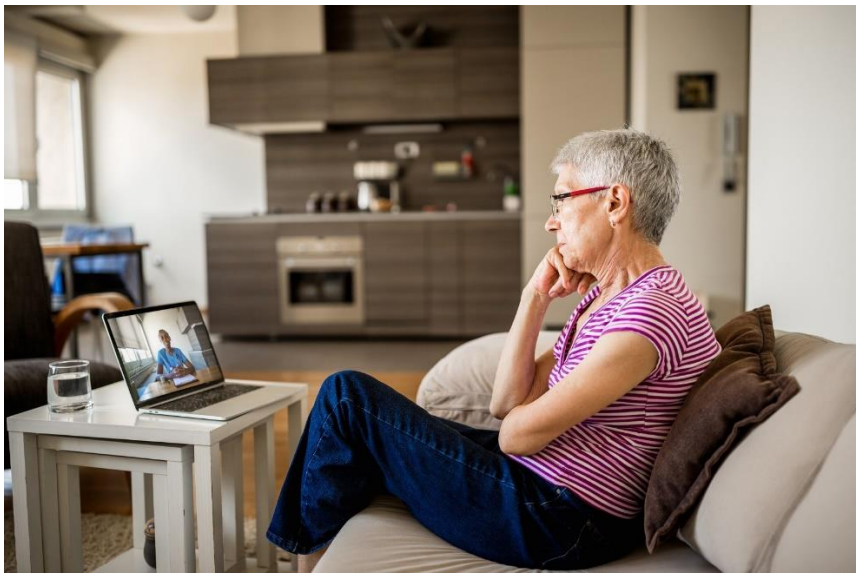
If you have any questions, please feel free to e-mail me at siofra.mccrum@dkit.ie. Thank you for your time and I will be in touch with you again soon.

Yours faithfully,
Síofra McCrum

**Appendix F**

Information flyer for study one

# Older adults (aged 50+) needed for research study



This research will examine older adults' attitudes towards attending face-to-face and online psychotherapy using questionnaires

The study can be completed online or in-person and will take 15-30 mins to complete

**Scan QR code to complete survey!**

**If you are interested in taking part, please get in touch:**

**Name:** Síofra McCrum

**Email:** siofra.mccrum@dkit.ie

**Appendix G**

Demographic questionnaire for study one

Demographic Questionnaire

What age are you?

---

What is your gender? e.g., male, female, other (please specify)

---

How often do you use technology in your daily life? e.g., mobile phone, tablet, laptop, etc.

- Never
- Occasionally
- Monthly
- Weekly
- Daily

Do you have any prior experience using online video call applications? e.g., Skype, Zoom

- Yes
- No

Do you have any prior experience of attending psychotherapy in-person (face-to-face)? i.e. an appointment in-person with a psychotherapist or counsellor

- Yes
- No

Do you have any prior experience of attending psychotherapy remotely via telephone or video call?

- Yes
- No

**Appendix H**

Senior Technology Acceptance Model (STAM) questionnaire (Chen & Lou, 2020)

The following set of questions relate to your perceptions towards using technology (e.g., mobile phone, tablet, laptop, etc.). Please rate the following statements about your use of technology from 1-10, by circling the desired number.

| **Attitudinal beliefs** | Strongly disagree | | | | | | | | | Strongly agree |
|---|---|---|---|---|---|---|---|---|---|---|
| Using technology would enhance your effectiveness in daily activities. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| You would find technology is useful in your daily activities. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| You like the idea of using technology. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| **Control beliefs** | Strongly disagree | | | | | | | | | Strongly agree |
| You could be skillful at using technology. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| You could complete a task using technology if there is someone to demonstrate how. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| Your financial status does not limit your activities in using technology. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| When you want or need to use technology, it is accessible to you. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| **Gerontechnology anxiety** | Strongly disagree | | | | | | | | | Strongly agree |
| You feel apprehensive about using technology. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| You hesitate to use the technology for fear of making mistakes you cannot correct. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| **Health conditions** | Very poor | | | | | | | | | Very Good |
| How are your general health conditions? | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| | Very uneasy | | | | | | | | | Very easy |
| How well are you able to concentrate? | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| | Very unsatisfied | | | | | | | | | Very satisfied |
| How satisfied are you with your personal relationships? | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| | Very unsatisfied | | | | | | | | | Very satisfied |
| How satisfied are you with the support received from friends and family? | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| | Very unsatisfied | | | | | | | | | Very satisfied |
| How satisfied are you with your quality of life? | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

## Appendix I

Barriers to Mental Health Services Scale-Revised (BMHSS-R) (Pepin et al., 2015)

Listed below are potential reasons why people do not seek out mental health services (e.g. counseling, psychotherapy). Please read each one carefully and indicate the extent to which you agree or disagree that the following barriers affect YOUR use of mental health services. Please try to pick an answer for each item, even if you are unsure.

| | Strongly Disagree | Disagree | Agree | Strongly Agree |
|---|---|---|---|---|
| 1. A psychotherapist (counsellor) would not understand me or my problems | ☐ | ☐ | ☐ | ☐ |
| 2. Psychotherapists (counsellors) would not find working with someone my age worthwhile | ☐ | ☐ | ☐ | ☐ |
| 3. Feelings of sadness are typical for people my age | ☐ | ☐ | ☐ | ☐ |
| 4. I would not tell my physician (GP) if I was feeling down or depressed | ☐ | ☐ | ☐ | ☐ |
| 5. I would not even know how to begin to look for a psychotherapist (counsellor) | ☐ | ☐ | ☐ | ☐ |
| 6. Normal people do not go to psychotherapy (counselling) | ☐ | ☐ | ☐ | ☐ |
| 7. Psychotherapy (counselling) is for people with severe mental health problems | ☐ | ☐ | ☐ | ☐ |
| 8. I would feel embarrassed or ashamed to see a psychotherapist (counsellor) | ☐ | ☐ | ☐ | ☐ |
| 9. I do not feel confident I could select a psychotherapist (counsellor) who is right for me | ☐ | ☐ | ☐ | ☐ |
| 10. My physician does not have time to address mental health concerns | ☐ | ☐ | ☐ | ☐ |
| 11. A person's problems are his or her own business, not anybody else's | ☐ | ☐ | ☐ | ☐ |
| 12. It is difficult for me to find transportation to the psychotherapist (counsellor) | ☐ | ☐ | ☐ | ☐ |
| 13. A psychotherapist (counsellor) is not qualified to help me with my problems | ☐ | ☐ | ☐ | ☐ |
| 14. I am afraid of what people would think of me if I went to a psychotherapist (counsellor) | ☐ | ☐ | ☐ | ☐ |
| 15. I have always solved my own problems | ☐ | ☐ | ☐ | ☐ |
| 16. I am not sure if psychotherapy (counselling) really works or is effective | ☐ | ☐ | ☐ | ☐ |
| 17. I am concerned that I would not be comfortable with a psychotherapist (counsellor) | ☐ | ☐ | ☐ | ☐ |
| 18. A lot of people feel sad and down | ☐ | ☐ | ☐ | ☐ |
| 19. Seeing a psychotherapist (counsellor) is a sign of weakness | ☐ | ☐ | ☐ | ☐ |
| 20. It would be too difficult to get transportation for weekly appointments | ☐ | ☐ | ☐ | ☐ |

| | | | | |
|---|---|---|---|---|
| 21. A psychotherapist (counsellor) cannot understand the problems of someone my age | ☐ | ☐ | ☐ | ☐ |
| 22. Psychotherapy (counselling) is too expensive | ☐ | ☐ | ☐ | ☐ |
| 23. I cannot find a psychotherapist (counsellor) who works with someone my age | ☐ | ☐ | ☐ | ☐ |
| 24. It is normal to feel more depression as we age | ☐ | ☐ | ☐ | ☐ |
| 25. Psychotherapists (counsellors) have not been trained to work with people my age | ☐ | ☐ | ☐ | ☐ |
| 26. I am concerned that the information I share with a psychotherapist (counsellor) will not be kept private | ☐ | ☐ | ☐ | ☐ |
| 27. It would be normal for me to get sad or down given the circumstances of my life | ☐ | ☐ | ☐ | ☐ |
| 28. I do not know what to look for in a psychotherapist (counsellor) | ☐ | ☐ | ☐ | ☐ |
| 29. People my age cannot benefit from psychotherapy (counselling) | ☐ | ☐ | ☐ | ☐ |
| 30. I am uncomfortable with personal questions | ☐ | ☐ | ☐ | ☐ |
| 31. I cannot afford psychotherapy (counselling) | ☐ | ☐ | ☐ | ☐ |
| 32. I do not know anyone who has benefitted from psychotherapy (counselling) | ☐ | ☐ | ☐ | ☐ |
| 33. I do not know the reasons people go to psychotherapy (counselling) | ☐ | ☐ | ☐ | ☐ |
| 34. I would not know how to find a psychotherapist (counsellor) | ☐ | ☐ | ☐ | ☐ |
| 35. I do not drive | ☐ | ☐ | ☐ | ☐ |
| 36. People my age cannot change | ☐ | ☐ | ☐ | ☐ |
| 37. Psychotherapists' (counsellors') time is better spent working with younger people | ☐ | ☐ | ☐ | ☐ |
| 38. Psychotherapists (counsellors) would think working with someone my age is a waste of time | ☐ | ☐ | ☐ | ☐ |
| 39. I need to solve my own problems | ☐ | ☐ | ☐ | ☐ |
| 40. My insurance does not cover mental health care | ☐ | ☐ | ☐ | ☐ |
| 41. Public transportation is not available or too burdensome | ☐ | ☐ | ☐ | ☐ |
| 42. It would be difficult for me to ask my physician (GP) to refer me to a psychotherapist (counsellor) | ☐ | ☐ | ☐ | ☐ |
| 43. I cannot afford transportation to a psychotherapist's (counsellor's) office | ☐ | ☐ | ☐ | ☐ |
| 44. It is hard for me to admit that I need professional help | ☐ | ☐ | ☐ | ☐ |

## Appendix J

Face-to-face Counselling Attitudes Scale (FCAS) and Online Counselling Attitudes Scale (OCAS)

(Rochlen, Beretvas & Zack, 2004)

These final questionnaires will ask about your attitudes toward seeking counselling through either of two methods: (a) **online** counselling (where you would interact with a counsellor using the internet via video call) or (b) **face-to-face** counselling (where you would go to a counsellor's office in person).

Please read the questions carefully because the sets of questions are similar. However, the first 10 pertain to **online** counselling and the last 10 pertain to **face-to-face** counselling. There are no "wrong" answers, and the only right ones are the ones you honestly feel or believe.

| | Strongly Disagree | Disagree | Somewhat Disagree | Somewhat Agree | Agree | Strongly Agree |
|---|---|---|---|---|---|---|
| Value of **Online** Counselling | | | | | | |
| Using **online** counselling would help me learn about myself | | | | | | |
| If a friend had personal problems, I might encourage him/her to consider **online** counselling | | | | | | |
| I would confide my personal problems in an **online** counsellor | | | | | | |
| It could be worthwhile to discuss my personal problems with an **online** counsellor | | | | | | |
| If **online** counselling were available at no charge, I would consider trying it | | | | | | |
| Discomfort with **Online** Counselling | | | | | | |
| If I were having a personal problem, seeking help with an **online** counsellor would be the last option I would consider | | | | | | |
| I would feel uneasy discussing emotional problems with an **online** counsellor | | | | | | |
| I would dread explaining my problems to an **online** counsellor | | | | | | |
| I think it would take a major effort for me to schedule an | | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| appointment with an **online** counsellor | | | | | | |
| I would be afraid to discuss stressful events with an **online** counsellor | | | | | | |

| | Strongly Disagree | Disagree | Somewhat Disagree | Somewhat Agree | Agree | Strongly Agree |
|---|---|---|---|---|---|---|
| Value of **Face-to-face** Counselling | | | | | | |
| Using **face-to-face** counselling would help me learn about myself | | | | | | |
| If a friend had personal problems, I might encourage him/her to consider **face-to-face** counselling | | | | | | |
| I would confide my personal problems in a **face-to-face** counselling session | | | | | | |
| It could be worthwhile to discuss my personal problems with a **face-to-face** counsellor | | | | | | |
| If **face-to-face** counselling were available at no charge, I would consider trying it | | | | | | |
| Discomfort with **Face-to-face** Counselling | | | | | | |
| If I were having a personal problem, seeking help with a **face-to-face** counsellor would be the last option I would consider | | | | | | |
| I would feel uneasy discussing emotional problems with a **face-to-face** counsellor | | | | | | |
| I would dread explaining my problems to a **face-to-face** counsellor | | | | | | |
| I think it would take a major effort for me to schedule an appointment with a **face-to-face** counsellor | | | | | | |
| I would be afraid to discuss stressful events with a **face-to-face** counsellor | | | | | | |

**Appendix K**

Statement of ethical approval for study two

DKIT
An Scoil Sláinte & Eolaíochta
School of Health and Science

Ms Siofra McCrum,
Department of Nursing, Midwifery & Early Years,
Dundalk Institute of Technology,
Dundalk,
Co. Louth

8th April 2024

**Re: Exploring Older Adults' Attitudes Towards Online and Face-to-face Psychotherapy**

Dear Siofra,

The above study was reviewed by members of the School of Health & Science Ethics Committee on the 28th March 2024. I acknowledge receipt of your amendments dated the 4th April 2024. This study is now granted ethical approval. Wishing you the best of luck with your research.

Yours sincerely,

Edel Healy

_____

Dr.Edel Healy
Chair of School of Health & Science Ethics Committee

Cc: Dr Jemma McGourty/Dr. Orla Moran

## Appendix L

Participant information leaflet for study two

**Participant Information Leaflet**

**Study title:** Exploring Older Adults' Attitudes Towards Online and Face-to-face Psychotherapy

**Researcher Name:** Síofra McCrum **Email address of Researcher:** siofra.mccrum@dkit.ie

**Research Supervisor Name:** Dr. Jemma McGourty & Dr. Orla Moran

You are being invited to take part in a research study to be carried out at Dundalk Institute of Technology (DkIT). Before you decide whether or not you wish to take part, you should read the information provided below carefully and, if you wish, discuss it with your family or friends. Take time to ask questions – don't feel rushed and don't feel under pressure to make a quick decision. You should clearly understand the risks and benefits of taking part in this study so that you can make a decision that is right for you. This process is known as 'Informed Consent'. You can change your mind about taking part in the study any time you like. Even if the study has started, you can still opt out. You don't have to give us a reason.

**Why is this study being done?**
This study aims to examine older adults' attitudes towards online psychotherapy/counselling. Older adults often face barriers to accessing traditional face-to-face (in-person) psychotherapy/counselling, such as physical limitations, limited access to transport, cost, stigma and lack of awareness of mental health services. This research aims to determine to what extent these factors affect attitudes towards psychotherapy. Online psychotherapy/counselling is defined in this study as partaking in psychotherapy via video call with a psychotherapist over the internet, such as via applications like Zoom or Skype.

**Who is organising and funding this study?**
This study is being conducted by a postgraduate student in DkIT for the purpose of obtaining a Master's by Research. This student is funded by the Higher Education Authority under the Technological University Transformation Fund.

**Why am I being asked to take part?**
You are being asked to participate in this research as you satisfy the necessary eligibility criteria for this study:

- You are aged 60 or older

You cannot take part if you have any of the following:

- A below conversational level of English
- A diagnosis of memory/cognitive impairment

**How will the study be carried out?**
You will have the opportunity to complete the interview over the phone or in-person. You will be asked to complete a consent form before taking part in the study. If you agree to take part, you will be asked a series of questions about your attitudes towards attending online psychotherapy/counselling. You are not obliged to answer any questions you are uncomfortable with and can exit the study at any time for any reason.

**What will happen to me if I agree to take part?**
If you agree to take part, you will be asked to complete an interview, which will take approximately 30 minutes. You can complete this interview by telephone or in-person. All your answers will be recorded and anonymised. Interview transcripts will be typed up from the interview recordings by the researcher and coded with an anonymous identifier such as "participant 1". Your data will only be accessible to the primary researchers in this study, the Master's student (Síofra McCrum) and their supervisors (Dr. Jemma McGourty and Dr. Orla Moran).

**What are the benefits?**
Taking part in this study will broaden the knowledge base of older adults' attitudes towards online psychotherapy and the factors which affect their attitudes. This will help us to identify ways in which we can better support older adults.

**What are the risks?**
No greater risks are foreseen from participating in this research than those encountered on an everyday basis. You will be asked questions relating to mental health and attending mental health services. There is a question in relation to prior experience attending psychotherapy and you can choose not to answer this question or any other question that you are uncomfortable with. If you become upset or distressed at any point during the research, it is important that you let someone know. You may bring this to the attention of the researcher, psychologist, doctor or a friend or family member. If you prefer, you may also contact some of the confidential support services listed below:
**AWARE:** www.aware.ie or 1890-303302 **Samaritans:** www.samaritans.org 1850-609090
Remember this research is entirely voluntary in nature and you may decide not to participate or to withdraw at any point without giving a reason.

**Is the study confidential?**
Your identity will remain confidential at all times. The information that we collect from you during this study will be stored securely. Any identifiable information (e.g. your signed consent form) will be stored separately from your interview data. Only the researchers mentioned in this leaflet will have access to your anonymised data. This data may contain information such as your age but will not contain any other identifiable information such as your name, address, phone number or email address. We will use results from the study in research reports and publications, but we will never use your name or other identifying information in these. We are happy to share the findings of the study with you, once the study has ended and the information collected has been analysed. The data collected in this study may be used for future research projects. We will not keep the information collected during the study for more than 5 years. After this time, we will ensure all information is destroyed. This is in line with Data Protection Legislation.

**Where can I get further information?**
If you need any further information now or at any time in the future, please contact: siofra.mccrum@dkit.ie

**Appendix M**

Participant consent form for study two

## Participant Consent Form

**Study title:** Exploring Older Adults' Attitudes Towards Online and Face-to-face Psychotherapy

| | | |
|---|---|---|
| I have read and understood the **Information Leaflet** about this research project. The information has been fully explained to me and I have been able to ask questions, all of which have been answered to my satisfaction. | **Yes** | **No** |
| I confirm that I have never been diagnosed with a cognitive/memory impairment and give my full informed consent to participate in this study. | **Yes** | **No** |
| I understand that I don't have to take part in this study and that I can opt out at any time. I understand that I don't have to give a reason for opting out and I understand that opting out won't affect my future. | **Yes** | **No** |
| I am aware of the potential risks of this research study. | **Yes** | **No** |
| I have been assured that information about me will be kept private and confidential. | **Yes** | **No** |
| I am aware I can request a copy of the Information Leaflet, and this completed consent form for my records. | **Yes** | **No** |
| **Storage and future use of information:**<br>I give my permission for information collected about me to be stored or electronically processed for the purpose of research and to be used in related studies or other studies in the future but only if the research is approved by a Research Ethics Committee. | **Yes** | **No** |

| | |
|---|---|
| Participant Name (Block Capitals) | Participant Signature | Date |

**To be completed by the Researcher:**

I, the undersigned, have taken the time to fully explain to the above participant the nature and purpose of this study in a way that they could understand. I have explained the risks involved as well as the possible benefits. I have invited them to ask questions on any aspect of the study that concerned them.

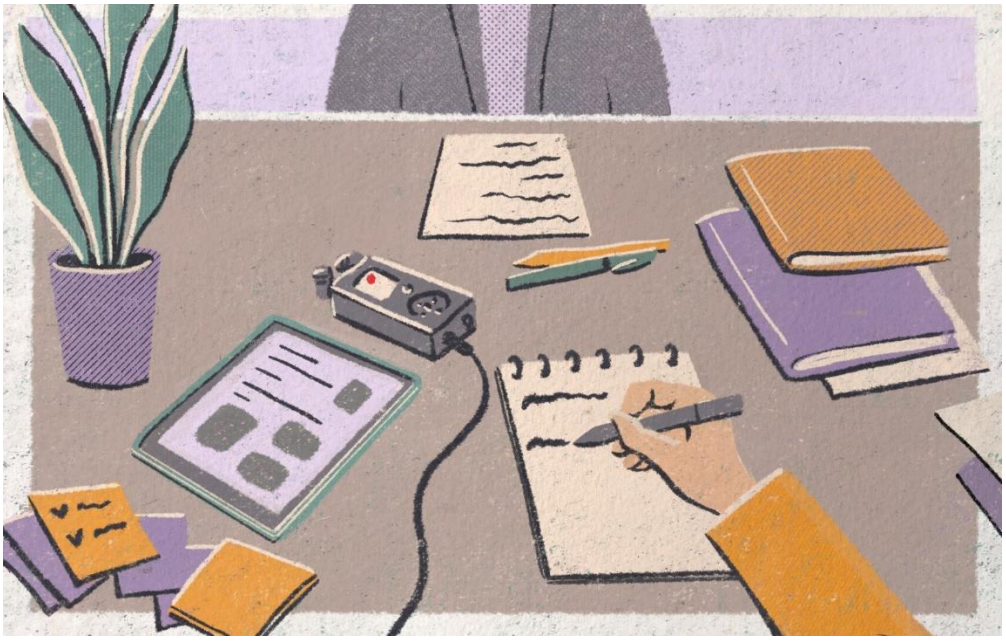
| | | | |
|---|---|---|---|
| Name (Block Capitals) | Qualifications | Signature | Date |

**Appendix N**

Information flyer for study two

# Are you aged 60+ and interested in online psychotherapy?

# I want to hear from YOU!



This research will examine older adults' attitudes towards attending face-to-face and online psychotherapy using interviews

The interview can be completed by phone, online or in-person and will take approximately 30 minutes to complete

**If you are interested in taking part, please get in touch:**

**Name:** Síofra McCrum

**Email:** siofra.mccrum@dkit.ie

## Appendix O

Interview schedule for study two

**Interview Schedule**

**Study Title:** Exploring Older Adults' Attitudes Towards Online and Face-to-face Psychotherapy

**Researcher:** Síofra McCrum

*Hello, I'm Síofra, thank you for your time today. Just to remind you this interview is being carried out as part of a research project at DkIT to explore attitudes towards online psychotherapy. The interview should take approximately thirty minutes and will be recorded for research purposes. All your responses will be completely confidential, and you will be provided with a pseudonym. No identifying information will be used in any of your quotes. You do not have to answer any question you feel uncomfortable with and can withdraw your consent at any time. I'm going to read through the consent form with you now. Do you have any questions before we begin?*

**Question 1:** What is your understanding of the term "online psychotherapy"?
*Prompt: What do you think attending an online therapy appointment may involve/consist of?*

**Question 2:** How do you think you may go about accessing online psychotherapy?
*Prompt: Who may they contact/what resources may they seek out for information/referral?*

**Question 3:** Do you think there could be any benefits to seeking online psychotherapy? If so, what?
*Prompt: Do you think there could be any advantages to attending online psychotherapy rather than attending face-to-face appointments for someone your age?*

**Question 4:** Do you think there could be any factors that may prevent you from seeking online psychotherapy? If so, what?
*Prompt: Can you think of any reasons why someone your age may not wish to attend online psychotherapy?*

**Question 5:** Do you think you would be willing to engage with online psychotherapy?
*Prompt: If online psychotherapy were available to a person your age, do you think they would access it if needed?*

**Question 6:** Do you have any personal experience attending psychotherapy, either face-to-face or online?
*Prompt: If yes, how would you describe that experience? If no, do you think you would be willing to engage with it?*

**Question 7:** Is there anything you wish to add or that you think would be helpful for me to know?

**Appendix P**

NVivo Codebook

## Codes

| Name | Description | Files | References |
|---|---|---|---|
| Barriers to engaging with online psychotherapy | Factors which participants identify as potential barriers to engaging with online psychotherapy | 5 | 33 |
| Lack of therapeutic space | The potential negative impact of not having a dedicated therapy space when attending online psychotherapy appointments, like a traditional therapy room | 2 | 2 |
| Need for trust and respect | The importance of trust and respect in the therapeutic relationship, and the difficulties online psychotherapy might pose for establishing this | 1 | 13 |
| Self-efficacy | The idea among older adults that they can solve their problems alone, and do not think psychotherapy is for them | 3 | 5 |
| Stigma | The impact of societal attitudes towards mental health and seeking psychotherapy, particularly past negative attitudes which are in the memory of older adults | 3 | 13 |
| Facilitators of engaging with online psychotherapy | Factors which participants identify as potential facilitators to engaging with online psychotherapy | 5 | 51 |
| Distance & anonymity | The idea that the distance and anonymity involved in attending online psychotherapy compared to f2f appointments may alleviate barriers such as transport and stigma | 5 | 14 |
| GP referral | The importance of GP referral, and how the support of GPs for online psychotherapy may impact awareness and openness to it among older adults | 3 | 8 |
| Having a listening ear | The potential value of online psychotherapy providing a listening ear for older people | 3 | 13 |

| | | | |
|---|---|---|---|
| Having a properly qualified therapist | The importance of psychotherapists having the appropriate qualifications and the online psychotherapy interaction to be as professional as a f2f appointment | 2 | 5 |
| Prior experience of psychotherapy | The impact having prior experience of psychotherapy has on attitudes towards online psychotherapy | 3 | 11 |
| Perceptions of online psychotherapy | Participants' general understanding and perceptions of online psychotherapy, which are factors not necessarily seen as barriers or facilitators | 5 | 58 |
| Accessibility | The ways in which participants identified they may access online psychotherapy | 4 | 11 |
| Awareness | Participants' ideas about the awareness of online psychotherapy among older adults | 3 | 12 |
| Comfort with technology | Participants' ideas about older adults' comfort with technology | 4 | 7 |
| Desire for initial f2f | The idea some participants had that an initial f2f appointment may be helpful to build rapport and comfort before moving online | 3 | 15 |
| Openness | The idea that older adults may be more open to discussing mental health and accessing online psychotherapy than in the past | 5 | 13 |