An Investigation of the Factors Relating to Attendance of Psychological Appointments

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Abstract

Background Psychological therapy is an important tool to improve mental health concerns. However, the high prevalence of mental health concerns is not reflected by mental health service use. Many individuals who are referred to a service do not attend or do not complete therapy.

Methods A quantitative cross-sectional survey design was used to investigate psychological and practical factors which may impact attendance of psychological appointments. The factors investigated included: therapy anxiety, safety behaviours, intrinsic motivation, stigma, fear of disclosure, cultural safety, and practical factors. One qualitative method using an open ended question at the end of the survey was used to elicit further factors beyond the main survey questions that may predict non-attendance. Following exclusions, 669 participants were included in the final sample from Australia, New Zealand, Canada and the United Kingdom.

Results The results of the study found statistically significant relationships between non-attendance and the following factors: therapy anxiety, safety behaviours, intrinsic motivation and self-stigma. Among the practical factors investigated, three of the 12 factors demonstrated statistically significant relationships with non-attendance these included, part-time employment, forgotten appointments, and family commitments. The results of the qualitative analysis highlighted five main categories of factors identified by participants. These categories included: psychological factors, practical factors, clinical factors, other commitments, and service factors.

Conclusions Of the factors investigated in this study, therapy anxiety was the strongest psychological predictor of not attending therapy across the statistical models. Furthermore, therapy anxiety was one of the most self-reported reasons for not attending psychological appointments. While therapy anxiety was the strongest predictor, the study

demonstrated a range of factors which related to individuals' likelihood of attending psychological appointments. The findings of the current study may suggest that interventions that target a range of the most commonly identified factors would be more effective than trying to target just one of the various factors that cause non-attendance.

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Glossary of Terms

Term	Definition
Mana	Prestige, authority, control, power, influence, status, spiritual power, charisma - *mana* is a supernatural force in a person, place or object
Māori	Māori, indigenous New Zealander, indigenous person of Aotearoa/New Zealand
Pākehā	New Zealander of European descent
Taiao	The physical environment for the client or whānau
Tangata whenua	Local people, hosts, indigenous people
Waka	Canoe, vehicle, boat
Whānau	Family, extended family, family group

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CHAPTER 1: Introduction

Mental health concerns affect millions of people worldwide. In 2017, a total of approximately 792 million people were estimated to be living with a mental health concern worldwide (approximately one in 10 people; Ritchie & Roser, 2018). Mental health concerns are broadly under-reported. Thus, this figure should be recognised as an estimate. This estimate was calculated based on a combination of epidemiological and medical data, surveys, and meta-regression modelling when raw data was unavailable (Ritchie & Roser, 2018). To help address the significant issue of mental health concerns worldwide a number of effective therapeutic interventions have been developed. There is a wealth of empirical evidence that supports the effectiveness of psychological therapy for individuals experiencing significant psychological distress. Several of these therapies include: individual cognitive-behavioural therapy (CBT; Butler, Chapman, Forman, & Beck, 2006; Deacon & Abramowitz, 2004; Tolin, 2010), acceptance and commitment therapy (ACT; Forman et al., 2007); family-based therapy (FBT; Couturier et al., 2013); group therapy (Fogarty et al., 2019) and a range of other modalities (Acarturk, Cuijpers, van Straten, & de Graaf, 2009; Cuijpers, van Straten, Warmerdam, & Andersson, 2008; Olatunji, Cisler, & Deacon, 2010; Stewart & Chambless, 2009; Tolin, 2010).

Despite the high prevalence of mental health concerns and the empirical support for psychological therapy the gap between the need for therapy and its provision is broad around the globe. Wang et al. (2007) reported in low and middle income countries between 76% and 85% of people with mental health disorders received no therapy for their disorder. The researchers sought to understand the use of mental health services across 17 countries of varied incomes around the world. The findings were based on 84,850 responders over the age

of 18, across New Zealand, Netherlands, France, Colombia, Nigeria, Belgium, Beijing, Lebanon, South Africa, Shanghai, Germany, Israel, USA, Mexico, Japan, Italy, and Spain. The number of responses from each country varied significantly, with the most coming from New Zealand. The findings suggested that as expected mental health service use was lower in less-developed countries in comparison to those more developed countries. However, even in the developed countries engagement and attendance issues within mental health services were prevalent. Approximately half of the individuals who reported severe mental health concerns engaged with services. Of the individuals who attended their initial appointment those who returned for follow up sessions varied between 61-91% across different countries (Wang et al., 2007). One of the possible reasons relatively few people engaged in therapy may be simply due to a lack of available services. This may be particularly relevant in less developed countries. This is not the only possible explanation as many people do contact mental health services (or even begin therapy) and then do not complete therapy.

To improve the large gap between the need for therapy and therapy utilisation it is necessary to understand the help-seeking process and the factors which may interfere with individuals receiving psychological support. Rickwood and Thomas (2012) proposed a conceptual framework to understand the help-seeking process and to provide a consistent way to measure help-seeking. Rickwood and Thomas (2012) define help-seeking as "an adaptive coping process that is an attempt to obtain external assistance to deal with a mental health concern" (p. 18). The conceptual framework involves five elements including process, timeframe, source, type, and concern. The process element of the framework consists of three subcomponents including attitudes about help-seeking, intentions of future behaviour, and help-seeking behaviours. This framework describing the help-seeking process is based on Ajzen's (1997) theory of planned behaviour and proposes that attitudes predict intentions, which in turn predict behaviours. However, the strength of associations between attitudes,

intentions, and behaviours has been demonstrated to at times be weak, particularly in the association between intentions and behaviours (Armitage & Conner, 2001).

Attendance behaviours are considered the final step of the help-seeking process and involve the behaviours of attending a service and obtaining formal help. However, within that final step there are varying levels or steps of attendance behaviours. Effective engagement in therapy requires a level of commitment from the client. A number of steps are required to commit and engage with a mental health service to see a therapist. The first step of commitment generally occurs when the individual obtains a referral, whether a self-referral or a referral from their family, GP, or other health care professional. For many, the commitment does not go beyond this point and they do not receive the support they may need (Sparks et al., 2003). A number of individuals will take a further step and book in for an initial appointment. The next step of commitment involves attending the first appointment; however, many will not attend. The ongoing final step of commitment is the continuation of engagement and attending each appointment. This is again another point at which individuals may elect not to continue with engagement, resulting in sporadic attendance or ending therapy early before the planned time or the desired changes are achieved. The current study seeks to understand the specific attendance behaviours involved with formal help-seeking in the form of psychological therapy.

Understanding and measuring attendance behaviours is complex and the definition of non-attendance varies within the literature. For example, who determines if non-attendance is premature? How many appointments are considered “enough”? Is it the clinician’s perception, the client’s perception, or based on a number of predetermined appointments? How is therapeutic success or failure determined? There appears to be some disparity at times between a clinician’s perspective of therapy goals and outcomes from those of their clients (Todd, Deane, & Bragdon, 2003). Clinicians tend to report non-attendance due to therapy

success more so than their clients (Todd et al., 2003). Consideration of the empirical findings from the literature may be helpful in guiding and understanding the definition of non-attendance. The following section details several studies which measure non-attendance in various ways.

A 2001 study investigated the number of appointments needed for effective therapeutic change using the Outcome Questionnaire (OQ-45; Lambert et al., 2001). The OQ-45 measures subjective discomfort, interpersonal relationships and social role functioning. The study involved approximately 10,000 clients. The majority of clients had diagnoses of adjustment disorders, mood disorders, or anxiety disorders. The results illustrated 50% of clients experienced clinically significant improvement following 21 appointments and 75% after 40 appointments (Lambert et al., 2001). Alternatively, Barkham et al. (2006) found clients who attended fewer sessions tended to have more clinically significant improvements than did those who had more sessions. This study may illustrate that premature termination of therapy may not be able to be measured based on the number of appointments attended, as clients may feel they have improved enough to disengage. However, it is important to consider other potential factors that could contribute to this outcome. For example, while the study controlled for a threshold of significant distress, individuals who had greater clinically significant improvements after fewer appointments may have experienced less complex distress and therefore less time may be required to see improvements. In contrast, individuals with more complex and chronic mental distress may require a greater number of appointments before improvements would result.

Consequently, Warnick, Gonzalez, Robin Weersing, Scahill, and Woolston (2012) sought to measure if the rates of non-attendance differed based on the way non-attendance was defined. The group compared three definitions: missed last appointment, clinician's opinion of termination and the dose (which the researchers defined as 12 sessions within four

months, as recommended by evidence-based practice). The findings demonstrated the different operational definitions of non-attendance related to different factors. The factors in the study included demographic factors (such as age, gender, ethnicity, caregiver marital status, and income) and clinical factors (i.e., problem severity, functioning, hopefulness and satisfaction with the service). African-American ethnicity was the only common factor across all three operational definitions that related to non-attendance. This study highlights that the way in which non-attendance is defined may impact the factors which correlate, though the differences observed could have been due to chance.

As outlined by Rickwood and Thomas (2012) and within the studies described above there is no single definition that is routinely referred to within the literature. Unrau and Grinnell (2005) offer a definition of help-seeking behaviours. They propose help-seeking behaviours involve a request for assistance from informal supports (informal help-seeking) behaviours) or formalised services for the purpose of resolving emotion, behavioural or health problems (formal help-seeking behaviours). According to the proposed help-seeking process (Rickwood & Thomas, 2012) attendance behaviours are considered the final step of the help-seeking process and involve the behaviours of obtaining informal or formal help. Based on these definitions, for the purpose of this study non-attendance behaviours have been defined as a lack of a direct behaviour that would result in attendance of a psychological appointment (formalised help) following an initial effort to engage with a service. It is important to recognise unlike Unrau and Grinnell's (2005) definition of help-seeking behaviours, attendance behaviours go beyond the initial request for assistance and include the ongoing behaviours required to attend multiple appointments. The current study defines logical terminology for the different stage of the engagement process. Given the number of steps to engage there are also a number of stages at which a person may not attend an appointment. While there is clearly a distinction between these types of behaviours, the

operational definition and method to measure such stages of non-attendance have not been universally defined or labelled within the literature (Hatchett & Park, 2003). The existing literature uses a variety of measures or definitions of non-attendance which yield inconsistent findings. With the aim of offering terminology which is consistent, logical, respectful and non-judgemental of peoples' experiences and has a relationship to the existing literature several terms have been defined for each subgroup of non-attendance; *non-engagers, non-attenders, early drop-outs, low-attenders, delayed drop-outs* and *complete-attenders*. *Non-engagers* are individuals who are referred to a service or inquire but do not follow through; the potential client is unable to be contacted and does not attempt to engage beyond the point of referral. There is little known about *non-engagers*. This subgroup of non-attendance makes up a significant portion of those missed appointments yet there is minimal understanding about the barriers deterring these individuals from engaging with and attending psychological appointments. *Non-attenders* are individuals who are referred to a service and make contact with the service but never begin therapy. This may include making an enquiry or booking an initial appointment online or over the phone but not attending the scheduled appointment. *Early drop-outs* are individuals who stop attending after one appointment. *Low-attenders* are those who attend several appointments but miss several in between, these individuals are likely not as engaged as those who do not miss appointments. *Delayed drop-outs* are those individuals who attend several initial appointments but stop attending without prior discussion between the client and therapist about therapy ending. *Complete-attenders* are those who do not miss any appointments and engage until it is agreed between the client and therapist that therapy is ready to conclude.

Differentiating Attendance Behaviours from Intentions and Attitudes

As outlined above the process of help-seeking involves three stages beginning with the development of attitudes, which contribute to intentions, which in turn predict attendance

behaviours. A number of the studies discussed below have investigated help-seeking attitudes or intentions as opposed to actual attendance behaviours; therefore, it is important to review the differences between these three concepts. Several studies have sought to measure whether help-seeking intentions are predictive of future behaviours within a laboratory (Halpern, 1977; Kahn et al., 2002; Rickwood et al., 2005). The framework of help-seeking and theory of planned behaviour suggests that these variables are related; empirical research indicates that there are indeed related, but only weakly(Armitage & Conner, 2001; Rickwood et al. 2005). Rickwood et al. (2005) found self-reports of the tendency to self-disclose information were predictive of self-disclosing behaviour within an experimental setting. However, Rickwood et al. (2005) reported a discrepancy between help-seeking intentions and behaviours. The researchers conducted a number of studies and found the relationship between intentions and behaviours varied from weak to moderately strong. The findings suggested we cannot assume attitudes or intentions are indicative of attendance behaviour. It is possible other interacting factors may interfere with one's ability to attend despite the best intentions. Furthermore, Halpern (1977) highlighted self-disclosure is context dependent; thus, intentions are likely to vary in each situation. It is likely a number of barriers intervene in real life situations between the cognitive intention and the physical act of seeking psychological help. A number of studies (Deane & Todd, 1996; Hinson & Swanson, 1993; Komiya et al., 2000; Vogel et al., 2005) measured hypothetical help-seeking intentions using participants who had never attended psychological therapy before. Consequently, these findings may not be predictive of help-seeking behaviours and appointment attendance. While the studies discussed below which assess help-seeking attitudes or intentions offer valuable insight, and may be indicative of help-seeking behaviours, it is important to consider their possible limitations. It is useful to collect data on appointment attendance and thus the current study investigates attendance behaviours.

Non-attendance of therapy is not a new phenomenon. In fact it has been discussed in the literature since the beginning of psychoanalysis (Firestein, 1982). Freud discussed his disappointment when his client, Dora in 1905, suddenly discontinued their therapeutic relationship. Freud believed the ending of this therapeutic relationship was due to the disturbance caused by transference, although the actual reason is unclear (Freud, 1971). While non-attendance to psychological therapy has been recorded and studied for over a century, our understanding of its causes is limited, and the methods to improve attendance are still developing.

In addition to the existing disparity between the number of people experiencing mental distress and the number receiving psychological therapy, we are now likely to see an increase in the need for mental health services around the world following the devastation caused by the 2020 global pandemic COVID-19. A recent systematic review of the current existing research of the impact of COVID-19 has been published (Xiong et al., 2020). The review included 19 studies across a number of countries around the world including over 90,000 participants. Overall, the findings demonstrated an increase in mental health concerns following the pandemic. Depressive symptoms were more prevalent following the pandemic increasing from 3.6% up % to 48.3%. Anxiety symptoms were also more prevalent in the findings ranging from 6.3% to 50.9%. Post-traumatic stress disorder symptoms were also reported and ranged from 7.0% to 15.8% (Xiong et al., 2020). It is important to consider the current contextual impact of COVID-19 as future research and interventions relating to psychological appointment attendance have the potential to be influenced by these changes.

The current study seeks to understand the multitude of factors which contribute to the common issue of non-attendance of psychological appointments. The study recognises there are a multitude of interacting factors contributing to an individual's likelihood of attending therapy, and aims to improve our understanding of the relationships between both practical

and psychological factors of non-attendance of psychological therapy. The following section will review some of the possible outcomes when individuals do not attend psychological therapy appointments.

Outcomes of Non-Attendance

A number of outcomes correlate with missed psychological therapy appointments. Several of these outcomes include social impairment, readmission, increased severity of symptoms, and mortality (Killaspy et al., 2000; McQueenie et al., 2019). Killaspy, Banerjee, King, and Lloyd (2000) used semi-structured interviews to investigate the outcomes for those who missed their appointment in comparison to those who attended. The follow up interview results demonstrated those who missed appointments were more unwell, experienced greater social impairment, had more severe mental health concerns and were more likely to be admitted to hospital (Killaspy et al., 2000). It is important to consider these findings are correlational. People who were more unwell may have been less likely to attend therapy due to being too physically unwell to attend. Furthermore, it is more common for people to seek medical appointments when they are unwell as they need intervention or support. Therefore, individuals who are unwell are more likely to have scheduled appointments than those who are of good health.

The correlating outcomes of missed appointments were starkly identified in a study recently published by McQueenie, Ellis, McConnachie, Wilson, and Williamson (2019). The study assessed routine data from general practices collected by the National Health Service (NHS) during 2013 to 2016. The data included 136 different practices, 11,490,537 appointments and 824,374 patients. The results demonstrated patients with long-term mental health concerns who had missed a minimum of two appointments per year were eight times more at risk of death in comparison to those who had not missed any appointments (McQueenie et al., 2019). The most common cause of death identified was suicide.

Several limitations to this study are worth mentioning, however. Firstly, the study fails to identify the reasons for missed appointments. Patients may not have attended due to being physically sick. Inevitably those who have more severe illness are more likely to be too sick to attend. Therefore, the sickness may be predictive of non-attendance rather than non-attendance predictive of illness or mortality (McQueenie et al., 2019). Secondly, the study did not control for the total number of appointments made by each person. Therefore, those who are more unwell may have more appointments with mental health services and therefore more chances to miss appointments. Furthermore, while this study investigates factors impacting appointment non-attendance and looks at mental health specifically as well as physical health, recognition that the data was obtained from primary care as opposed to a mental health service is important. The study demonstrated a strong correlation between missed appointments and mortality; however, further investigation of the reasons individuals missed their appointments is necessary (McQueenie et al., 2019).

Non-attendance of psychological appointments is not only a significant issue for clients but also health care professionals, health care settings, and the economy. As an approximation of the potential financial costs for services, the annual cost of missed medical and mental health appointments at Counties Manukau District Health Board (DHB) alone (one of 20 DHBs within New Zealand) was estimated to be close to $4.3 million, with more than 21,000 missed appointments costing between $180-$260 per appointment (Dastgheib, 2014). DHBs offer a range of other specialist services aside from mental health appointments and the cost per appointment differs based on the specialist and the service offered. Thus, these figures do not offer a clear picture of the true cost for mental health services nationally or internationally but do offer some insight into the potential financial impact missed appointments have on a mental health organisation. These costs must be absorbed by the organisations and result in less funding to help those able to participate.

The introductory chapter outlined the help-seeking process, in particularly non-attendance behaviours were explored and defined. Understanding the help-seeking process and assessing it appropriately is essential to offer valuable contribution to the literature. Following on, a number of the possible outcomes of non-attendance were reported. The following chapters will review a range of perceived barriers to attendance and the psychological theories supporting these factors. Firstly, the impact of cultural safety will be discussed, Then practical factors including the influence of the referrer, the timeliness of intake following the referral, financial cost, education, employment, and alternative commitments will be discussed. Lastly, internal avoidance factors will be explored. These factors include motivation, safety behaviours, therapy anxiety, stigma, and self-disclosure. The outline of the various predictive factors is intended to illustrate the complex, multidimensional phenomenon of non-attendance. The identification of a broad range of factors demonstrates that no single factor determines non-attendance. The exploration of these factors will provide the foundation for this research and demonstrate the theoretical rationale.

CHAPTER 2: Cultural and Practical Correlates of Non-Attendance

The following chapter highlights a range of studies that have found a relationship between non-attendance, cultural safety and practical factors. The cultural safety section explores the existing literature surrounding non-attendance and cultural safety within New Zealand, Canada, and Australia. The practical factors section explores the relationships between non-attendance and forgotten appointments, the influence of the referrer, wait times, cost and financial stress, education, employment, and other commitments.

Cultural Safety

Having an awareness of and incorporating culture to encourage cultural safety is an essential part of effective therapeutic communication that contributes to health care (Kaur

Gurm & Cheema, 2013) and thus, may provide opportunities for interventions to improve attendance. Health inequalities between indigenous populations (such as Māori, Aboriginal, First Nations Peoples, and Native Americans) and non-indigenous populations persist across a range of countries, including New Zealand, Australia, USA, Canada and Nordic countries (Bramley et al., 2005; Hansen et al., 2010). Many services offer a universal approach to health care which often results in services which are not culturally appropriate or culturally responsive for indigenous and minority cultures (Barwick, 2000; Baxter, 2002).

The concept of cultural safety was developed in the late 1980s in New Zealand by a group of Māori nurses (Polaschek, 1998). Cultural safety involves recognition of the societal position certain cultural groups (particularly minorities) have within a society, and how these cultural groups are viewed and treated. The theory of cultural safety suggests all individuals operate from their own cultural mind-set which contributes to the way they behave and relate. While this concept originated in New Zealand with relevance to Māori, it has since been applied across other countries and other cultures (Kaur Gurm & Cheema, 2013). Cultural safety extends beyond ethnicity to include, age or generation, gender, sexual orientation, socioeconomic status, spiritual beliefs or disability (Papps & Ramsden, 1996). Cultural safety involves recognition, respect and action which nurtures individuals' unique cultural identity (Kaur Gurm & Cheema, 2013).

There is a growing body of qualitative literature investigating cultural safety in health care services and the way in which the level of cultural safety or marginalisation deters engagement with such services (Wilson & Barton, 2012). The research suggests if services are not culturally safe, even if the service has no financial costs, they may not be utilised by indigenous and minority cultures (Durie, 2001; Jansen et al., 2009). Jansen et al. (2009) investigated Māori experiences of health services across primary health care, ACC (Accident Compensation Corporation), A&Es (Accident and Emergency), and hospitals. Racism,

disrespect and communication issues were identified as barriers to engaging in health care. The health professionals were described by the patients as having biased perceptions against Māori and lacked empathy and the ability to communicate clearly and respectfully with their Māori patients. Furthermore, participants of the study reported feeling as though the doctors frowned upon them engaging in Māori cultural practices (such as having whānau present to accompany them; Jansen et al., 2009). The client reported findings are disheartening. Many individual's first engagement with health care is in primary health care. If they have a negative experience, which is not culturally safe, it may discourage future help seeking. Prior negative experiences with primary health care providers may lead to negative perceptions of what mental health care will entail thus decreasing the likelihood an individual will engage. Prior negative health care experiences, which lack culturally safe practices, could contribute to people becoming part of the group of individuals who are referred to a service but do not engage (non-engagers). These negative prior experiences could prevent individuals from attending a first appointment or even phoning a mental health service.

The literature surrounding cultural safety in mental health services is beginning to emerge (Browne et al., 2016; Isaacs et al., 2010; Pomare, 2015; Te Pou o te Whakaaro Nui, 2010). Pomare (2015) investigated Māori experiences of cultural sensitivity at a child and adolescent mental health service in New Zealand. The findings suggested positive initial interactions that incorporated tikanga (traditional practices or protocol) and validated mana (power) contributed to maintaining future engagement. Pomare highlighted the initial engagement period as a crucial stage. A number of themes emerged including minimal information and uncertainty about the mental health service, mistrust in the mental health service and negative perceptions and stigma amongst their community about mental health services (Pomare, 2015). Furthermore, Pomare (2015) identified excessively technical and clinical language as a barrier to attendance of psychological appointments. The recognition of

the criticality of the early stages of engagement are particularly relevant for this current study as it seeks to capture the barriers to those in the pre-and-early engagement stages (the non-engagers, non-attenders, and early drop-outs).

Although the concept of cultural safety was developed in New Zealand, a number of other countries have highlighted cultural barriers faced by indigenous and minority cultures. In Canada, Isaak et al. (2020) investigated barriers to attending mental health services for First Nations communities. The study reported barriers for these individuals included stigma, mental health literacy, and the lack of culturally relevant resources. Through a Canadian ethnographic study, Browne et al. (2016) highlighted key dimensions of healthcare services needed to enhance the wellbeing of indigenous peoples. These dimensions included inequity-responsive care, culturally safe care and trauma informed care. A further study highlighted three central cultural barriers for First Nations people in Canada (Nelson & Wilson, 2018). These three barriers included reduced quality of care for indigenous people, long wait times, and experiences of racism and discrimination. The study suggested experiences of substandard care may be barrier to future access leading individuals to expected substandard care and not seek support. This study offers further support for the importance of early engagement and understand the barriers for *non-engagers, non-attenders* and *early drop-outs.*

A number of Australian studies have demonstrated cultural barriers to service attendance for Aboriginal people. Isaacs et al. (2010) explored the literature for cultural barriers to help-seeking for indigenous people in Australia and reported barriers included indigenous people not feeling comfortable talking to individuals of the opposite sex, language difficulties, and differences in cultural values. In a further qualitative study involving 60 participants, Price and Dalgleish (2013) highlighted cultural barriers for Aboriginal youth in Australia. The study suggested key barrier included a distrust in information being kept confidential and associated fears of shame and being punished by their parents if their help-

seeking was exposed. Furthermore participants expressed doubt that the service providers would be able to understand their issues and life experiences from a cultural lens. Isaacs et al. (2012) investigated cultural barriers to service engagement for Australian Aboriginal men using semi-structured interviews. The study highlighted three main themes: barriers to gaining entry to service, barriers to engaging Aboriginal men, and staffing problems. Again this study highlights the importance of understanding barriers to early engagement that impact *non-engagers*, *non-attenders* and *early drop-outs.* Further research which involves indigenous, minority and marginalised individuals would offer greater insight to cultural barriers for these clients from their perspective. Thus far, the research has consistently found gaps in cultural safety; models have been developed to provide more culturally sensitive care - which then raises the question of what the barriers are to implementing them? One of these more culturally safe health models, the Meihana model, is discussed in the following subsection.

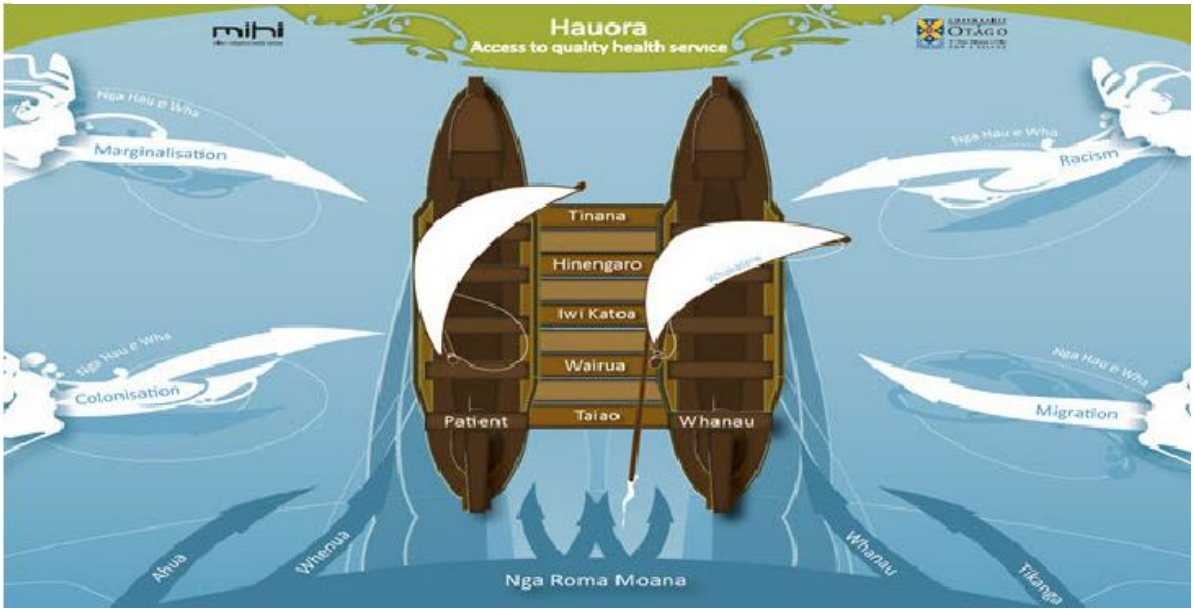
Meihana Model

The Meihana model is a Māori model of health. It includes factors that contribute to overall wellbeing as well as factors which cause inequalities between indigenous and non-indigenous cultures (Pitama et al., 2007; Scott, 2014). The model provides a clinical assessment guide for health professionals working with indigenous clients (Pitama et al., 2007). This model highlights the multitude of factors which contribute to an individual engaging in a health service. The model extends theory beyond the individual and shares responsibility with the service provider. The Meihana model highlights the importance of the physical environment of the health care service. Physical environment factors include access, parking, feeling welcomed, and the size of the room (the ability to include whānau at the appointment; Pitama et al., 2007). Furthermore, it includes the competence and respect of the

service providers and health professionals (Pitama et al., 2007, 2014). See Figure 1 below for a visual diagram of the model.

Figure 1

Diagram of the Meihana Model



Note. Diagram of the Meihana model. Reprinted [adapted] from "Improving Māori health through clinical assessment: Waikare o te Waka o Meihana" by S. Pitama, T. Huria, C. Lacey, 2014, *New Zealand Medical Journal, 127,* 108.

The Meihana model was used in this thesis to inform an understanding of the way in which cultural safety may impact non-attendance of psychological services and to formulate the cultural safety questions (not to test the model itself) of the present study. In particular, this model informed the incorporation of questions about the taiao, the physical environment of the service, and how accessible the service was for clients. Furthermore, this model acknowledges the role of the service provider and was used to inform the questions relating to the way clients felt their culture was accepted and embraced. It is important to note this model was designed primarily for Māori and has not yet been applied to other cultures. It is possible it may highlight a range of factors present for cultural minorities, particularly

considering the similar cultural barriers identified in the literature across cultural minorities. Many indigenous cultures are collectivist and thus the importance of the inclusion of family in wellbeing is likely universal across many indigenous communities (K. Miller, 2018). Furthermore, the current international literature highlights the importance of the health care professional being culturally safe. The Meihana has a focus on the importance of the health care professional and thus this model may be applicable to further indigenous cultures. While this model is yet to be applied across cultures it may be relevant to other indigenous and minority cultures too and thus was used to inform the cultural safety questions of the current study.

The preceding section discussed the importance of cultural safety in regard to both the quality of services and appointment attendance. This section informs the cultural safety measure designed for the current study as well as demonstrates the current literature within this area to set the tone for two of the exploratory questions. The following section changes direction to look at the relevance of the practical factors which may contribute to individuals seeking psychological support and whether these reasons may be predictive of non-attendance.

Practical Factors

When an individual has the intention to seek help and attempts to engage in help-seeking behaviours there can be a number of barriers which may interfere with the physical and logistical possibility of being able to engage with and attend a service. Practical factors are defined as financial, scheduling, or logistical factors which interfere with a person's ability to attend therapy. The current study has a specific focus on understanding practical factors from a service provider perspective, which could be changeable and supported by a therapist or service. The following section will identify a number of these practical factors which have been found to predict non-attendance of psychological appointments.

The literature highlights a number of practical factors including forgotten appointments, the influence of the referrer, the physical environment and access of a service and the timeliness of the referral. These factors are changeable, and thus, can be addressed through service level interventions. Furthermore, factors including individuals' level of education, type of employment, cost and financial stress, as well as other commitments are highlighted in the literature as practical factors which may be related to non-attendance behaviours. These factors and the relevant literature are explored below.

Forgotten Appointments

A number of self-report studies identify "forgotten appointments" as an explanation for non-attendance (Filippidou et al., 2014; Lin et al., 2016; Long et al., 2016). Long et al. (2016) contacted clients of a university psychiatry clinic to ask why they missed their initial appointment. The main reasons given were transportation issues, forgetting, recording the appointment time incorrectly and decreased desirability. Of the individuals who missed their initial appointment, 20% claimed they had forgotten their appointment (Long et al., 2016). A further study by Ramlucken and Sibiya (2018) investigated the reasons for missed mental health appointments in Pietermaritzburg, South Africa. The results demonstrated 69% of the study's participants indicated they had forgotten their appointment. These studies highlight the relevance of forgotten appointments.

Filippidou et al. (2014) introduced a text reminder intervention to minimise forgotten appointments of both medical and psychological services. Baseline attendance was gathered between May and September 2013 and the data following the intervention was collected during October 2013 and March 2014. Overall the medical appointments showed a decrease in missed appointments from 17.7% (before intervention) to 11.8% (after intervention); however, the rate of missed appointments increased for psychological appointments from 9.4% (before intervention) to 11.6% (after intervention). This study may illustrate the

ineffectiveness of the text reminder intervention for psychological services, or it may suggest forgotten appointments are not a significant factor contributing to non-attendance. The study also highlighted the difference between medical appointments and psychological appointments, suggesting there are factors specific to psychological appointments which may deter people from attending and thus psychological appointment attendance needs to be investigated specifically. Furthermore, Clough and Casey (2014) investigated a text reminder intervention in a mental health service and found no significant difference between the group who received the text reminder and the group which did not. The researchers concluded text reminders were not effective at increasing appointment attendance. However, these results may not be generalisable. In particular 75% of the study's sample had had previous engagement with a psychological service and thus these individuals may have been more socialised to therapy and more likely to attend regardless of a text reminder. The current literature, albeit limited, suggests forgotten appointments are a common predictor of non-attendance of psychological appointments though interventions which seek to minimise forgotten appointments through reminder text messages may to be ineffective. Further understanding of the relationship between non-attendance and forgotten appointments is needed. In particular investigation of other potential confounding variables may be valuable to control for.

Influence of the Referrer

Empirical evidence suggests the type of referral may provide some insight into non-attendance (Issakidis & Andrews, 2004; Sparks et al., 2003). Referral methods include self-referral (making an appointment with a therapist independently without being referred formally), family referral (a family member referring their relative for support), GP referral, referral from another clinician or health care professional, or from the police or court system. Sparks, Daniels, and Johnson (2003) investigated non-attendance of those who self-referred

and those who were referred by another source. The results showed individuals who self-referred were significantly more likely to attend their intake appointment in comparison to those who were referred by another individual or service (Sparks et al., 2003). In a further study, Issakidis and Andrews (2004) investigated the impact of demographic, clinical, and system factors on non-attendance at an anxiety disorder clinic in Sydney, Australia. One of the significant findings was related to the referral source. The results illustrated that clients who were referred by GPs in comparison to mental health specialists were significantly less likely to attend their intake appointment.

The studies discussed above illustrate a relationship between the source of a referral and non-attendance of psychological therapy appointments. While the causality of this relationship is not clear there are a number of possible explanations. The type of referral may reflect a client's motivation for therapy; an individual who self-refers may be more intrinsically motivated. Such an individual has decided without the suggestion of others to seek help, whereas a referral from an outside source such as a health professional may be more extrinsically motivated. A client referred by an outside source may attend to appease the referrer or because the referrer perceives it to be useful. Alternatively, the type of referral could reflect the severity of need; an individual who attains a GP referral may have less significant distress in comparison to a specialist referral, and thus, may be able to function more easily without seeking support. Alternatively, severity could also create significant barriers to seek and engage in therapy. These studies point to a relationship between the type of the referral and likelihood of attendance, but little is known about causal mechanisms of this relationship.

The Timeliness of Intake Following Referral

The length of time between being referred and engaging with a service is considered another factor that contributes to non-attendance (Reitzel et al., 2006; Swift et al., 2012).

Reitzel et al. (2006) investigated the impact of time during the intake process on non-attendance. This process includes the time it takes from receiving the referral, processing it and assessing suitability, contacting the client and then offering an appointment. Reitzel et al. (2006) looked at an outpatient adult sample over a five year duration; the results suggested that the timeliness of case assignment predicted intake non-attendance (non-engagers). The patients who experienced a longer delay during the intake process were less likely to attend than those who did not experience a long delay. Furthermore, those individuals with more severe symptoms were more susceptible to the impact of intake timing on non-attendance. Similarly, Swift, Whipple, and Sandberg (2012) in a small study involving 57 participants over an eight month period found attendance was higher when the duration of wait time was shorter. A study of army soldiers in the United States highlighted the importance of wait times for treatment seeking. In particular participants reported long wait times to schedule an appointment, between appointments, and in the waiting room were perceived as barriers to attendance (Zinzow et al., 2013).

In contrast, Sparks et al. (2003) did not find the wait time to be a statistically significant indicator of non-attendance. That said, participants within this study had a mean wait time of 14.7 days (Sparks et al., 2003). It may be possible, as the wait time increased beyond this time period, attendance could begin to decrease. This may be considered a short wait time in comparison to what may occur within some services. For example a fairly recent New Zealand news article reported adolescent clients face an average of a 35 day wait for an initial appointment at Canterbury DHB with some clients waiting between four months and up to a year for a follow up appointment (Lewis, 2018). Furthermore, an Australia new article reported 38% of individuals seeking psychological support in Western Australia had to wait more than six months (Lyons, 2021). In fact, Reitzel et al. (2006) argued wait times of more than 15 days were related to non-attendance. Therefore, greater exploration of the impact of

wait time beyond two to four weeks is needed to determine whether wait time is predictive of non-attendance and the criticality of the wait for an appointment. The impact of contextual events such as Covid-19 may put a larger demand on mental health services thus increasing wait times significantly.

It may be possible the shorter the wait time, the more motivated an individual will be to engage in therapy. It could be possible that the less time an individual must wait the less time they have to over think and become too anxious to attend. Further investigation between motivation, anxiety and wait time is needed. It may also be important to consider, as mentioned previously, that individuals have demonstrated self-improvements while waiting to attend therapy (Arrindell, 2001; Young, 2006). Some individuals may improve on their own leading them not to attend an appointment. Therefore, the non-attendance figures may increase, not because individuals had to wait too long (and lost motivation or became too anxious), but because they improved and no longer felt therapy was necessary. Research is needed on the criticality of wait time.

Financial Stress and Cost of Appointments

Financial stress and the cost of appointments may be a further barrier contributing to non-attendance of psychological appointments. When considering the potential influence of cost it is important to consider the health care system and country of the population being investigated as these factors likely impact on funding, income, and the cost of appointments. A number of studies have demonstrated cost and financial stress can be a barrier across a range of circumstances, age groups, and countries (Andrade et al., 2014; Ojeda & Bergstresser, 2008; Olfson et al., 2009; Polacsek et al., 2019; Xiao et al., 2017). Xiao et al. (2017) investigated over 10,000 clients at an American university counselling centre. The study reported that non-attendance was more likely to occur among individuals who reported financial stress (measured by asking participants to rate how much current financial stress

they were in on a 5-point scale) than those who did not. The actual cost of these university appointments was unclear. It is important to consider the participants of this study were all university students, attending university appointments, and may not be representative of the general population. Similarly, 44.5% of the participants in the Ojeda and Bergstresser (2008) study reported financial cost as a barrier to accessing therapy. This study included a broad range of participants from ages 18 to 50+ and from a broad range of ethnic groups within America. A further study demonstrated cost as a barrier for older adults seeking mental health support (Brenes et al., 2015). Brenes et al. (2015) reported 58.4% of the American older adult sample reported cost as a practical barrier to therapy. An Australian qualitative study further highlighted the barrier of cost for an older adult sample (Polacsek et al., 2019). These studies suggests cost may be a barrier across the life span and across countries. Further evidence for the significance of cost across countries and health care services can be found in an international study including 24 countries, one of which was New Zealand (Andrade et al., 2014). In particular, the study highlighted cost as a barrier for high income countries including New Zealand, Portugal, Brazil, America and Mexico as well as lower income countries. Further exploration of the influence of the cost of appointments and financial stress of non-attendance would offer greater insight.

Education

An individual's level of education is also thought to be related to attendance behaviour. Though not technically a practical factor, one's education level may impact the their ability to attend. In particular, limited education may impact on literacy levels which in turn may impact on an individual's ability to complete necessary paperwork, book appointments, and receive written reminders. In consideration of practical service level changes consideration of one's education level may guide appropriate and reachable interventions to enhance attendance for all educational and literacy levels. Olfson et al.

(2009) illustrated low levels of education, defined as leaving school before age 15 years, was associated with elevated non-attendance behaviours with mental health professionals. Furthermore in Madrid, Reneses et al. (2009) investigated education levels ranging from no education, primary school education, secondary education to university education. Individuals with university level education had a lower dropout rate than those with primary and secondary school education. However, those participants who indicated they had no formal education had the lowest drop-out rate of all. Further investigation of the possible relationship between education levels and non-attendance behaviours could inform how information provided by services is communicated in a helpful way to enhance attendance across different education levels.

Employment

When considering practical and logistical factors which may impact the feasibility of being able to attend an appointment it is important to consider the possible role of employment. For many people employment consumes most of their time in a working week. Although employment can provide the funds necessary to pay for an appointment, it has the ability to restrict individuals' schedules and impact on their availability to attend appointments. Furthermore types of employment and expectations of work differ for many people. Employment has been demonstrated in the literature to be related to non-attendance. Gong et al. (2003) found those with employment sought less help from health professional that those who were unemployed. While this may suggest individuals who are unemployed have more health issues therefore, seek more help, it may also speak to the lack of availability to attend appointments for individuals in employment. A further study by Martinez et al. (2020) found that precarious employment and financial constraints was the most commonly endorsed barrier to attending mental health services. This study may suggest those with part-time or casual work have less financial freedom and flexibility to be able to

attend appointments. Understanding the relationship between types of employment and attendance behaviours is essential, particularly as those individuals with precarious or no employment have worse health outcomes and high rates of depressive mood and suicidal ideation than those in permanent employment (Han et al., 2017). It is important to understand this relationship to be able to implement service level changes which provide more accessible services for all individuals regardless of their type of employment or financial situation.

Other Commitments

Many individuals have work and family commitments to balance which may make it challenging to find time to prioritise their mental health and service use. Other commitments such as work, childcare and family commitments have been highlighted in the literature as relevant barriers to non-attendance (Alhamad, 2013; Kourany et al., 1990). A recent Australian study investigated barriers to mental health help-seeking using an online survey. The study reported almost half of the participants reported it was difficult to find the time for services due to other commitments (e.g., work, family, friends; Cronin et al., 2021). Yzer & Gilasevitch (2019) investigated barriers to coping with stress and help-seeking within an American university population. Participants were asked to think of a hypothetical situation in which they were experiencing depressive symptoms and report the possible barriers to attendance they foresaw. Time constraints were the most frequently reported barrier across all stress reduction activities including seeking therapy. While little can be done to reduce individuals' additional commitments, services may be able to adapt the availability of appointments and the location of services to better cater to the busy lives of people. Further research is needed to understand which commitments have the greatest impact on non-attendance.

Chapter 2 offered an exploration of the current literature surrounding practical barriers for clients with the intention to inform practical changes which may be implemented

at a service level. In particular, the concept of cultural safety was discussed and how this may impact non-attendance. The importance and relevance of cultural safety in mental health services has been demonstrated across a number of countries. However, a greater depth and breadth of research is needed to understand the relevance and relationship between cultural safety and non-attendance behaviours. Following on, practical factors were outlined. The current literature identifies a broad range of possible practical factors which may impact non-attendance behaviours. These factors may demonstrate service level changes which can be implemented to enhance attendance and offer a service which is well catered to the needs of many. The particular factors discussed in the preceding chapter will be investigated in the current study given their relevance to service level changes. Many of these practical factors have been assessed in isolation; few studies have assessed a range of practical factor while holding others to account. The succeeding chapter will look beyond these factors and offer a review of the literature surrounding some of the psychological correlates of non-attendance.

CHAPTER 3: Psychological Correlates of Non-Attendance

In addition to the practical factors detailed in the preceding chapter, it is important to consider the psychological factors that may cause individuals to disengage or not attend psychological care. When an individual is at the point at which they are considering the need of support from a trained mental health professional, it is likely their psychological functioning is affected, and this may inhibit their ability and willingness to engage with a psychological service. The following section will explore some of the psychological factors that may impact non-attendance. These factors include therapy stigma, therapy anxiety, safety behaviours, motivation for therapy, fear of emotion and self-disclosure.

Stigma

Crocker (1999) offers a definition of stigma; stigma occurs when an attribute of a person's social identity is believed by society to be flawed (part 1), and the person is then devalued in the eyes of others (part 2). This definition consists of two parts: (1) an attribute (such as race, gender, sexual orientation, mental illness) that marks a person as different and leads to devaluation. (2) Stigma is constructed within our social context; it is a collective view developed and maintained by members of society that is dependent on relationships and the context (Crocker, 1999).

Stigma can impact individuals based on their race, gender, sexual orientation and mental health concerns. Therefore, it is important to understand stigma specifically in relation to mental health and attending therapy. The following subsection will explore the stigma and avoidance literature, the theory of stigma and how this may relate to missed psychological appointments. The most significant early theoretical understanding of stigma was offered by Goffman (1963). Goffman suggested three types of stigma exist: stigma related to one's physical body such as physical deficits or disabilities, stigma related to one's character such mental illness, alcoholism, drug addiction, sexuality, criminality, and stigma relating to

culture including race, nationality, religion and class. Goffman proposed individuals with mental illness experienced a strong sense of stigma through problems with their identity, social distance between them and others, low self-esteem, and anxiety (Goffman, 1963). Since the development of this early model, there have been additional theories which offer further understanding of stigma. The modified labelling theory is one of these theories and is explored below.

Modified Labelling Theory (MLT)

The modified labelling theory (MLT) offers an explanation of the effects of stigma and the relationship between public and self-stigma (Link et al., 1989). The theory focuses on the consequences of stigmatisation and the impact of labels. The MLT stems from the labelling theory but extends the theory to have a greater focus on the role of stigma in maintaining mental illness and relapse. The theory also provides a more detailed explanation of how stigma relates to the relevant consequences. The MLT and further empirical evidence suggests two types of stigma associated with mental health and psychological services: public stigma and self-stigma (Corrigan, 2004; Vogel, Bitman, Hammer, & Wade, 2013; Vogel, Wade, & Hackler, 2007). This model was selected for the current study for its specific focus on the consequences of stigma and labelling. In contrast, other models have a greater focus on factors which lead to labels and stigmatisation (Cullen & Cullen, 1978). Thus, the modified labelling theory will be explored in greater depth below to provide the theoretical underpinning of the stigma portion of this thesis. The next several subsections will contrast public stigma and self-stigma followed by a discussion of how these forms of stigma relate to one another and the impact they may have on an individual's ability to function and engage. Following this the literature surrounding public stigma, self-stigma, and non-attendance of psychological appointments will be reviewed.

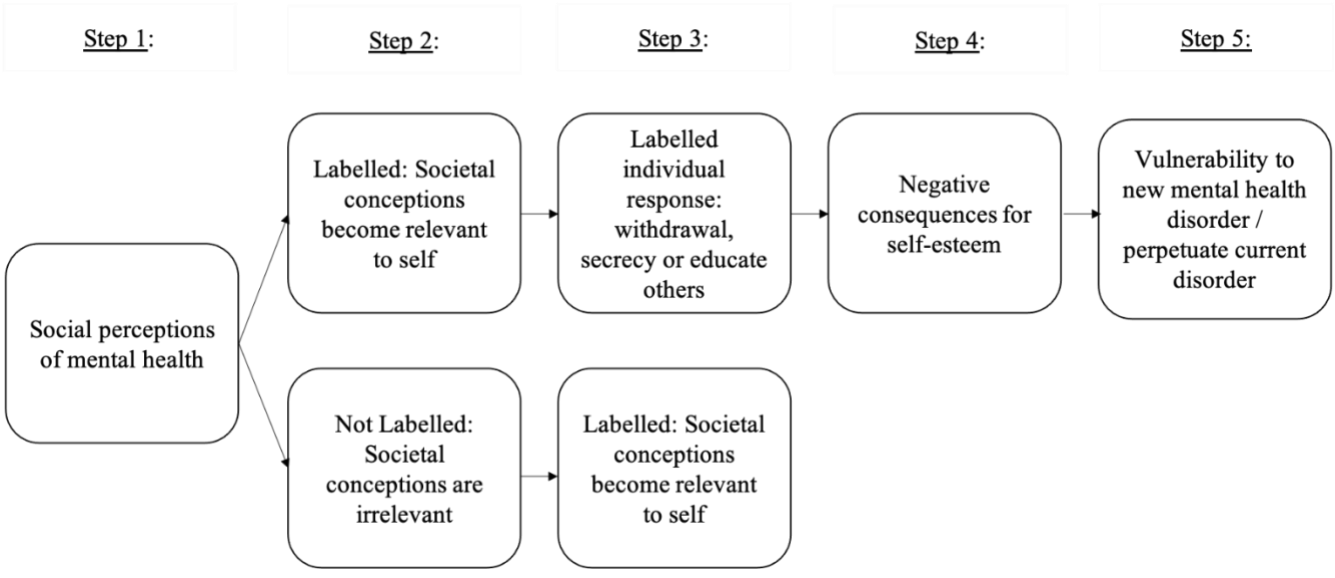
Public Stigma Public stigma of mental health includes cognitive, behavioural and affective responses towards individuals impacted by mental health difficulties (Corrigan, 2004). Public stigma occurs on a social level, through societal beliefs, views and reactions towards others (Vogel, Wester, et al., 2007). Cognitive responses include stereotypical beliefs such as perceiving an individual with mental illness is dangerous or dishevelled (Bathje & Pryor, 2011), and more emotionally unstable, less confident, and less interesting (Ben-Porath, 2002). Behavioural reactions include discrimination in employment, social interaction, health care, housing and people being treated more negatively than those who did not engage with mental health services (Dickerson et al., 2002; Sibicky & Dovidio, 1986). Affective responses include reacting with fear, irritation, or a lack of empathy (Bathje & Pryor, 2011; Corrigan, 2004). Awareness of public stigma by the affected individual can be distinguished in two ways: endorsement (in agreement) and awareness (aware of but in disagreement; Corrigan et al., 2014). This distinction is often overlooked within the literature; however, it may be one of the factors that draws public and self-stigma together.

Self-Stigma Self-stigma occurs internally, through personal stereotypes and prejudices. Self-stigma occurs when a person's self-esteem or sense of self-worth is diminished due to the perception held by the individual that they are socially undesired or unaccepted (Vogel et al., 2013). Self-stigma is perceived to occur when an individual experiences mental distress or engages with a mental health service and applies negative public attitudes to themselves and, as a result, experiences diminished self-esteem and self-efficacy (Corrigan, Druss, & Perlick, 2014). Link et al. (1989) advocated that individuals internalise the stigma of society and anticipate discrimination, and thus, develop avoidance strategies such as secrecy or withdrawal from social interaction in the hope of avoiding anticipated rejection. This suggests self-stigma could be related to avoidance, and arguably may extend to avoidance of appointments with a psychologist.

Figure 2 below provides a visual interpretation of theorised mechanism of the modified labelling theory which social perceptions of mental health can affect the mental health of individuals. The MLT proposes that public stigma and self-stigma are connected in a causal chain. Public stigma leads to internalisation of public stigma, which leads to secrecy, withdrawal or attempting to educate others. The purpose of educating others is to prevent others from developing stigmatising attitudes. This suggests the individual may feel stigmatised. These individual responses lead to further negative consequences, including feelings of shame, reduced self-esteem and self-worth, repeated feelings of needing to prove oneself and feeling unworthy, reduced work opportunities, limited social networks culminating in a perpetuation of psychological distress and vulnerability toward developing

Figure 2

Modified Labelling Theory



A number of studies have offered empirical support for some of the predictions of the MLT and illustrated negative consequences which follow stigmatisation (Link et al., 1989, 2001; Rosenfield, 1997). The findings of these studies suggest that life satisfaction and

wellbeing were highest for those individuals who experienced little stigma and gained access to quality mental health services. Life satisfaction and wellbeing were lowest amongst those individuals who perceived high levels of stigma and lacked quality services.

While the theory proposes a relationship between perceived public stigma (step 2) and self-stigma (step 3) the original theory does not demonstrate how these two forms of stigma interact and whether it is both forms of stigma which relate to the negative consequences that follow in stage four. Based on the theory and the model illustrated above intuitively it would be expected that both forms of stigma would relate to non-attendance. The following section looks more closely at public stigma and self-stigma and how they relate to non-attendance.

Stigma and Non-Attendance

While the MLT does not directly relate to non-attendance of psychological therapy appointments, it does theorise common responses to stigma include withdrawal and secrecy (Link et al., 1989). This withdrawal and secrecy may extend to a lack of engagement with or withdrawal from psychological therapy appointments. The following section reviews some of the current literature surrounding the relationship between stigma and non-attendance.

There has been variability in the findings on the way public stigma and self-stigma relate and how they impact the likelihood of non-attendance (Clement et al., 2015; Eisenberg et al., 2009; Link et al., 2001; Vogel, Wester, et al., 2007; Vogel, Wade, et al., 2007; Wade et al., 2011). In a qualitative study of a barriers to treatment seeking for army soldiers Zinzow et al. (2013) highlighted the relevance of public stigma. Participants believed other soldiers, their leaders, friends, family and other members of society would perceive them negatively. In particular, participants were concerned about other perceiving them as ‘crazy’, ‘weak’ or ‘faking’. The sample of participants included both those who had sought psychological treatment and those who had not. It is of note for a large portion of the sample, the study focused on the participant’s perception of perceived barriers to treatment rather than based on

past experience of barriers to attendance behaviours. Wade et al. (2011) found support for the relationship between self-stigma and help-seeking but in a group therapy environment with university students. The study involved a single group session with university students focused on connecting participants to the here and now. Following the session, participants indicated their interest in continuing with group counselling. Using a multilevel regression to examine the predictors of interest, the results indicated participants were less likely to endorse interest in continuing therapy. There were a number of limitations to this study. Firstly, participants were not truly seeking counselling; however, they did still meet clinical criteria on the screening measures. A further limitation was the group format of the study; this format creates a different dynamic and may be a further barrier in comparison to individual therapy. Lastly, the study measured participants' interest in re-attending rather than their actual attendance. Therefore, a number of other barriers to non-attendance may have inhibited further non-attendance despite their interest in continuing.

Clement et al. (2015) published a systematic review of the stigma literature. The inclusion criteria were data-based studies on the relationship between mental health-related stigma and help-seeking for mental ill health. The review identified 10 significant barriers to engaging in therapy based on how many times they were reported by participants. Stigma was identified as the fourth most significant barrier to engaging with psychological services. Stigma was reported as a barrier by approximately one quarter to one third of the participants in the studies reviewed (Clement et al., 2015). The most prominent forms of stigma included: therapy stigma (stigma associated with seeking or receiving mental health therapy) and self-stigma. Perceived public stigma showed only a weak negative association with help-seeking and engagement (Clement et al., 2015). Eisenberg, Downs, Golberstein, and Zivin (2009) offered further support of the weak association between public stigma and non-attendance found by Clement et al. (2015). The main findings of the study suggested perceived public

stigma was more common than self-stigma; self-stigma was significantly associated with help-seeking but public stigma was not.

Using a mediation model, Vogel, Wade, et al. (2007) found public stigma leads to the internalisation of negative external messages and it was these internal messages which predicted attitudes to psychological help-seeking. This study suggests you cannot have self-stigma without public stigma; however, it is not the public stigma that impacts interest in attending but the internalisation of it. This is an important finding and suggests stigma interventions could occur at the individual level which may be more achievable than endeavouring to change societal beliefs. This study highlights the connectedness of public stigma and self-stigma and the importance of measuring both forms of stigma when investigating the impact on non-attendance. As with Wade et al.'s study, the university student participants were not truly seeking and engaging in psychological therapy but were participating in questionnaires which assessed their attitudes; thus, a number of barriers could arise in situ observations.

The current literature demonstrates a relationship between stigma and attitudes towards therapy and help-seeking intention. However, these studies do not encapsulate those real-world non-attendance behaviours. The current study aims to contribute to this gap within the literature. Furthermore, the current study intends to test both perceived public stigma and self-stigma in relation to non-attendance of psychological appointments.

Therapy Anxiety

Seeking and engaging in psychological therapy is not only a potentially stigmatised process but also may be an anxiety provoking experience. Attending a psychological appointment involves being in an unfamiliar setting, speaking openly with an unfamiliar person, allowing oneself to be vulnerable (and open to possible perceived criticism and judgement) and discussing what is most emotional and distressing. The following subsection

will investigate the role of therapy anxiety and the impact it may have on appointment non-attendance. A description of anxiety will be provided, followed by an exploration of theory and the literature.

Anxiety

Fear or anxiety is a normal and protective trait that allows the assessment of danger and avoidance of harm (Rosen & Schulkin, 1998). Fear is considered to be a basic and universal emotion present across all cultures, ages, and living beings (Barlow, 2002). Adaptive anxiety is considered a normal response to the possible presence of danger; this anxiety subsides when the threat is removed, and the response is proportionate to the perceived danger or threat (Meacham & Bergstrom, 2016). For example, seeing a live snake can be a daunting experience for many; it often elicits a certain level of anxiety which diminishes following the presentation (Sylvers et al., 2011). Anxiety becomes maladaptive or abnormal when the perception of danger or fear is disproportionate to the actual event, or if it persists in the absence of danger (Rosen & Schulkin, 1998).

The terms “anxiety” and “fear” are often used interchangeably to represent the same construct. Other similar terms also include: “dread”, “phobia”, “fright”, “panic”, and “apprehension” (Barlow, 2002). Many theorists, however, have identified a clear distinction between fear and anxiety based on the presence (or absence) of cues (Barlow, 2002). Fear was characterised by a reaction to a specific and observable danger, such as a tiger running towards you, whereas anxiety was recognised as an objectless apprehension, such as walking through a dark alleyway (Barlow, 2002). The key difference refers to objectiveness and imminence of danger. However, these distinctions become difficult when considering a phobia. According to the DSM-5, a specific phobia is “marked fear or anxiety about a specific object or situation” (American Psychiatric Association & American Psychiatric Association, 2013, pg. 197). Not only does the DSM-5 use the terms fear and anxiety

interchangeably but the definition also refers to a phobia as a form of anxiety. Yet phobia is marked by a fear of a physical object; thus, contradicting the perception that anxiety is an objectless apprehension. Furthermore, the DSM-5 describes fear and anxiety as "two states that overlap, but they also differ" (American Psychiatric Association & American Psychiatric Association, 2013, p. 189). Given the scope of this study and the crossover of the terms across the existing measures implemented, as well as the inconsistencies in the literature the terms 'anxiety' and 'fear' in the context of this study will be used interchangeably to discuss the same construct.

Safety Behaviours

When one's anxiety is disproportionate to the danger, one may avoid many situations that do not require avoidance; thus, the behaviour becomes counterproductive. Individuals with social anxiety avoid social situations; individuals with a specific phobia of dogs will avoid dogs; and individuals with panic disorder may avoid situations that have caused a panic attack previously (Helbig-Lang & Petermann, 2010). This avoidance of perceived danger, also known as a safety behaviour, becomes a maintaining factor of the individual's anxiety (Salkovskis et al., 1999).

It is possible that anxiety and associated safety behaviours may interfere with appointment attendance. For example, when an individual is anxious about attending an appointment, they may avoid booking in, cancel at the last minute, or push the appointment back (DeFife et al., 2010). This avoidance behaviour would allow the client to avoid the perceived danger of the appointment and reduce their therapy anxiety. It may therefore reinforce the behaviour, and lead someone to continue to avoid therapy; however, empirical evidence is needed to support this. The following section will review the theory of safety behaviours as a potential way to understand non-engagement or missed appointments. An overview of a theoretical explanation of safety behaviours as a maintaining factor for anxiety

is offered below followed by an exploration of the possible relationship between safety behaviours and non-attendance behaviours.

Cognitive Theory of Safety Behaviours

According to Salkovskis (1996), a safety behaviour is a deliberate behaviour perceived to prevent a feared catastrophe. These behaviours are then reinforced when the catastrophe does not occur following the preventive safety behaviour. The two-factor learning model offers an understanding of safety behaviours (Mowrer, 1960).

Mowrer's (1960) two-factor model is based on both operant and classical conditioning. Based on the theory of classical conditioning, it is proposed that phobias or fears develop as a result of a paired association between a neutral and feared stimulus. However, this theory does not account for the continued avoidance or escape behaviours. Consequently, the second factor of the model is based on operant conditioning. Mowrer proposes that safety behaviours result in escaping the anxious feeling, and subsequently act as a contingent reinforcement for learned associations between a situation and anxiety responses (Mowrer, 1960). The individual feels they remained "safe" because of their safety behaviours and therefore are encouraged to use these behaviours again when a similar situation arises.

Safety Behaviours Maintain Anxiety

There is a large body of literature highlighting the impact of safety behaviours on the maintenance of anxiety (Clark, 1999; Freeman et al., 2007; Helbig-Lang & Petermann, 2010; Hofmann, 2007; McManus et al., 2009; Rachman & England, 1977; Salkovskis, 1991; Veale & Riley, 2001; Wolpe, 1961). For example, McManus et al. (2009) investigated the relationship between safety behaviours, self-focused thinking and social anxiety. The study found that individuals who engaged in safety behaviours were more likely to think their social fears would occur, thought they looked more anxious, felt more anxious and rated their

overall performance to be poorer than those who did not engage in safety behaviours or self-focused thinking. Similarly, Hofmann (2007) reported safety behaviours as the most critical maintaining factor for anxiety. The individuals in the study who did not engage in safety behaviour showed greater therapeutic improvements. All these studies demonstrate the strong link between safety behaviour and the maintenance of anxiety or other mental health issues.

Despite the research and cognitive theories of anxiety which have focussed on safety behaviours as playing a crucial role in the maintenance of anxiety, there has been very minimal investigation into the relationship between safety behaviours and non-attendance of psychological appointments. One study by Lorian and Grisham (2011) explored the relationship between risk-avoidance and the willingness to seek therapy. The study compared clinically anxious people to control participants. The clinical sample reported significantly more risk-avoidance behaviours compared with the control, and this risk-avoidance was negatively correlated with willingness to seek therapy (Lorian & Grisham, 2011). This suggests risk-avoidance decreases the likelihood of seeking therapy or attending appointments (Lorian & Grisham, 2011). Though risk avoidance differs from safety behaviours this study still offers interesting insights.

Anxiety and Appointment Non-Attendance

Safety behaviours are one component of anxiety which may contribute to individuals not attending appointments. Further aspects of anxiety within the literature have demonstrated a relationship with non-attendance. The relationship between anxiety and appointment non-attendance is further illustrated within the a large body of dental anxiety literature (Armfield, 2013; Armfield & Ketting, 2015; Berggren & Linde, 1984; Heyman et al., 2016; Schneider et al., 2016). Armfield and Ketting (2015) investigated the relationship of high dental anxiety and dental avoidance through a nationwide survey of an Australian population including both anxious and non-anxious individuals. The results illustrated a

strong relationship between dental anxiety and avoidance. Over 70% of participants with high dental anxiety avoided dental care, whereas 20% of individuals with low dental anxiety avoided dental care (Armfield & Ketting, 2015). Furthermore, Heyman et al. (2016) reported increased dental fear or anxiety was associated with prior dental avoidance as well as seeking dental services for emergency rather than planned care. This study indicates anxiety acts as a barrier to seeking and receiving dental care unless situations reach emergency point. Interestingly, Schneider et al. (2016) assessed dental anxiety and general anxiety in relation to dental appointment non-attendance. Schneider found that dental anxiety related to dental non-attendance but general anxiety or feeling stressed did not. This study may indicate that the anxiety must be specific to an appointment or service as opposed to having overall anxiety; thus, it may be useful to understand not only if an individual is anxious, but what the focus of the anxiety is.

These studies demonstrate a relationship between dental anxiety and avoiding dental care. The body of dental literature helps to demonstrate the strong relationship between anxiety and non-attendance to health appointments. However, further investigation of non-attendance to psychological appointments specifically is necessary. Zartaloudi and Madianos (2010) administered a questionnaire to assess the influence of fear on help-seeking in a community mental health centre that provided counselling, psychotherapy and medication. Fearfulness was measured using the Thoughts about Psychotherapy measure. This measure included questions about the therapist not taking the clients' problems seriously or not understanding, not sharing the same values, feeling pressure to change, and concerns about judgement from the therapist and friends. The sample included 290 participants who had engagement with the community mental health service in the past four years. The results suggested individuals with greater fears about therapy had less positive attitudes towards psychological help-seeking and experienced delays in engagement and attendance (Zartaloudi

& Madianos, 2010). This study primarily looked at the relationship between fearfulness and attitudes about help-seeking. Future studies should specifically investigate attendance behaviours. Furthermore, it is important to note the retrospective study included participants who engaged with the relevant service between 2003-2007; therefore, some participants were expected to recall their experiences from up to four years prior. This time delay may have significantly impacted memory and response accuracy. While this study has limitations, it demonstrates a relationship between fear or anxiety and the willingness to seek therapy. Further investigation in this area is needed.

Fear of Emotion and Self-Disclosure

When one engages in therapy it often involves allowing oneself to be vulnerable, sharing private thoughts, experiences and strong emotions. A *fear of emotion* involves apprehension and discomfort towards expressing one's emotions (Vogel & Wester, 2003). Vogel and Wester (2003) examined the relationship between emotional disclosure and attitudes towards help-seeking through a simultaneous multiple regression analysis. The study included six emotional disclosure types: fear, sadness, happiness, anger, anxiety and jealousy. The results showed no specific emotion was significant but it was the general fear of disclosing emotion that correlated with help-seeking. Vogel and Wester concluded that client expectations at having to express emotions negatively impacted their helping-seeking intentions (Vogel & Wester, 2003). Furthermore, Komiya et al. (2000) highlighted the relationship between fear of expressing emotion and a reluctance to engage in therapy. Those individuals with less emotional openness were found to have less favourable attitudes towards help-seeking (Komiya et al., 2000).

In addition to being vulnerable and exposing one's emotions, seeking help involves disclosing a problem or troubling experience to a family member, friend or professional with the goal of obtaining support, advice or assistance during a distressing time (Gourash, 1978).

Self-disclosure involves the ability to disclose distressing and personal information (Vogel & Wester, 2003). Self-disclosure was first described by Jourard (1964) as imperative; to be helped a client must choose to disclose to another person their private attitudes, thoughts, feelings and experiences. Several studies have investigated the relationship between the ability to self-disclose and intent to seek help. The results of these studies have been variable. However, several have found a strong relationship between fear of self-disclosure and help-seeking attitudes or seeking therapy (Hinson & Swanson, 1993; Vogel et al., 2005; Vogel & Wester, 2003).

Hinson and Swanson (1993) investigated the likelihood university students between the ages of 17 and 28 years would seek help from a therapist. A significant proportion of the variance in willingness to seek psychological help was accounted for by the willingness to self-disclose to a therapist and the severity of the problem. These two factors interacted with one another; if the problem's severity was low, individuals would be more likely to disclose their situation to friends or family. However, if the problem severity was high, the individuals were more likely to recognise the need to self-disclose to a therapist in order to receive more specialised support.

Vogel and Wester (2003) offered further support for the relationship between self-disclosure and the intention to seek therapy. Two studies were conducted on over 400 university students. The study involved a questionnaire which included demographic information, the perceived risk and benefit of disclosing to a counsellor and attitudes about self-disclosure. The results illustrated a fear of self-disclosure and a perceived benefit of self-disclosing were predictive of both attitude and intent to seek psychological support. While Vogel and Wester's (2003) and Hinson and Swanson's (1993) studies support this relationship between self-disclosure and the intention to seek therapy it is important to note the two studies were both conducted within a university population. These students were not

speaking from prior experience but were answering hypothetical questions. Therefore, the response may not be representative of real-world situations within the general population.

The extent to which an individual likes and how well they know another person influences their willingness and likelihood to self-disclose (Jourard, 1964). This interaction poses a significant issue for those individuals who are fearful of self-disclosure and are in turn avoidant of therapy. This results in them forfeiting the opportunity to get to know and build rapport with a therapist. Therefore, these individuals are unable to feel safe enough to self-disclose personal information and receive support. Fear of self-disclosure may represent a significant barrier to attendance of psychological appointment. The data in this area is limited and variable; greater exploration is required to make causal inferences about the relationship between fear of self-disclosure and non-attendance.

Masculine stereotypes have been documented in the literature as related to help-seeking attitudes and behaviours (Addis & Mahalik, 2003; O'Brien et al., 2005; Yousaf et al., 2015). Gender stereotypes involve the assumption that men and women learn gendered behaviours and attitudes. These are perceived to develop from cultural values and ideologies about what it takes to be a man or woman (Addis & Mahalik, 2003). A systematic review of the literature suggests fear of expressing emotion is particularly prominent in the male population (Yousaf et al., 2015). For example, Johnson et al. (2012) reported that men were less likely than women to seek support for their depression as they did not want to speak of their emotions. Similarly, O'Brien et al. (2005) found that men felt they should be able to handle problems on their own and are not "supposed to" be open about their emotions. These studies illustrate anxiety about expressing emotions as a significant barrier to help-seeking and appointment attendance, especially among males due to masculine stereotypes.

Motivation

Not only can anxiety contribute to avoidance and become a barrier to therapy attendance, to seek and engage in therapy there must be commitment and motivation to change. In most cases an individual must: see the benefit in taking action, take the necessary steps to reach out to a service, be practically motivated to make the time to travel the distance to the service, and be open to vulnerability in discussing what may be causing them distress. In other cases, such as an inpatient service or compulsory treatment, these factors may differ. However, for many individual's, motivation is a key factor in attending therapy. Miller and Rollnick (2002) have suggested that motivation for therapy can be defined as "the probability that a person will enter into, continue, and adhere to a specific change strategy" (p. 19). The self-determination theory offers an understanding of the varying factors which motivate human behaviour. The following section will explore the self-determination theory of motivation, looking specifically at modes of motivation in the hope of further understanding motivation for therapy. Following this, the available literature surrounding motivation and how this impacts non-attendance will be explored.

Self-Determination Theory (SDT)

The self-determination theory (SDT) offers an understanding of different forms of motivation which drive human behaviour. The theory assumes people are active organisms with natural tendencies towards growth, mastering challenges and integrating new experiences to form a sense of self. To be competent, autonomous and to relate to others there are believed to be the three fundamental psychological needs (Deci & Ryan, 2012).

However, these natural tendencies do not occur automatically but are influenced by the social context (Deci & Ryan, 2004). Social context consists of proximal relations including family, friends or co-workers and distal relations such as cultural values or an economic system (Deci & Ryan, 2012). The social context can support or negate these

fundamental needs and impact on whether an individual's goals and actions are intrinsic or extrinsic. SDT in based on predictions about behaviour and development based on a dialectic between the active and natural organism and the social context (Deci & Ryan, 2004, 2012).

SDT claims seven forms of motivation exist; *extrinsic motivation, amotivation, external, introjection, identification, integration and intrinsic motivation.* These various forms of motivation will be discussed in greater depth below, looking first at the least autonomous form of motivation and finishing with the most.

Extrinsic motivation is based on instrumental reasons; behaviours are not performed for their own sake, but to receive a reward or to avoid a punishment (Deci & Ryan, 1990). Within extrinsic motivation there are thought to be five levels: amotivation, external, introjection, identification and integration.

Amotivation occurs when an individual does not recognise the relationship between their actions and the outcome. The individual will likely lack a sense of control and feel incompetent. A client with amotivation may enter therapy with feelings of hopelessness and doubting therapy effectiveness (Pelletier et al., 1997).

External regulation includes behaviours controlled via reward or constraint of another person (Pelletier et al., 1997). For example, an employee attends therapy to ensure the safety of their job as per instructions from their employer.

Introjected regulation is a source of motivation reinforced through internal pressure such as guilt, shame, anxiety or self-esteem (Pelletier et al., 1997). An example of introjection regulation would be a mother of a family of victims to domestic violence who seeks therapy out of shame for not being able to leave the abusive situation.

Identified regulation refers to behaviours that one chooses to act out due to congruence with values or goals, but are still considered extrinsic, that is to achieve a goal

(Pelletier et al., 1997). An example may be an individual seeking therapy to reach their goal of becoming a better businessperson.

Integrated regulation is the most autonomous form of extrinsic motivation; it is defined as a behaviour performed with a combination of carefully considered external motivations that align with one's own personal values (Pelletier et al., 1997). The behaviour is engaged in without coercion, but without separable outcomes from the pure satisfaction of engaging in the activity. For example, a client seeks therapy to better themselves as a person, and to reduce anxiety in engaging in more aspects of life they enjoy. The varying degrees of motivation shed light on several of the various reasons an individual may seek therapy.

Intrinsic motivation is based on a need to be autonomous and competent in dealing with one's environment through conquering challenges; thus, enhancing personal efficacy (Deci & Ryan, 1985). Simply put, intrinsic motivation is engaging in an activity or behaviour for the sole purpose of engaging in that activity. Intrinsic motivation is performed in the absence of reward or constraint. An individual who attends therapy with the pure intention of gaining a deeper personal understanding of themselves is thought to be intrinsically motivated. Another example could be an individual who attends therapy because they find the process enjoyable and interesting (Ryan et al., 2011). This form of motivation of therapy in most cases is quite unlikely in reality (Ryan et al., 2011). According to Maslow's hierarchy of needs, self-actualization which can be defined as meeting one's full potential, is considered the last of five priorities (Maslow, 1943). Satisfying other basic physiological needs such as food, water, warmth, and safety and psychological needs such as belonging, love and intimacy need to be first met (Maslow, 1943). Given people lead busy and expensive lives, therapy to understanding oneself better is unlikely to be a priority for many. People tend to seek therapy because they perceive it to be instrumental to other valued

outcomes. These outcomes may include improved career, marriage, mental health or lifestyle (Ryan et al., 2011).

Motivation and Non-Attendance

Support for the SDT has been found across a range of domains such as physical education (Standage et al., 2006), addiction (Williams et al., 2006), health care (Ng et al., 2012), general education (Niemiec & Ryan, 2009), politics (Losier et al., 2001), religion (Neyrinck et al., 2005) and psychological therapy (Bados et al., 2007; Soares et al., 2012). Each of the studies referenced illustrate a relationship between levels of motivation and engagement. Greater levels of autonomy and intrinsic motivation were related to positive outcomes and behaviours such as engaging in physical education, adhering to doctors' recommendation and more stable political attitudes. The following section will review a number of the current studies which have begun to investigate the relationship between motivation and psychological therapy. The empirical evidence and SDT discussed above demonstrated how the level and quality of motivation may impact attitudes, performance and regulation. The question of whether this theory extends to appointment non-attendance is explored below.

Several studies have found empirical evidence for a relationship between motivation and non-attendance of psychological appointments (Bados et al., 2007; Ryan et al., 1995; Westmacott & Hunsley, 2017). Ryan, Plant, and O'Malley (1995) found a relationship between external and internal motivation and the likelihood of dropping out of individuals seeking therapy for alcohol misuse. The results demonstrated that individuals with high levels of intrinsic motivation were more likely to be still engaged in therapy after eight weeks. While this study supports the relationship between motivation and non-attendance, it is important to recognise the particular relevance of therapy for alcohol misuse. There is often legal or family pressure to seek therapy for alcohol misuse and therefore the findings may not

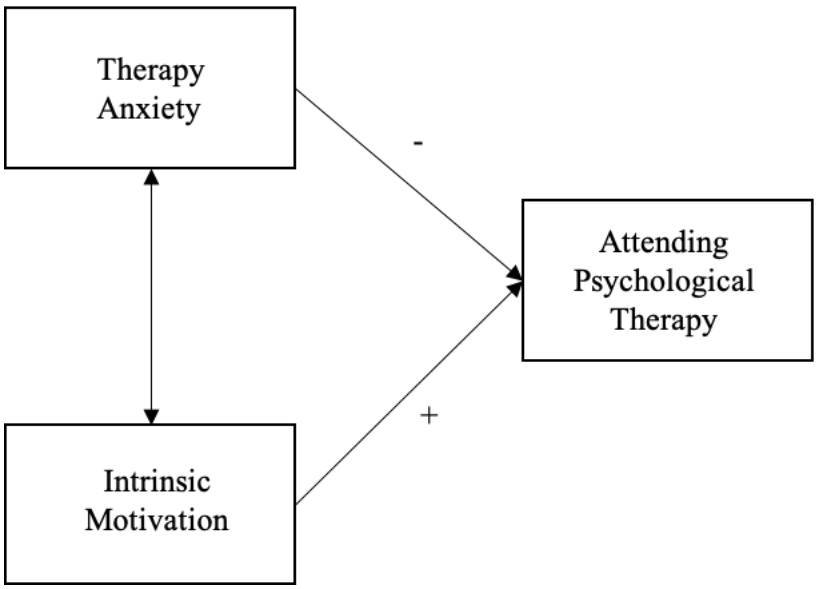
translate to other forms of psychological distress. Bados, Balaguer, and Saldaña (2007) investigated non-attendance of a behavioural therapy service in Barcelona and found of the individuals who dropped out, 46.7% stated it was due to low motivation. Soares et al. (2012) investigated the impact of motivation on non-attendance in Portugal and found no difference in the motivation scales of those who dropped out and those who attended, suggesting motivation may not be a significant predictor of non-attendance. However, the study did present several limitations. The instruments used were not validated in a Portuguese population and the sample size was small (14 therapists and 39 clients). Further investigation could clarify the significance of the relationship between motivation and non-attendance of psychological appointments.

Motivation and Anxiety

Individuals with clinically significant distress, who are referred to a clinic for therapy, will have some level of motivation to make change. However, of these individuals, many experience anxiety in anticipation of therapy, which may hinder appointment attendance. There appears to be an incongruent relationship between anxiety and motivation; thus, motivation is diminished by the individual's anticipatory anxiety. What is the level of motivation required in order to counteract anxiety surrounding therapy non-attendance? The balance between help-seeking motivation and anxiety about psychological therapy has not yet been investigated (see Figure 3 below); however, this relationship is evident across a number of other domains and is reviewed below.

Figure 3

Motivation and Anxiety Relationship with Attendance



Halvari et al. (2010) investigated the impact of motivation and treatment anxiety on non-attendance of dental care appointments. The study looked at perceived competence and autonomy alongside dental treatment anxiety. The results demonstrated that individuals who perceived they had autonomous motivation were more likely to attend their appointments; those with higher rates of dental treatment anxiety were more likely to avoid or prolong the wait of their dental appointments (Halvari et al., 2010). This study identified a positive correlation between motivation and attendance, and a negative correlation between anxiety and attendance. However, it did not look at how the two factors work together to influence attendance. Although this study does not look specifically at motivation and avoidance of psychology appointments, it does highlight the potential relationship between motivation, anxiety and non-attendance of health-related appointments.

Additionally, several studies have looked at the relationship between motivation and anxiety and how it relates to education (Gottfried, 1982; Jain & Sidhu, 2013). Pekrun (1988)

presents a theoretical model on the interrelationships of anxiety and motivation in achievement settings. The theory proposed that test anxiety is experienced negatively; thus, decreasing intrinsic motivation for future tests. In other words, increased anxiety reduces future positive intrinsic motivation, potentially leading to avoidance of future anxiety provoking situations (Pekrun, 1988). This theory is similar to the cognitive theory of safety behaviours in that negative experience increases avoidance of future negative experiences (Clark, 1999).

Jain and Sidhu (2013) found increased anxiety correlated with more negative attitudes and lower levels of motivation among those learning to speak English. Another study looked at intrinsic motivation and anxiety in school children (Gottfried, 1982). The longitudinal study found a negative correlation between intrinsic motivation and anxiety. Those individuals with greater intrinsic motivation experienced less school-related anxiety (Gottfried, 1982).

These studies highlight the relationship between anxiety, motivation and outcomes. They suggest a relationship between motivation and anxiety can change the outcome of a situation, whether it is seeking dental care, learning a new language or potentially attending and engaging in psychological care. These studies outline a gap in the literature to explore motivation and treatment anxiety and how it impacts psychological help-seeking and attendance. The following section explores the literature surrounding the relationship between presenting concerns or diagnosis and non-attendance.

Presenting Concerns or Diagnoses

The current literature offers empirical support for the relationship between diagnosis and non-attendance. Hamilton et al. (2011) looked at a broad range of diagnoses. The researchers implemented a retrospective longitudinal study including 66,000 mental health practices and over 450,000 participants in the United States. The findings demonstrated

individuals diagnosed with depression and anxiety were more likely to attend compared to individuals diagnosed with schizophrenia, psychosis, and substance use disorder. While this study offers a very large sample size, comparison should be made cautiously as the disparity across the 66,000 services may be vast, including type of clinicians (psychologists, psychiatrists, counsellors etc.), the therapy modalities and any other service specific barriers. Furthermore, the retrospective data is purely correlational and no causality can be assumed nor can clients' perspectives be considered. While this study is not without limitations it does support the relationship between diagnoses and attendance.

Issakidis and Andrews (2004) offered further support for the relationship between diagnosis and attendance. The findings suggest that clients with a primary diagnosis of depression were less likely to commence treatment than those with a primary diagnosis of anxiety. On the other hand, individuals with a primary diagnosis of anxiety were more likely to stop attending once therapy was in progress in comparison to those with a primary diagnosis of depression. This study not only highlighted the relationship between diagnosis and non-attendance but also identified different diagnoses correlated with different points of non-attendance. While it important to recognise this was a correlational study and the reasons as to how different diagnoses impact attendance were not explored in this study there are a few possible explanations. It is possible those with a diagnosis of depression would be more likely to not commence treatment than those with anxiety based on the symptomology of these presentations. Individuals with depression may be more likely to experience a lack of motivation and difficulty with activating action thus resulting in a lack of treatment commencement. Furthermore, it makes sense that individuals experiencing anxiety may be more likely to drop-out of treatment once it commences than those experiencing depression as they are faced with challenges such as exposure therapy later in the therapy process where their anxiety may be heightened. Those with anxiety may be more likely to demonstrate

avoidance behaviours when they are exposed to anxiety provoking experiences. It is important to recognise this study investigated only those at a depression and anxiety clinic and therefore did not include other diagnoses.

Chapter 3 explored a number of psychological factors which may predict non-attendance of psychological appointments. The current literature includes a number of studies and psychological theories which offer support for the predictiveness of non-attendance. The literature demonstrates a breadth of psychological predictors, some of which have been well established while others are in the early stages of investigation and require more specific research. In particular, motivation and anxiety have been researched within a health or education setting but have not been extensively applied directly to psychological appointment attendance. The current study intends to fill this gap and investigate the predictiveness of a range of psychological and practical factors for attending psychological therapy appointments. The factors outlined in the preceding chapter will be investigated in the current study. These factors will be looked at in isolation as well as in more complex models together. Should these psychological factors demonstrate strong relationships with non-attendance behaviours, services may be able to assess the presence of these factors during the referral and initial engagement process and ensure relevant interventions are implemented to minimise the possible impact of these factors. The following chapter will outline the research rationale in further depth as well as present the hypotheses and exploratory questions for the current study.

CHAPTER 4: Research Rationale, Hypotheses and Exploratory Questions

Rationale for the Current Study

There is a growing awareness of the issue of non-attendance of psychological appointments, further understanding and interventions are needed. The literature review above highlighted a multitude of individual and interacting factors that may relate to non-attendance. Following this review a number of clear gaps in the literature are evident. Firstly, many of the studies investigated help-seeking intentions or attitudes which differ from attendance behaviour. As outlined earlier, it is anticipated a number of barriers intervene in real life situations between the cognitive intention and the physical behaviour of seeking and engaging in psychological support. While many of the studies discussed above, investigating help-seeking intentions or attiutudes, offer valuable insight it is important to consider their limitations. It is useful to collect data on appointment attendance behaviours as opposed to hypothetical help-seeking intentions or attitudes. Thus, the current study seeks to look beyond intentions and attitudes and investigate factors which relate to real life attendance behaviours. The following research questions and hypotheses are pertinent to attendance behaviours.

Secondly, many findings discussed in the existing literature are contradicted by other studies. As with most areas of research, no two studies report the same findings or results. A larger body of robust research within a research area that utilises appropriate designs for drawing causal inferences would provide greater empirical evidence and possible confidence in the causal nature of relationships. Therefore, the current study seeks to further our understanding of non-attendance and contribute to the existing literature through the use of complex models which allows for confounding variables to be controlled, allowing for tentative causal conclusions to be drawn.

Lastly, the current study has a particular focus on psychological factors such as motivation, therapy anxiety, safety behaviours, stigma, and self-disclosure as well as practical factors and cultural safety. The majority of these factors have demonstrated relationships in other areas such as education or physical health care but have had minimal investigation in relation to attendance of psychological therapy appointments. Thus, the focus of the hypotheses and exploratory questions of the current study is to look at the predictive factors in the context of psychological therapy appointments. The current study includes five main hypotheses and five exploratory questions. These are explored in detail below.

Hypotheses

Hypothesis One

The first two hypotheses are derived from the cognitive theory, indicating that safety behaviours are a maintaining factor for anxiety and a barrier to treatment outcomes. Hypothesis one seeks to understand the role of safety behaviours in non-attendance.

Hypothesis one: The tendency to engage in safety behaviours (as measured by the SAFE[1]) will be negatively correlated with appointment attendance history amongst clients seeking psychological treatment.

[1] The SAFE Subtle Avoidance Frequency Examination (SAFE) was used to assess safety behaviours such as avoiding eye contact or wearing cool clothes to prevent sweating. For further details see the measure section below.

Hypothesis Two

The second hypothesis seeks to measure whether treatment anxiety[2] correlates with non-attendance. This finding has been well documented within dental literature (Armfield & Ketting, 2015; Heyman et al., 2016; Skaret et al., 1999) but needs further investigation for psychological appointments.

Hypothesis two: Treatment anxiety (on the modified DAS-R[3]) will be negatively correlated with appointment attendance history amongst clients seeking psychological treatment.

Hypothesis Three

The third hypothesis is based on the Self-Determination Theory (SDT) of motivation. The aim of this hypothesis is to see whether a correlation between intrinsic motivation and attendance exists. The SDT theory has been applied and measured across a range of different fields (as discussed earlier) but the research surrounding psychological appointments is minimal.

Hypothesis three: Intrinsic and integrated regulation motivation (as measured by the CMOTS[4]) will be positively correlated with appointment attendance history amongst clients seeking psychological treatment.

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[2] The hypotheses and research questions use the term "treatment" or "treatment anxiety", however the remainder of the thesis uses the term "therapy" or "therapy anxiety" as it relates more closely to experience with a therapist. Despite the variation, both of the terms refer to the same variable.

[3] The DAS-R is Corah's Dental Anxiety Scale Revised (Ronis, 1994). For further details on this measure and the modifications made see the measure section below.

[4] The CMOTS is the Client Motivation for Therapy Scale (Pelletier et al., 1997) was implemented to assess intrinsic motivation to attend therapy. For further details see the measure section below.

Hypothesis Four

The aim of the fourth hypothesis is to begin to assess the relationship between treatment anxiety[2] and motivation. The hypothesis is based on the potentially counterproductive relationship between motivation and treatment anxiety. The balance between help-seeking motivation and anxiety about therapy has not yet been investigated; however, this relationship is evident across a number of other domains such as dentistry (Halvari et al., 2010) and education (Jain & Sidhu, 2013). This hypothesis will look at the balance between motivation for therapy and treatment anxiety and how it impacts non-attendance of psychological appointments:

Hypothesis four: In a structural equation model with attendance history as the outcome variable and anxiety and intrinsic motivation as predictors:

H4a. Anxiety levels will be negatively related to attendance history

H4b. Intrinsic and integrated regulation motivation will be positively related to attendance history

Hypothesis Five

Hypothesis five is based on the modified labelling theory (MLT) of stigma. The fifth and final hypothesis relates to stigma and non-attendance. The aim of the hypothesis is to measure whether a relationship exists as the current literature predominantly assesses psychological help-seeking attitudes and intentions as opposed to physical attendance behaviours.

Hypothesis five: Individuals who report highly on the public stigma (as measured by the PSOSH[5]) and self-stigma (as measured by the SSOSH[6]) scales will have a poorer attendance history.

Exploratory Questions

Exploratory Question One

The first exploratory question is based on practical factors. The current study has a large focus on the psychological factors that impact non-attendance. However, recognition of the practical factors which also play a part in non-attendance is important. Therefore, the purpose of exploratory question one is to identify the strongest practical predictors of non-attendance.

Exploratory question one: Which practical factors are the strongest predictors of non-attendance?

The following factors will be included in an ordinal logistic regression as previous literature supports their predictiveness of non-attendance. These factors include employment, education, type of referral, the timeliness of referral process, work, family and childcare commitments, forgotten appointments, physical sickness, time restrictions, and financial cost[7].

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[5] The Perception of Stigmatization by Others for Seeking Help Scale (PSOSH; Vogel et al., 2006) was used to assess perceived public stigma. See the measure section below for further details.

[6] The Self-Stigma of Seeking Psychology Help scale (SSOSH; Vogel et al., 2006) was used to assess self-stigma. See the measure section below for further details.

[7] The preregistered version of of exploratory question 1 did not state some of practical barriers listed here (work, family and childcare commitments, forgotten appointments, physical sickness, time restrictions, and financial cost). However, these barriers were identified in the measures section of the preregistration, and we

Exploratory Question Two

The intention of exploratory question two is to assess the degree to which a wider range of psychological factors, beyond those specified in the hypotheses, predict attendance. These factors include cultural safety, presenting problem (or diagnosis), and self-disclosure. This question was formed with the understanding that non-attendance is a complex phenomenon and recognition that multiple factors play a part is important. The inclusion of cultural safety in this question is important given the current lack of understanding of cultural safety in psychological services. The relationship between cultural safety and attendance would be valuable to assess specifically within its own hypothesis. However, I would have been unable to do it justice with the recognition of the size and scope of a Doctorate of Clinical Psychology (DClinPsych) thesis as well as the number of questions already included. Thus, it was included in this exploratory question with the hope of further exploration in future research.

The inclusion of presenting problems was made as the literature has demonstrated different presenting problems impact attendance at different points. However, many of these studies have been confined to particular services which include a limited number of presentations (Issakidis & Andrews, 2004). As this study is not restricted to any particular service it may identify further correlating presentations. The intention for exploratory question two is to assess the strongest psychological predictors of non-attendance.

Exploratory question two: Which psychological factors are the strongest predictors of non-attendance? The following factors will be included in a structural equation model as previous empirical evidence has indicated their importance. These factors include treatment

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chose to include them in the analysis for this research question. They are therefore included in the research question (as stated here) for completeness.

anxiety[2], motivation for therapy, self-stigma, public stigma, self-disclosure, low mood/depression, anxiety, trauma, stress, substance use and cultural safety.

Exploratory Question Three

Exploratory question three pertains to the different points of non-attendance. A number of studies investigate non-attendance though they often look only at one point of non-attendance such as not attending at all (non-engagers) or not attending after the first appointment (early drop-outs). This question seeks to identify the most common point at which individuals do not attend appointments by identifying the most commonly selected response.

Exploratory question three: What is the most common point [8] at which people disengage? [9] The following factors will be included to assess the proportion of participants within each category: *I was referred but never booked in (non-engager), I booked an appointment but cancelled or didn't show up (non-attender), I came to the first appointment and then didn't return (early drop-out), I came to most of my appointments but missed a few in between (low-attender), I stopped coming after attending several appointments (delayeddrop-out, I attended all the appointments that I made with the therapist (complete-attender).*

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[8] The most common point, is considered the most frequently endorsed response within the 6 response options from the measure of non-attendance behaviours.

[9] The term "disengage" was originally selected and preregistered however it is not the most appropriate term across the different levels of attendance. Disengage suggests an individual has previously attended and then stopped engaging and therefore does not capture those who have not attended at all. For the remainder of this thesis the term "did not attend" or "non-attendance" will be used in place of disengage.

Exploratory Question Four

Exploratory question four further extends exploratory question one in the investigating of the relationship between cultural safety and non-attendance. The aim of exploratory question four is to investigate cultural safety across different ethnicities to develop understanding of cultural safety as a possible predictor of non-attendance. The literature illustrates indigenous cultures experience lower rates of cultural safety within the medical health care literature (Jansen et al., 2009; Johnson et al., 2004). However, cultural safety has had minimal investigation within the field of psychological care. Thus, the aim of this question is to begin to investigate cultural safety across a range of ethnicities within psychological services.

Exploratory question four: What differences in mean cultural safety levels exist across ethnicities?

Exploratory Question Five

Exploratory question five is intended to acknowledge the complexity of the relationship of non-attendance and the individual differences people experience. The question is intended to provide participants with an opportunity to express their voice and feel their reasons are being heard. The intention is also to identify common factors which may have been missed within the scope of the main survey items. Exploratory question five will be analysed using a content analysis of an open-ended question which provides participants the opportunity to share additional ideas beyond those that are included within the survey:

Exploratory question five: What are the most common self-identified reasons for not attending appointments?

CHAPTER 5: Method

Design

This research uses a cross-sectional survey design to investigate non-attendance. Cross-sectional surveys are one of the most common types of surveys. They provide a structured way to collect data which allows for systematic analysis of variables. Cross-sectional designs involve observation at a single point in time (Lavrakas, 2008).

Explanation of Method

The current study includes two different samples, a complex recruitment procedure, and a range of inclusion and exclusion criteria applied during both the recruitment and data analysis phases. To provide a logical and clear explanation the inclusion criteria of the study is discussed first. This provides underpinning for the subsequent decisions and steps taken. Following is a description of the participants and recruitment, exclusion criteria, ethical considerations, procedure, and measures.

The sample was made up of two groups: New Zealand participants and international participants. It was important to include New Zealand participants as this study was conducted in New Zealand and is a population of interest. The decision to include participants beyond New Zealand was to reach a larger sample in order to achieve statistical power, to accurately estimate statistical relationships, in a more time efficient way. Given the scope and time restraints of a DClin thesis this was particularly important. Furthermore, the problem of non-attendance is global; thus, the inclusion of international countries allows for exploration beyond New Zealand specifically.

The international sample included participants from Australia, Canada and the United Kingdom. These countries were selected for the international sample as they all offer some form of government-funded health care and mental health care, as well having a private health care sector. When considering the inclusion of particular countries, it was important to

select countries which shared similar health care systems to enhance consistency. Factors such as funding or cost, types of services and access were important to consider. Australia offers government-funded inpatient, residential care and community mental health services (Australian Institute of Health and Welfare, 2020). Canada offers government-funded hospitals, clinics or agencies or an employee assistance program (CAMH, 2020). The United Kingdom offers government-funded hospitals and clinics through the National Health Service (National Health Service, 2018). These services are similar to those funded services offered by the District Health Board (DHB) community mental health services in New Zealand (Ministry of Health Manatū Hauora, 2020). While these services are similar, they are not identical; thus, the different countries should be considered as a relevant factor. Furthermore, these countries are largely English speaking; thus, it was reasonable to assume that survey questions would be understood. The difference between the New Zealand and the international sample, particularly recruitment and data collection, will be described in detail in the following paragraphs.

Inclusion Criteria

To meet the criteria for the New Zealand sample participants had to be over the age of 18, be living in New Zealand and sought therapy in the past 18 months. This criteria was screened by early questions in the survey. If participants did not meet the criteria they were directed to the end of the survey and thanked for their participation.

To meet the criteria for the international sample participants must have completed the screening survey on Prolific (an online data collection platform); sought therapy in the past 18 months; be over the age of 18 years; and be living in the United Kingdom, Canada or Australia. These criteria were assessed in a separate screening survey prior to the completion of the main survey due to some of the restrictions of Prolific. This process is explained in

greater depth in subsequent sections. For more information see the participant recruitment subsection and Figure 4 below.

Participants

The sample size was determined based on the planned analyses to ensure enough statistical power was achieved. The most complex of the planned analyses was a structural equation model (SEM). For details on this analysis see the subsection Structural Equation Modelling (SEM) in Data Analysis below. The N:q ≥ 10 rule for SEM (sample size – free parameter ratio) suggests a sample size with 10 participants to every one parameter would be sufficient to achieve statistical power (Jackson, 2003; Kline, 2016). Of the three SEMs in this study, exploratory question two, the most complex model assessing psychological factors, included 49 free parameters. Thus, 49 multiplied by 10 is equal to 490. To ensure statistical power was achieved and to allow for exclusions the study aimed to collect 650 participants.

The desired sample size was 200 participants for the New Zealand sample and 450 for the international sample. The ratio of international to New Zealand participants was based on several factors. First and foremost, a reasonable sized New Zealand sample was desired, given that the research was conducted in New Zealand, and representation of the wider population was of particular interest and importance. However, New Zealand has a much smaller population and the recruitment methods available in New Zealand were likely to produce relatively slow recruitment. Secondly, while it was also recognised that the international sample may represent a unique population, those who participate in online research for the purpose of earning a small amount of money, we anticipated it would be easier to collect a large sample of data more quickly for the international sample using Prolific, which proved to be accurate.

The data collection process involved three main steps: recruiting and collecting the New Zealand sample, conducting an additional screening survey to recruit international

participants (explained in depth below), and collecting data from the international sample. A total of 476 international participants and 253 New Zealand participants ultimately took part in the survey. Following exclusion of those who did not meet the inclusion criteria (see exclusion criteria below) a total of 460 international participants and 209 New Zealand participants were included in the final sample with a total of 669 participants overall with a total of 83 excluded participants.

The participants consisted of 209 individuals (31.24%) who were living in New Zealand, 34 (5.08%) living in Australia, 37 (5.53%) living in Canada and 389 (58.14%) living in the United Kingdom. The sample included 179 (26.75%) males, 478 (71.44%) females and 10 (1.49%) individuals who identified as gender diverse. The age of participants was predominantly between 18 – 34, a total of 392 (58.59%) individuals. See Table 1 below for an overview of the demographic statistics of participants.

Table 1

Demographic Statistics of Participants

		Frequency	Percentage
Country			
	New Zealand	209	31.24%
	Australia	34	5.08%
	Canada	37	5.53%
	United Kingdom	389	58.14%
Gender			
	Female	478	71.44%
	Male	179	26.75%
	Gender Diverse	10	1.49%
Age Range			
	18-34	392	58.59%
	35-49	209	31.24%
	50-64	60	8.96%
	65+	8	1.19%

New Zealand Sample Recruitment

The New Zealand sample was recruited via Facebook advertisements with a link to the online survey (targeted at individuals living in New Zealand over the age of 18 who were interested in psychology or self-help mental health), Facebook posts (on the researcher's personal page as well as relevant psychological pages such as Anxiety New Zealand Trust), posters around Massey University Albany campus, and in psychology clinics (such as Anxiety New Zealand Trust).

International Samples Recruitment

The recruitment process for the international samples was somewhat complex. Participants for this sample were recruited through Prolific. Prolific is an online platform that enables fast data collection across the Organisation for Economic Co-operation and Development (OECD) countries (*Prolific Academic*, 2014). Participants on Prolific earn small monetary rewards for participating in studies. The countries selected were United Kingdom, Australia and Canada as their health systems are similar to New Zealand and they have a large population of users on Prolific.

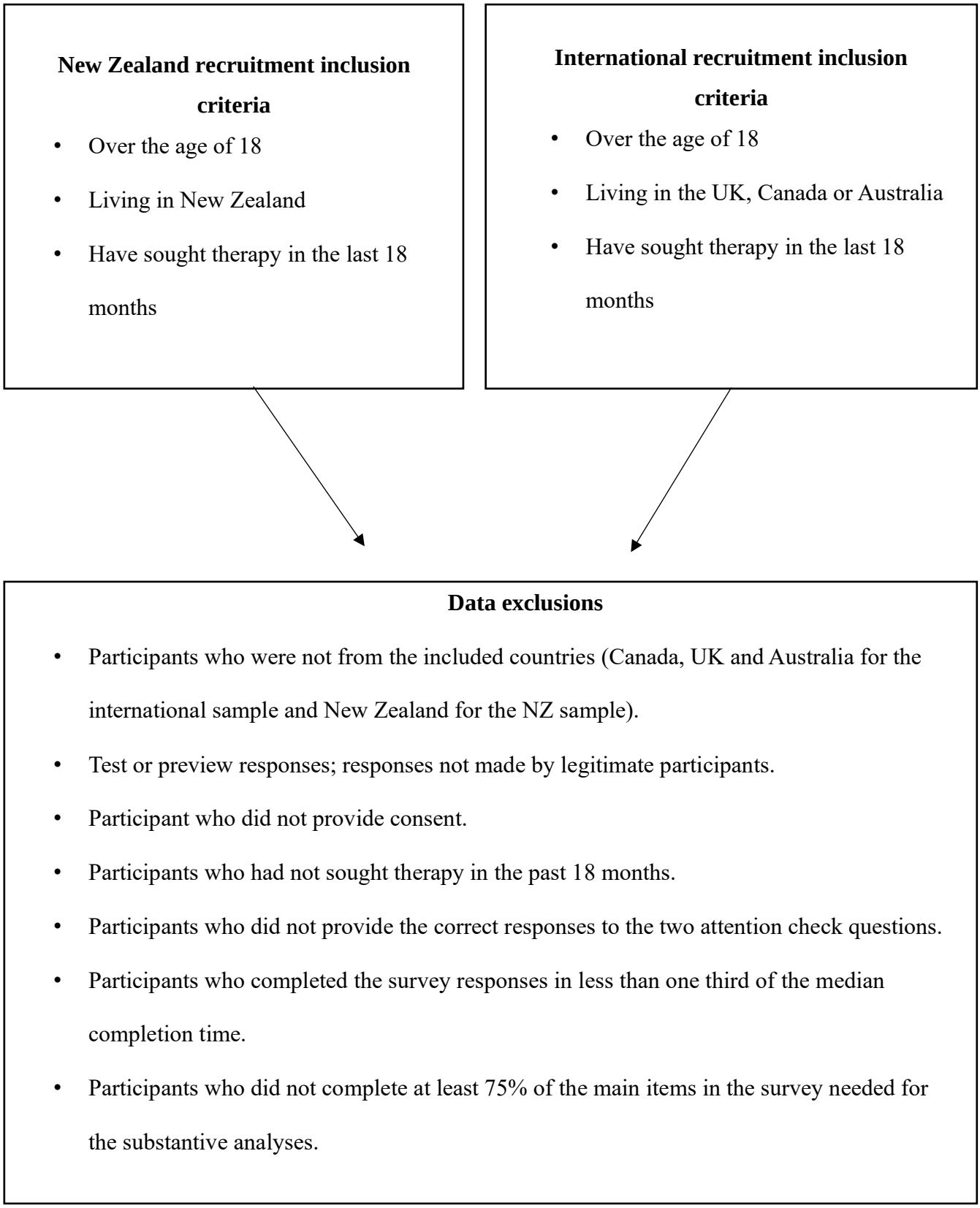
Prolific offers a set list of screening exclusion criteria such as age, gender and country of residence but these do not include customised inclusion criteria such as "seen a therapist in the last 18 months". To recruit a desired sample when custom screening criteria are needed Prolific suggests running two separate studies. Therefore, a short screening survey was created to identify those who have sought psychological support in the last 18 months. To participate in the screening survey, participants needed to be from the United Kingdom, Canada or Australia and be over 18 years of age. The screening survey consisted of three main questions: "In the last 18 months, have you been referred to a psychological service?", "In the last 18 months, have you booked in for psychological therapy and not attended?", and "In the last 18 months, have you attended psychological therapy with a psychologist or counsellor?".

The aim of the screening survey was to identify enough participants who met the criteria for the main study (450 international participants). A total of 1500 participants completed the screening survey as stated in the preregistration. This identified a total of 690 participants eligible for the main study. All 690 screened participants were invited to participate in the main study and a total of 476 completed the study. Several more participants were collected beyond the 450 to ensure enough participants would be included

after exclusions. The screening survey took on average 44.78 seconds to complete with a median completion time of 34.5 seconds. Each individual was paid 0.12 GBP (British pound sterling) which was equivalent to $0.24 NZD. This corresponds to an hourly rate of 7.20 GBP. This amount paid was decided based on Prolific's recommendation to pay a minimum of five GBP per hour (*Prolific Academic*, 2014). Those who answered "Yes" to the screening questions, identifying they had engaged with a psychological service within the last 18 months, were invited via Prolific to undertake the main study. The main international survey sample included 476 international participants. Each participant in the main international sample received 1.25 GBP as recognition of their participation.

Figure 4

Inclusion and Exclusion Criteria



Exclusion Criteria

The following section details the data exclusions specified in the preregistration. This includes nine different criteria. Each of these nine criteria and the rationale are explained in depth below. For a visual representation see Figure 4 above which outlines the inclusion and exclusion criteria.

1. Participants who were not from one of the included countries: Canada, United Kingdom and Australia for the international sample and New Zealand for the NZ sample.
    i. This information was determined by a forced response question within both the New Zealand and the international surveys. The question reads as follows: Which country do you reside in? With a multi-choice response options of New Zealand / Other for the NZ survey and Australia / UK / Canada / Other for the international survey. Participants who selected, "Other" were directed out of the survey.
2. Participants who had not sought therapy in the past 18 months.
    i. This information was determined by a forced response question within both the New Zealand and the international survey (as well as the screening survey). The question reads as follows: In the last 18 months have you sought information or support from a psychological service? This included any of the following: calling a service to find out what they offer, looking them up online, getting a referral, or attending one or more appointments. (Yes/No)
3. Responses that were identified by Qualtrics as, "spam" with the status code other than 0.
    i. This included:

1. any responses which were completed as a practice/test (e.g., by the researcher or during informal piloting);
2. any duplicate responses (multiple identical responses received from the same IP address within 12 hours);

4. Participants under the age of 18.
    i. This was determined by a forced choice age screening item, if participants select 0-17 they were directed out of the survey.
5. Participants who completed the survey too quickly were excluded.
    i. Qualtrics measured completion time and any responses less than 1/3 of the median completion time were excluded. The median completion time was 633 seconds (10 minutes and 51 seconds) and one third of this is 210 seconds (3 minutes and 50 seconds). Therefore, any responses less that 210 seconds were excluded. The decision to exclude these participants was made as unusually fast completion time may indicate that the participants were not reading and answering the questions attentively (Abbey & Meloy, 2017).
6. Participants who did not provide consent (by selecting, “Yes” to the consent question). Respondents who answered, “No” to the consent question were redirected to the end of the survey using the survey flow settings, and their responses were not included in the final sample.
7. Participants who did not provide the correct responses to the two attention questions were excluded. The two attention check questions were designed to detect inattentive responders (Abbey & Meloy, 2017).
    i. Participants who did not answer, “Yes” to the 5-response option attention check ,“Select ‘Yes’ if you are still paying attention”.

   ii. Participants who did not answer, “Always” to the 5-response option attention check “If you are paying attention please select ‘Always’”).

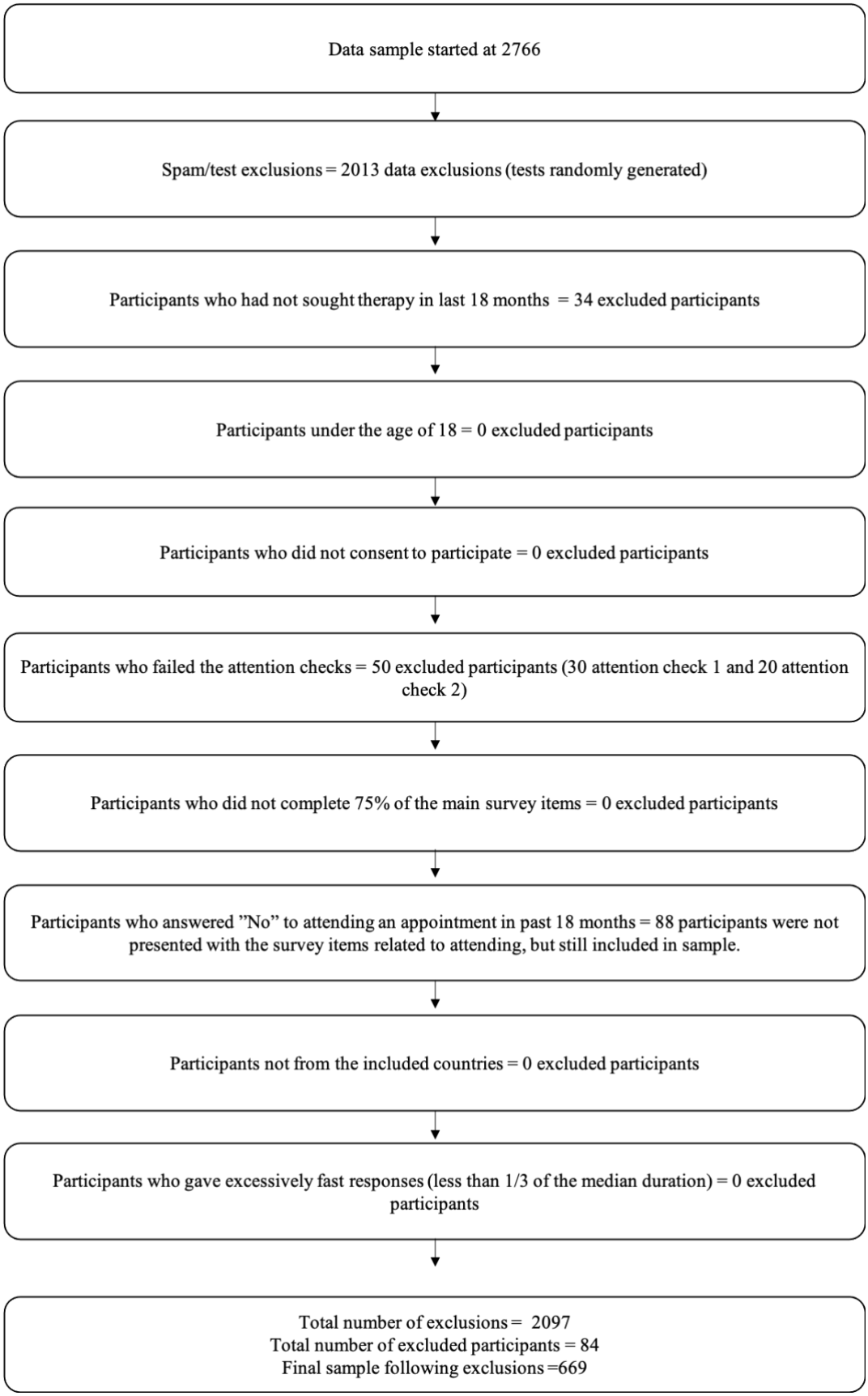
8. To be included in the final sample, participants must have completed at least 75% of the main items in the survey needed for the substantive analyses to allow for data imputations (see the Missing Data section below).
   i. The last of the exclusion criteria relating to missing data presented some unanticipated difficulties during data processing. Firstly, when writing the preregistration I miscalculated the number of survey items that would be included in the final analyses (87 not 92). The main survey items included 87 items relevant to the study’s analyses. These items were included in a study variable labelled, “study_var_87”.
   ii. As outlined in the preregistration, the individuals who answered, “No” to attending therapy (but had sought therapy) were not presented with all of the survey items. What was not clearly outlined in the preregistration was that this sample would need to have its own set of study variables in R. This was labelled, “study_var_73” and it excluded the 16 items not relevant to participants who had not attended any appointments.

The list above specifies the exclusion criteria applying to the study as a whole, however the following criteria pertains specifically to participants who responded in a certain way to one question. Participants who answered, “No” to the question, “In the last 18 months have you attended an appointment for psychological therapy?” (those who have sought therapy in the past 18 months but not actually attended any appointments) were not directed to the questions which relate to their appointment experience. The survey involved 16 items which related to the experience of participants who have attended appointments. These

included items about how warm and inviting the service was, how culturally safe the service was and how many appointments they attended. The participants who responded, “No” were excluded from the ordinal logistic regression for exploratory question one as it includes these items. Figure 5 below offers a flowchart of the particular exclusions made based on the exclusion criteria. A large number of exclusions for spam/test responses are noted; these were computer generated prior to data collection. Furthermore, for most of the exclusion criteria no participants were excluded after data collection. It is possible participants who would have been excluded based on these criteria were already excluded based on the order in which the data exclusions were applied. For example those who were excluded due to failing the attention checks may also have been excluded for having a completion time shorter than the criteria specified.

Figure 5

Exclusion Flowchart



Missing Data

As outlined above in the data exclusion criteria, the decision was made to exclude participants who had not completed at least 75% of the main survey items. The decision to include only those who had completed 75% of the main items was in order to run an imputation. Imputations can provide reasonably accurate estimates of how participants would have responded to items that they missed, but this assumption is predicated on there being sufficient data available from their responses to other items. Therefore, it was important participants had completed at least 75% of the main survey items to encourage more accurate imputation estimations. A single expectation-maximisation imputation using Amelia II package (Honaker et al., 2011) in R, without rounding or truncation of out-of-range response was used. An imputation is an algorithm designed to essentially fill in the blanks of missing data as most statistical analysis methods are only able to include observations for which every variable is measured. The purpose of imputations is to maximise the sample and stop the removal of all responses with any missing data in an appropriate way. Imputation allows for the inclusion of partial participant responses, which otherwise would need to be excluded to run the analyses (Schlomer et al., 2010). In contrast, listwise deletion has been shown to cause biased parameter estimates when the data is not missing completely at random (Kang, 2013). Imputation has been demonstrated to reduce bias and increase efficiency in comparison to listwise deletion and thus was the chosen method (Honaker et al., 2011; Schlomer et al., 2010).

To use imputation as accurately as possible there needs to be substantial data from each participant which suggests setting a cut off score for the quantity of data per participants that is sufficient and considered substantial. While there is not a set rule regarding what that cut off should be, research by Scheffer (2002) suggests that imputation works well when there is less than 5 to 10% missing data in the sample. In an attempt to demonstrate no more

than 5 to 10% missing data and to have sufficient data per participant the rule of requiring 75% completed data for each participant was applied. If participants had completed less than 75% it would not be possible to reliably impute their missing data. The specificity of 75% was important for the preregistration; it was important to specify a cut off for missing data and apply a clear exclusion rule so that it could be appropriately applied after data collection. Following data exclusions, the study met the 5 to 10% guidelines, as the overall total number of missing data in the main survey items was 1.9% and of the 669 participants 650 did not miss a single item. There were 19 participants who missed at least 1 item presented to them and therefore were imputed. This was 2.84% of the participants.

During the analysis process it was discovered that running the imputation for the entire sample would create issues given that a number of participants were not presented with all of the items. As outlined previously, the participants who had sought therapy in the last 18 months but answered, "No" to the question, "In the last 18 months have you attended an appointment for psychological therapy?" did not receive all of the survey items. The survey included 16 items which were relevant to therapy attendance such as, "To what extent was the physical environment at the psychological service inviting when you visited for therapy?". Those participants who had not attended did not receive these items. Therefore, imputation would be unhelpful for these participants' responses. This prompted the decision to deviate from the preregistration and two separate imputations were run for the two groups (for more information see the R code script at https://osf.io/teb8k/):

1. Firstly, the two subsets of data were created: those who answered, "Yes" to seeing a therapist and were presented with every item; and those who answered, "No" to seeing a therapist and did not receive all of the items (excluding the 16 unanswered items).

2. Then the first round of imputations was run including the items presented to every individual (excluding the 16 items) with the whole sample.
3. A second imputation was run with only the variables that were presented if participants had seen a therapist (the 16 items), and using only the participants who saw a therapist.
4. Then the imputed data was combined using the Rbind and Cbind functions to combine the appropriate rows and the imputed subsets of data.

Open Science Practices

The present study sought to address some of the methodological limitations within the current literature and provide a more transparent, replicable study. To contribute to the literature in a useful and meaningful way it is not only important to consider the gaps in terms of data but also the methods in which this data is collected. This study employed open science practices. This includes preregistration on the online repository Open Science Framework as well as the use of open data. This preregistration and open source data can be found at https://osf.io/teb8k/. The use, benefit and important considerations of open science practices will be explored below.

Preregistration

Preregistration involves researchers sharing their research rationale, hypotheses, design and analytic strategy online prior to the collection and analysis of data. Preregistering research offers transparency and demonstrates honest procedures as well as minimising false-positive publication, the ability to change hypotheses to meet the findings, changing methods or analysis strategies and *p*-hacking (Gelman & Loken, 2013). Specifying the details of the proposed study before the data is collected and analysed minimises the possibility of hindsight bias (Fischhoff & Beyth, 1975). Hindsight bias occurs when a researcher sees

results as more predictable after they have occurred. The researcher uses the outcome to understand and explain the findings (Nosek et al., 2018).

Open Data

Open data involves uploading the data from the study to an online repository such as Open Science Framework to allow other researchers to replicate the study or view the data. By sharing data openly, it encourages honesty, transparency, the opportunities for others to spot human error and creates opportunities to replicate or design similar studies. Furthermore, open data is of particular relevance now following the "replication crisis" (Diener & Biswas-Diener, 2017). The replication crisis occurred following the failure to replicate a number of large and powerful studies. One of the first and highly publicised cases was by social psychologist Diederik Stapel (Bhattacharjee, 2013). Stapel was a well-regarded research professor and was discovered to have committed research fraud on a number of publications such as a study indicating that eating meat made people selfish and less social (Bhattacharjee, 2013). Other less publicised cases were also discovered including cognitive psychologist Marc Hauser and social psychologist Lawrence Sanna (Wade, 2010). In addition to fraudulent publications, a number of studies were criticised on their research methods which resulted in inflated false positive error rates (Ioannidis, 2005; Simmons et al., 2011).

There are a number of possible explanation for non-reproducibility of any given study. It is possible the original work either employed questionable research methods or raises the suspicion that the findings were falsified as was discovered in the studies above (Bhattacharjee, 2013; Diener & Biswas-Diener, 2017; Ioannidis, 2005; Simmons et al., 2011). An alternative explanation is that certain variables can be more difficult to control than other variables. Within psychological research a participant's response is dependent on social context, biological and psychological traits, and verbal and nonverbal cues from researchers (National Academies of Sciences, Engineering, and Medicine, 2019). Therefore,

particular effects may only be relevant in particular contexts; thus, may not be detected upon replication.

Regardless of the explanation, this replication crisis has diminished researchers and public trust in psychological research. The use of open data helps to overcome the aftermath of the replication crisis by providing the data to be re-checked and analyses to be reproduced. Publicly sharing data and research practices provides the opportunity for readers to notice human error. Furthermore, sharing data openly may over time build greater trust and confidence in psychological research.

Ethical Considerations

The current study was reviewed and approved by the Massey University Human Ethics Committee: Southern A, Application 19/62. The process of the ethics application prior to the collection of data was very detailed and ensured all aspects of the study were carefully considered to ensure all ethical considerations were appropriately managed to maintain the safety of participants. The following section explores a number of ethical considerations made to ensure the current study offers honest and transparent research implemented in an ethical way. Ethical considerations included informed consent, anonymising data to protect confidentiality, the different ethical codes for the various countries included, as well as the use of open science practices and open data.

Informed Consent and Anonymity

Informed consent was obtained before the survey questions were presented. The start of the survey presented an information sheet detailing how the data would be managed including how it would be securely stored and accessed. In addition, the information sheet explained once the data was analysed and the doctoral thesis was completed, any identifiable information would be removed and the data shared on an online repository that other researchers, as well as members of the public can access. The purpose of this was explained

by stating that the use of open access data is to ensure scientific integrity is maintained and any claims and conclusions made by the researcher based on this research are well-founded. Participants rights were clearly outlined including the right to decline to participate or to withdraw from the survey without completing the questions. Participants provided informed consent by reading the information sheet and clicking, “Yes” to the consent question. Only those who responded, “Yes” were directed into the survey questions. The participants then went through all of the relevant items of the survey.

Recruiting Participants from Multiple Countries

Recruiting participants from multiple countries is common practice, although it is still important to consider potential ethical issues. As the study was conducted from New Zealand, Massey University’s code of ethics and the New Zealand laws were followed. However, for the sake of diligence the following general ethics codes were reviewed: The Australian Code for the Responsible Conduct of Research (National Health et al., 2018), The UK Research Integrity Office Code of Practice for Research (UK Research Integrity Office, 2009), and Canada's Tri-Council Policy Statement: Ethical conduct for research involving humans (Canadian Institutes of Health Research, 2018). To the best of the researcher’s knowledge, this research is in accordance with these codes and does not breach any local laws in the countries from which data collection occurred.

Using Open Sciences Practices Ethically

Sharing data openly does raise some ethical considerations and should be handled carefully to ensure confidentiality is maintained (Meyer, 2018). Firstly, open source data may be used for research purposes to which participants did not consent. To address this concern, it was important to make it very clear to participants that their data would be shared openly. This was achieved by clearly outlining how data would be managed on the information sheet. See Appendix A: Survey for details on the management of data. Secondly, participants may

be at greater risk of being identified within the data (Meyer, 2018). Data that is sensitive and may be identifiable may cause harm to participants (Meyer, 2018). To minimise the risk of these ethical concerns a number of steps were considered and incorporated. For this study, it was important to de-identify the data as much as possible. This included not collecting names, not linking email addresses to participants' responses, not publishing email addresses, removing the longitude, latitude, IP address and collection date from the data collected by the survey platform Qualtrics. This also included not publishing the qualitative data collected via the open ended question. Overall, the intention of preregistration and open data for this study was to promote transparent and honest research in an ethical way.

Procedure

The following procedure section presents two separate procedures for the two samples as the process for each differed. The main differences included compensation and the requirements of Prolific. Due to these differences the survey flow (the way the questions are presented) for the two samples differs and is explained below. The survey was designed to take 10-15 minutes. The completion time across both samples had a median time of 11 minutes. While data collection took place online it is important to note data was collected in early 2020 prior to the significant restrictions and impact of COVID-19. Therefore, the questions pertaining to "physically attending" were relevant to time before many services transitioned to offer online telehealth. Future studies would need to reword questions to be more inclusive of online or remote therapy attendance.

New Zealand Sample Procedure

Following recruitment (as detailed above) New Zealand participants visited an anonymous link to participate in the online survey via Qualtrics. The surveys began with a consent form including an information sheet as well as a list of potential mental health service phone lines within New Zealand. The services included Youthline, Depression

Helpline, Lifeline, Anxiety New Zealand Helpline, as well as three specific services and resources for Māori and Pacifika participants (Aunty Dee and the resources on the depression.org.nz website). Participants provided informed consent by reading the information sheet and clicking, "Yes" to the consent question. Only those who responded, "Yes" were directed into the survey questions. The participants then went through all of the relevant items of the survey. Those participants who answered, "No" to physically attending appointments were not directed to the 16 attendance related questions.

At the end of the survey, the information about relevant New Zealand mental health services was presented again as well as the choice of charities, and the option of receiving a summary of findings. Following the presentation of available mental health services the New Zealand participants were asked to select which charity, one of three, they would like to receive a $3 donation. The three charities selected were Mental Health Foundation, Anxiety New Zealand Trust and Lifeline. These charities were selected for their mental health focus and with the assumption that participants would feel positively about a donation being made on their behalf. If participants wished to receive a summary of the results, they were directed to another survey to enter their email address which was not connected with their survey responses. Finally, the participants were presented with a thank you message.

The decision to make charitable donations as opposed to offering compensation to each participant in the form of a voucher was carefully considered. Firstly, there was a number of practical considerations. For the quantity of money we could realistically provide to each participant, delivering a voucher or cash was not feasible. Furthermore, such methods create implications in terms of the tax status of the incentives, and also create anonymity issues for the participants. Secondly, the literature was reviewed to understand the impact on participation of charitable donations, small monetary incentives for each participant and no compensation (Mellström & Johannesson, 2008; Zutlevics, 2016). Interestingly, the concept

of crowding-out can occur when monetary incentives are offered to participants (Mellström & Johannesson, 2008; Zutlevics, 2016). Crowding-out occurs when the presentation of monetary incentives reduces participation by reducing intrinsic motivation (Zutlevics, 2016). Mellström and Johannesson (2008) investigated the impact of incentives for blood donors. The study showed participation increased by 10% when a charitable donation was offered and decreased by 10% when the monetary incentive was introduced. Thus, the decision to make charitable donations was based on practical feasibility, the support in the literature, and the possibility of benefiting relevant mental health services. Furthermore, given the focus of intrinsic motivation in this study it was important to consider the factors which may have impacted motivation to participate in this study.

International Sample Procedure

As outlined in the participant and recruitment section above, participants in the international sample completed a screening survey prior to the main study due to the restrictions of Prolific. Those who answered, "Yes" to the screening questions identifying they had engaged with a psychological service within the last 18 months were invited to undertake the main study.

Similarly to the New Zealand sample, the survey began with an information sheet and consent form. International participants were also asked to provided their Prolific identification number. This allowed for participants to be compensated for their time in an anonymous way without connecting their responses to their identity.

A list of mental health services relevant to each of the three countries was provided. These included Beyond Blue and Lifeline for Australia, National Suicide Prevention Lifeline and National Hopeline for Canada, and SANEline and Rethink Mental Illness for the United Kingdom. Likewise to the New Zealand sample, the participants proceeded through all of the

relevant items of the survey. Those participants who answered, “No” to physically attending appointments were not directed to the 16 attendance related questions.

At the end of the survey, the information about relevant mental health services was presented again. The participants were then thanked for their time in participating. After the participants had completed the survey they were allocated their small monetary reward for participating. Each participant received 1.25 GBP as recognition of their participation.

Measures

The survey explores several key areas: stigma, therapy anxiety, safety behaviour, fear of disclosure, motivation, demographic information, practical factors, cultural safety, and attendance history. The self-report survey was formed based on a range of new and existing scales to measure several constructs as described in the following section. Prior to data collection the survey was informally peer reviewed by several individuals in New Zealand known to the researchers to ensure the questions were understandable. For further details on the content of survey items see Appendix A: Survey.

Self-Stigma

The Self-Stigma of Seeking Psychology Help scale (SSOSH; Vogel et al., 2006) was used to assess self-stigma. The original measure was developed to assess potential clients prior to therapy. Since the creation of this scale, a new measure was developed, the Self-Stigma of Seeking Help Scale–Therapy (SSOSH-T; Owen et al., 2013), though this measure is designed for those engaging in therapy. As this study also intends to capture those who have not yet attended therapy, the original scale was selected (Owen et al., 2013; Vogel et al., 2006). The SSOSH asked participants to "Please use the 5-point scale below to rate the degree to which each item describes how you might react if you were seeking psychological help" (Vogel et al., 2006). The measure included 10 Likert scale items with response options ranging from 'Strongly disagree'(1) to 'Strongly agree' (5). Higher scores on the measure indicate higher levels of self-stigma. The validity and reliability of the scale was assessed by Vogel et al. (2006) over five studies. The scale demonstrated good internal consistency with a Cronbach's alpha of .91 and was successfully able to differentiate between those who sought psychological services and those who did not. The scale was also correlated with other similar measures by Vogel et al. (2006). The scores on the SSOSH were positively associated with scores on the Disclosure Risks Scale and negatively correlated with the Anticipated

Benefits, Attitudes Toward Seeking Professional Psychological Help Scale, Intentions to Seek Counselling Inventory, Disclosure Expectations Scale (Vogel et al., 2006). These positive correlations indicate the SSOSH measures the intended construct and suggests good validity. The Cronbach's alpha coefficient for the overall scale was .88 for the current study. Scores for this scale were calculated by averaging each participant's responses to the 10 items to create a self-stigma score.

Public Stigma

The Perception of Stigmatization by Others for Seeking Help Scale (PSOSH; Vogel et al., 2009) was used to assess perceived public stigma. The original set of questions requests participants to "Imagine you had a problem that needed to be treated by a mental health professional. If you sought mental health services, to what degree do you believe that the people you interact with would _____." (e.g., respond negatively to you; Vogel et al., 2009). For the purpose of this study, the stem of each item was adapted to "If you sought psychological services to what degree do you believe that the people you interact with would _____." The decision to adapt the items and remove the focus of imagination was based on the current study's inclusion criteria. As all of the participants in the current study have sought therapy in the past 18 months, they all have experienced a reason to seek therapy and therefore there was no need to 'imagine' a hypothetical problem. The scale contains five items, which participants rated on a 5-point scale from 'Not at all' (1) to 'A great deal' (5). Higher scores on the measure indicated higher levels of public stigma. The original PSOSH scale has demonstrated strong internal consistency of between .77 to .88 across five samples (Vogel et al., 2009). This measure has demonstrated moderate concurrent validity through comparisons to Stigma or Seeking Professional Help (r =.31, p < .001), Devaluation-Discrimination (r = .20, p < .001) and the Self-Stigma of Seeking Help (SSOSH; r = .37, p < .001). The Cronbach's alpha coefficient estimate for the current study was .91. Scores for this

scale were calculated by averaging each participant's responses to the five items to create a perceived public stigma score.

Therapy Anxiety

A modified version of the Corah's Dental Anxiety Scale, Revised (DAS-R; Ronis, 1994) was used to measure therapy anxiety. The DAS-R is a self-report 5-point Likert scale measure (Corah, 1969; Ronis, 1994). This scale was originally developed in 1969 as a brief measure of anxiety about dental visits. It was further developed in 1994 to improve the language used and include the roles of dental hygienists (Ronis, 1994). The Cronbach's alpha coefficient was .82 indicating good reliability. Dental anxiety was correlated negatively with frequency of dental visits (r = -.28), and positively correlated with another measure of dental anxiety (r = .62), supporting the validity of the scale (Ronis, 1994). This scale captures a number of the anxiety provoking factors about attending dental appointments including: the feelings of anticipating an appointment, the anticipation in the waiting room, and the atmosphere in the treatment room. Thus, this scale was modified to assess therapy anxiety as opposed to dental anxiety. The structure of the measure remained the same to include four 5-point Likert scale questions. The response options for three of the questions ranged from 'Relaxed'(1) to 'So anxious I might break out into a sweat or almost feel physically sick' (5) and the first question's response options ranged from 'I would look forward to it as a reasonably enjoyable experience' (1) to 'I would be very frightened of what the therapist might do' (5). The provoking factors from the original measure, including the anticipation of the appointment, in the waiting room and the atmosphere in the treatment room, were assessed but adapted to be specific to psychological appointments. Possible scores range from 4 to 20. Higher scores on the measure indicated higher levels of therapy anxiety. See Table 2 below detailing the question modifications. The Cronbach's alpha for the overall scale was

.87 for the current study. Scores for this scale were calculated by averaging each participant's responses to the four items to create a therapy anxiety score.

Table 2

Modified DAS-R Item Comparison

Original DAS-R Scale	Modified DAS-R Scale
1. If you had to go to the dentist tomorrow for a check-up, how would you feel about it?	1. If you had to go to an appointment tomorrow to meet with a therapist how would you feel about it?
2. When you are waiting in the dentist's office for your turn in the chair, how do you feel?	2. Imagine you are waiting in the waiting room for the therapist to come and meet you, how do you feel?
3. When you are in the dentist's chair waiting while the dentist gets the drill ready to begin working on your teeth, how do you feel?	3. Imagine you are sitting in the room waiting for the therapist to start talking, how do you feel?
4. Imagine you are in the dentist's chair to have your teeth cleaned. While you are waiting and the dentist or hygienist is getting out the instruments which will be used to scrape your teeth around the gums, how do you feel?	4. Imagine the therapist asks you to explain what has brought you to therapy, how do you feel?

Safety Behaviours

The Subtle Avoidance Frequency Examination (SAFE; Cuming et al., 2013) was used to measure safety behaviours and to see if a correlation exists between safety behaviours and attendance. The SAFE is a 32 item self-report measure where clients must rate on a five-point Likert scale, from 'Never' (1) to 'Always' (5), the frequency they would engage in strategic avoidant behaviours in social situations. The measure is made of three main components: inhibiting or restrictive behaviours, active behaviours to present well in social situations, and ways in which individuals manage physical symptoms such as blushing or sweating. These components are combined together to represent one overall score of safety behaviours. Higher scores on the measure indicate a greater use of safety behaviours (Cuming et al., 2009). The current study used the overall score to assess safety behaviours as opposed to

looking specifically at the three components. This decision was made given the number of measured constructs within this study. Furthermore, as safety behaviours have not been investigated specifically in relation to attendance, a broad focus is more appropriate.

The soundness of the measure was calculated on a clinical sample (229 individuals seeking therapy at University Emotional Health Centre) and non-clinical sample (64 first-year undergraduate students). The measure demonstrated psychometrically sound properties. A Cronbach's alpha coefficient of .91 for the complete scale and .86, .85, and .83 respectively for the three components of the scale suggest good internal consistency (Cuming et al., 2009). Discriminant validity was calculated using a two-way ANOVA to measure the ability of the SAFE to discriminate between the clinical and non-clinical population. The results for the clinical sample were significantly higher than for the non-clinical sample suggesting good discriminant validity (Cuming et al., 2009). The alpha coefficient for the present study was .93 for the complete scale. Scores for this scale were calculated by averaging each participant's responses to the 32 items to create a safety behaviour score.

Motivation

The Client Motivation for Therapy Scale (CMOTS; Pelletier et al., 1997) was implemented to assess intrinsic motivation to attend therapy. The scale was developed based on Deci and Ryan's (1985) theory which proposed human motivation involved a continuum of motivation. The CMOTS is a brief measure of 24 items which assesses the impact of types of motivation on psychotherapy effectiveness. The measure includes the six levels of motivation including five types of extrinsic motivation (amotivation, external, introjected, identified and integrated regulation) and intrinsic motivation (Pelletier et al., 1997).

The literature reviewing the soundness of this measure is very limited. Originally, the measure demonstrated satisfactory structure and internal consistency with alpha scores between .70 to .92 across the six levels of motivation (Pelletier et al., 1997). In more recent

times, Poulin (2018) sought to measure the predictive capacity of self-report measures of motivation. The study compared the CMOTS to the Change Questionnaire (CQ); the results showed statistically significant positive correlations suggesting the two measures are measuring the same construct – motivation (Poulin, 2018). Ametrano, Constantino, and Nalven (2017) used the intrinsic motivation subscale of the CMOTS and found it to have good internal consistency with Cronbach alphas ranging from .82 to .86. Furthermore, this study correlated the four item subscale with other measures of motivation such as the University of Rhode Island Change Assessment scale (URICA) and found it was correlated with a correlation coefficient ranged from .17 to .33, ($p < .05$) suggesting construct validity (Ametrano et al., 2017). In contrast, Leibert and Dunne-Bryant (2015) sought to use the full CMOTS scale and found three of the six subscales demonstrated poor to adequate validity external: external regulation (a =.49), introjected regulation (a = .56) and, amotivation (a = .70). The remaining demonstrated good validity: intrinsic motivation (a = .82), integrated regulation (a = .91) and identified regulation (a = .82). Based on the internal consistency and construct validity the studies suggest the intrinsic motivation subscale is an appropriate measure of motivation for therapy.

For the purpose of this study two of the six subscales of the CMOTS were selected: intrinsic motivation and integrated regulation. This decision was made for several reasons. Firstly, the choice not to use the full scale was made due to differing alpha scores reported by Leibert and Dunne-Bryant (2015) as discussed above. Secondly, as described earlier, it is probably not reasonable to assume that people would have *purely* intrinsic motivation for undergoing therapy. People tend to attend therapy as they perceive it to be instrumental to other valued outcomes (such as improved career, marriage, mental health or lifestyle; Ryan et al., 2011). Thus, this study included integrated regulation in the hope of encapsulating those participants who have an integrated level of motivation. The modified scale for the current

study included seven 5-point Likert scale items with response options ranging from ‘Does not correspond at all’(1) to ‘Corresponds exactly’ (5). Participants were asked to, “Using the scale below, please indicate to what extent each of the following items corresponds to the reasons why therapy may be important to you by selecting the appropriate number to the right of each item”. For simplicity, scores for integrated regulation and intrinsic motivation were combined to form a single construct to represent motivation. Higher scores on the measure indicated higher levels of motivation for therapy. The Cronbach alpha coefficient estimate for the two combined subscales in the current study was .89 overall. Scores for this scale were calculated by averaging each participant’s responses to the eight items, four items for intrinsic motivation and four items for integrated regulation, to create a motivation score.

Cultural Safety

Cultural safety was measured using eight questions (see Table 3 below). Upon reviewing the current literature in this area at the time of designing the study there did not appear to be any current measures which assessed cultural safety quantitatively, particularly in relation to appointments at a health or mental health care service. Due to the lack of available measures at the time, I formulated new questions based on three existing measures: Physician Bias and Interpersonal Cultural Competence Measure, Mahi Oranga, and the Self-Perceived Marginalisation Questionnaire (Johnson et al., 2004; Stewart & Gardner, 2015; Stone et al., 2018). The questions included cultural understanding, cultural incorporation, dignity and respect, appropriate communication, judgement, and the accessibility and welcoming ambience of the physical environment of a service. The measure included eight 5-point Likert scale items with response options ranging from ‘Strongly disagree’ (1) to ‘Strongly agree’ (5). Participants were asked to, “Please rate on the 5-point scale below the point to which you agree to the following statements from your prior experience of seeing a therapist for psychological help”. Higher scores indicated a higher level of perceived cultural

safety lower scores indicated a lack of perceived cultural safety. See Table 3 below for the questions. The Cronbach's alpha coefficient estimate for this scale was .82 suggesting the measure had relatively high internal consistency. A confirmatory factor analysis was run following data collection to assess how well a single factor model fit. Overall fit was good as evidenced by a large CFI value, small RMSEA and SRMR values (RMSEA = .06, 90% CI [.04 .07], SRMR = .07, CFI = 0.96). All of the factor loadings were positive, substantial, and significant. This suggests the measure of cultural safety was measuring a single construct and could be considered a unidimensional measure. Questions one to four were reverse coded to ensure a high score represented individuals feeling culturally safe and a low score represented individuals who did not feel culturally safe. Scores for this scale were calculated by averaging each participant's responses to the eight items, two items assessed physical environment and six assessed relationship with the psychologist or staff, to create a cultural safety score.

Table 3

Cultural Safety Questions

Cultural Safety Questions	Please rate on the 5-point scale below the point to which you agree to the following statements from your prior experience of seeing a therapist for psychological help.				
The therapist/staff treated me with dignity and respect.	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree
The therapist/staff understood my background and values.	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree
The therapist/staff incorporated my cultural values in our appointment.	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree
The therapist/staff communicated with me in a culturally appropriate way.	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree
I would have received better support if I belonged to a different cultural group.	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree
The therapist judged me unfairly or treated me with disrespect because of cultural background.	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree
Physical Access Questions					
To what extent was the physical environment at the psychological service inviting when you visited for therapy?	Not at all inviting	Slightly inviting	Somewhat inviting	Moderately inviting	Very inviting
Was the psychological service easy to find and access?	Not at all	Slightly	Somewhat	Moderately	Very inviting

Fear of Disclosure

The Disclosure Expectations Scale (DES) was used to assess disclosure during therapy. This scale was developed by Vogel and Wester (2003). The scale includes eight items. Of the eight items, four were designed to assess the perceived risk of self-disclosure to

a therapist and the other four aimed to capture how beneficial it would be to self-disclose personal information. The selection of this measure was made as the items were specific and relevant to disclosure during psychological therapy. For the purpose and ease of this study only the four risk of disclosure items were included not five as specified in the preregistration (see Appendix B: Deviations from Preregistration for more information). The four Likert scale items had five response options ranging from 'Not at all'(1) to 'Very'(5). Higher scores on the measure indicated higher levels of a fear of disclosure. The Cronbach's alpha for the Anticipated Risk subscale was .74 and .83 for the Anticipated Utility subscale (Vogel & Wester, 2003). The current study estimated a Cronbach's alpha coefficient of .86 for the four anticipated risk items. Scores for this scale were calculated by averaging each participant's responses to the four items.

Demographic and Practical Factors Information

Demographic and practical factors were collected by asking a range of questions regarding: age, gender, ethnicity, relationship status, education, living arrangements, employment, reason for engaging, referral source, the wait time for an appointment, cost, other commitments, time restraints and being too ill. Demographic details beyond ethnicity were collected primarily to describe the sample. To measure wait time, participants were asked to indicate on a Likert scale whether they felt the wait time was satisfactory to their needs. To measure the participants' perceived type of distress or diagnosis participants selected from: low mood or depression, anxiety, stress, suicidal thoughts and/or behaviours, relationship issues, trauma / Post-Traumatic Stress Disorder (PTSD), substance use, or other. To indicate referral source participants selected from the following: doctor, another psychologist, family / friend, self-referred or other health professional (e.g., social worker, nurse, physio). To assess the other practical factors participants selected practical barriers from the following list: I had a work commitment, I had a family commitment, appointments

were too expensive, I forgot, I was physically sick, difficult to access, I didn't have enough time, I didn't have child care (see Appendix A to view the survey questions).

Attendance History

The primary outcome variable for this study was attendance history. To measure attendance history participants were asked to select one of six options to identify the point at which they did not attend in the past 18 months from the following options:

I was referred but never booked in (non-engagers);

I booked an appointment but cancelled or didn't show up (non-attenders);

I came to my first appointment and then didn't return (early drop-outs);

I came to most of my appointments but missed a few in between (low-attenders);

I stopped coming after attending several appointments (delayed drop-outs);

I attended all the appointments that I made with the therapist (complete-attenders);

The decision to ask participants to recall their experience up to 18 months prior was considered carefully. Though self-report studies are one of the most commonly used methods within psychological research (Haeffel & Howard, 2010) there are a number of factors which need to be considered when deciding on a data collection time-frame. For the current study it was important to have a broad enough time-frame to study attendance behaviours over time and to render a sufficiently large number of participants eligible to participate. Furthermore, many psychological services or clinicians, particularly in New Zealand and Australia, close between the December and January holiday period for approximately 2 to 4 weeks which leaves approximately 74 possible weeks. In addition many clients, particularly within the private mental health sector, would have appointments fortnightly which narrows the time frame to just 37 weeks. Therefore, having 18 months as opposed to 12 months provided a broader time frame to capture attendance behaviours.

There are nevertheless several recall errors which can occur in retrospective reporting: forgotten entirely, recalled inaccurately, or time errors (Dex, 1995). Time errors involve evaluating an event older than it actually is, or mis-estimating the frequency of events for a given time interval (Dex, 1995). These recall errors have the potential to occur in the current study when individuals are asked to report the number of appointments they have attended and missed. This possible limitation was considered carefully when deciding the most appropriate way to have participants report their attendance history. Therefore the primary method was less focused on participants ability to recall specific events and relied on participants to select a category which best described them. The decision to measure attendance in this way was also made with the hope of understanding which factors had an impact at different points of non-attendance.

Attendance was also recorded by participants entering how many appointments they attended and how many they missed to provide a percentage of missed appointments. This method of measuring attendance was gathered with the intention of providing an alternative measure of attendance to use in supplementary analyses. As there is no flawless way to measure attendance identified within the literature two methods were selected in the hope of offering a greater contribution to literature. The following section presents the process of data analysis for the hypotheses, exploratory questions and supplementary analyses.

Data Analysis

The following section presents the data analysis process for the current studies hypotheses, exploratory questions and supplementary analyses. Data analysis was completed using R version 1.2.5033 (R Core Team, 2019). R provides a freely available, open source software to prepare and analyse raw data. The data analysis process involved writing a data script including commands to clean and anonymise the data, run exclusions, run each

analysis, and produce graphs to present the results. This process is explored in more depth below.

By removing any fields containing potentially identifiable data, such as the IP address, the latitude, and longitude locations, the data was initially processed to ensure it was anonymous. The data was also processed to ensure it met the inclusion criteria. Given the number of research hypotheses and questions as well as the broad range of factors included in this study there were six different types of analyses. The following section describes the range of analyses used in this study. These include: Spearman's correlation, structural equation modelling, ordinal logistic regression, descriptive analysis, inferential statistics, and content analysis.

The main outcome variable is ordinal. This study sought to analyse the extent to which different factors impact attendance of psychological appointments, the ordinal outcome variable. This is considered an ordinal variable as the categories have an order but we cannot assume they are equal distances apart. For example weight increases at an equal rate, and the distance between 4kg and 5kg would be the same as the distance between 9kg and 10kg. For ordinal variables, it is unknown what the psychological distance between each response option is or whether the distance is the same across participants (Bürkner & Vuorre, 2019). According to the Dictionary of Statistics and Methodology (Vogt, 1999) an ordinal scale provides rank order characterisation of phenomena when the variables can be described but the units cannot be measured (Merbitz et al., 1989; Vogt, 1999). Ordinal scales are one of the most common scales used within psychology (Stevens, 1946). When choosing an appropriate model to assess the relationship between ordinal variables for the current study it was important to consider the shape of a relationship, specifically whether the relationship was linear. It is often assumed the shape of the relationship is linear; however, when considering ordinal variables (such as Likert scales) the linearity of this relationship is

unlikely. If linearity is assumed, and it is not the case, the model may yield biased parameter estimates (Williams, 2019). Furthermore, biased parameter estimates can arise when measuring a continuous attribute using discrete observations. This bias can occur when a finite response scale allows only responses within a set range but the underlying continuous attribute may in fact fall outside of this range (Williams, 2019). One way around this is to use models specifically designed for ordinal outcome variables such as ordinal logistic regression or structural equation models. Therefore, it was important to select models that consider the variables as ordinal (Bürkner & Vuorre, 2019; Williams, 2019). These models are explored below.

Spearman's Correlation

For correlational analyses, there were two main choices: Pearson's correlation and Spearman's correlation. A correlation is a measure of the association between two variables. This association refers to the change in one variable associated with another, either in the same (positive) or opposite (negative) direction (Schober et al., 2018). Pearson's correlation coefficients are typically used for data that follows a bivariate normal distribution and where the relationship between variables is linear. On the other hand, Spearman's rank correlation coefficients can be used to measure non-normally distributed data, ordinal data and non-linear (but monotonic) relationships. Given the outcome variable (attendance) is ordinal and Likert scales were used for the predictor variables, a Spearman's correlation was selected and is discussed in further depth below.

Spearman's rank correlation coefficients measure the strength and direction of associations between two variables. Ordinal data can also be ranked. Therefore, the use of a Spearman's coefficients are not restricted to continuous variables (Schober et al., 2018). Spearman's correlations assess the monotonic relationship between two variables (Schober et al., 2018). A monotonic relationship involves two variables with one of the following two

relationships: as one variable increases so does the other, or as one variable decreases the other variable increases. The assumption of monotonicity is less restrictive than that of a linear relationship (Schober et al., 2018). Based on the criteria for Spearman's correlations and the variables of this study, this analysis was utilised to test hypothesis one, two and three. Two-tailed significance test were applied to these analyses. There is some debate within the literature about whether one-tailed tests or two-tailed tests are most appropriate when making directional predictions (Ruxton & Neuhäuser, 2010). One-tailed tests have the advantage of slightly increasing power. However, using a one-tailed test allows for the possibility of the relationship in one direction and disregards the possibility of a relationship in the other direction. Two-tailed tests have the advantage of the possibility of a significant result in the opposite direction than predicted, providing stronger evidence to falsify the hypothesis (rather than just failing to support it). Thus two-tailed significance tests were selected for the current study. Other hypotheses and questions require more complex models as they have multiple predictor or outcome variables and are discussed in the sections below.

Hypothesis one was tested using a Spearman's correlation as the outcome variable (attendance) is ordinal with six categories with safety behaviours as the predictor variable.

Hypothesis two was tested using a Spearman's correlation with attendance as the outcome variable and treatment^2 anxiety as the predictor variable.

Hypothesis three was also tested using a Spearman's correlation with attendance as the outcome variable and intrinsic and integrated regulation motivation as the predictor variables.

The preregistration stated that hypothesis one and two would be considered supported if the correlation is negative with a *p* value less than 0.05 (2 tailed). Hypothesis three will be considered supported if the relationship is positive with a *p* value less than 0.05 (2 tailed).

Structural Equation Modelling (SEM*)*

Structural equation modelling (SEM) has become one of the model techniques of choice within psychological research (Hooper et al., 2008). SEM uses various models to understand relationships among observed variables by providing a quantitative test of a hypothesised theoretical model (Schumacker & Lomax, 2004). SEM allows for complex phenomena to be modelled and tested. Furthermore, SEM specifically takes into account measurement error when analysing data. Models can include latent and observed variables as well as measurement error terms (Schumacker & Lomax, 2004). In contrast, regression models assume predictor variables are measured without error (Westfall & Yarkoni, 2016).

The following three research hypotheses or questions were investigated using SEM using the R package lavaan (Rosseell, 2012). Three path diagrams can be found below which illustrate the three proposed models based on existing literature. Goodness of fit was assessed using five measures of fit, an understanding of these measure can be found below in Table 4. These models were tested using diagonally weighted least squares (DWLS) as the estimation method, due to its robustness and demonstrated efficacy with ordinal, non-normally distributed data (Li, 2016; Mîndrilă, 2010). To determine the models' goodness-of-fit, the root mean square error of approximation (RMSEA), and associated confidence intervals, the standardised root mean square residual (SRMR), the comparative fit index (CFI) and the model chi-square were assessed and reported. See Table 4 for additional information about each goodness-of-fit index below. The preregistration (https://osf.io/teb8k/.) stated that the fit of the model would be considered supported based on the following: the RMSEA is less than or equal to .06 with a 90% confidence interval with a lower boundary less than .5 indicating close fit; the SRMR is less than or equal to .09; the CFI is equal to or greater than .90; the chi-square test is insignificant at an alpha level of .05 (2 tailed). If all are met good fit will be presumed. If only some of the criteria are met the findings with respect to the model's fit will

be considered to be ambiguous. The preregistration stated that the fit statistics would not be used to determine whether the hypotheses themselves were supported as the hypotheses pertained to specific relationships estimated within the models, rather than the capacity of the models themselves to explain the observed covariances.

Table 4

Measures of Fit Indices

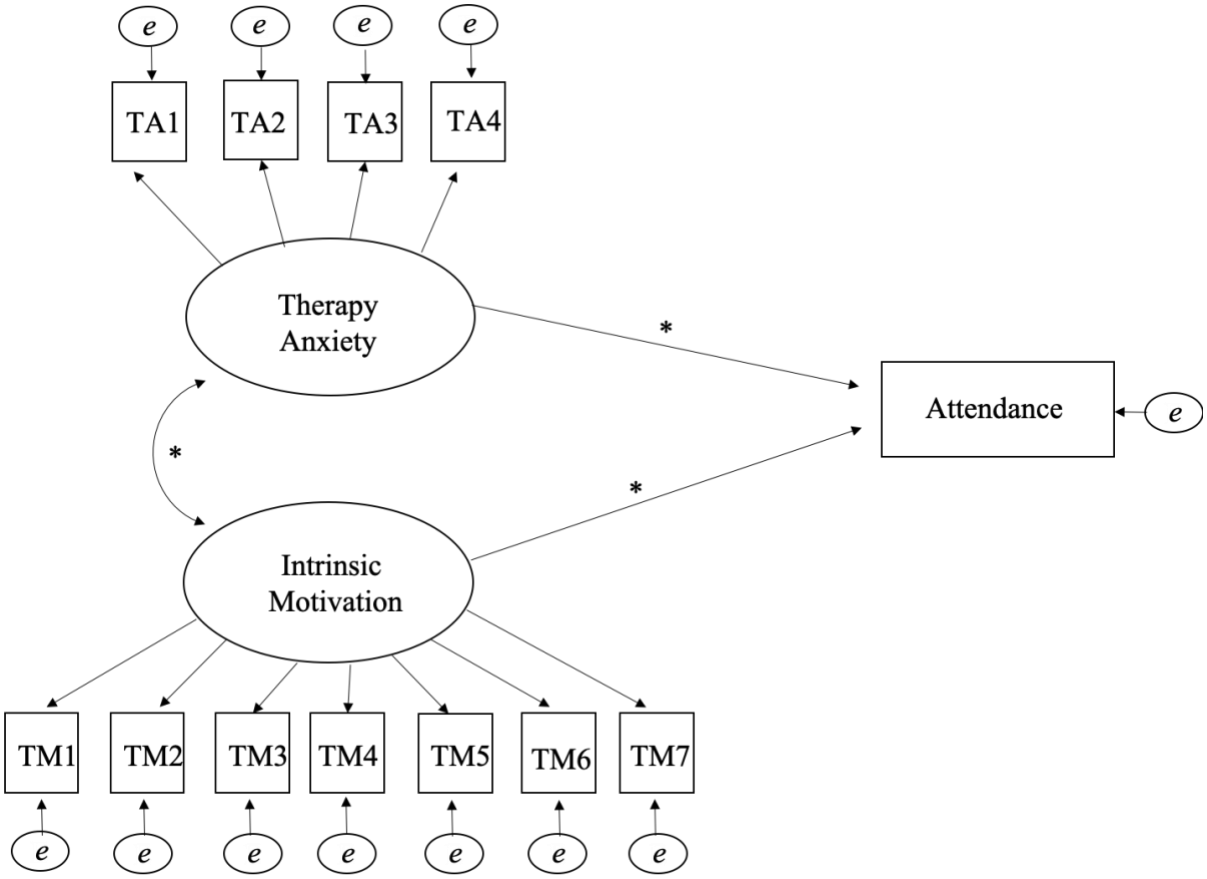
Measure	Description
Root mean square error of approximation (RMSEA)	The RMSEA is the root mean square error of approximation. It tells reader how well the model would fit the population's covariance matrix. The RMSEA is considered one of the most informative indices of fit as it is sensitive to the number of estimated parameters in a model (Hooper et al., 2008).
Standardised root mean square residual (SRMR)	The SRMR is the square root of the difference between the residuals of the hypothesised model and the sample covariance matrix. Values range from 0 to 1.0 with good fitting models with values of less than .05. The SRMR value will be lower when a model has a large number of parameters or it is based on a large sample size (Hooper et al., 2008).
Comparative fit index (CFI)	The CFI offers an estimate of the fit of the model against a null model. The null model assumes that all variables in the model are uncorrelated with one another (Hooper et al., 2008).
Chi-square (χ^2)	Chi-square is considered the classic measure of goodness of fit for SEM (Hooper et al., 2008). The chi-square output value and its *p* value suggest the confidence that a researcher can have when rejecting the null hypothesis. In an SEM analysis, the chi-square fit statistic tests a null hypothesis that the model being tested fits perfectly in the population. It is important to note chi-square values can be inflated when non-normally distributed data or large sample sizes are assessed. Therefore, it was important to include further measures of fit given the lack of normalcy and the large sample size.

Hypothesis four a and b were tested using structural equation modelling, with intrinsic motivation and therapy anxiety as the predictor variables and attendance as the outcome variable (see Figure 6 for the path diagram). As stated in the preregistration (which can be found at https://osf.io/teb8k/) H4a will be considered supported if the regression coefficient

for therapy anxiety (where attendance is the outcome variable) is negative and statistically significant with a *p* value less than .05 (2 tailed). H4b will be considered supported if the regression coefficient for intrinsic motivation (where attendance is the outcome variable) is positive and statistically significant at *p* less than .05 (2 tailed).

Figure 6

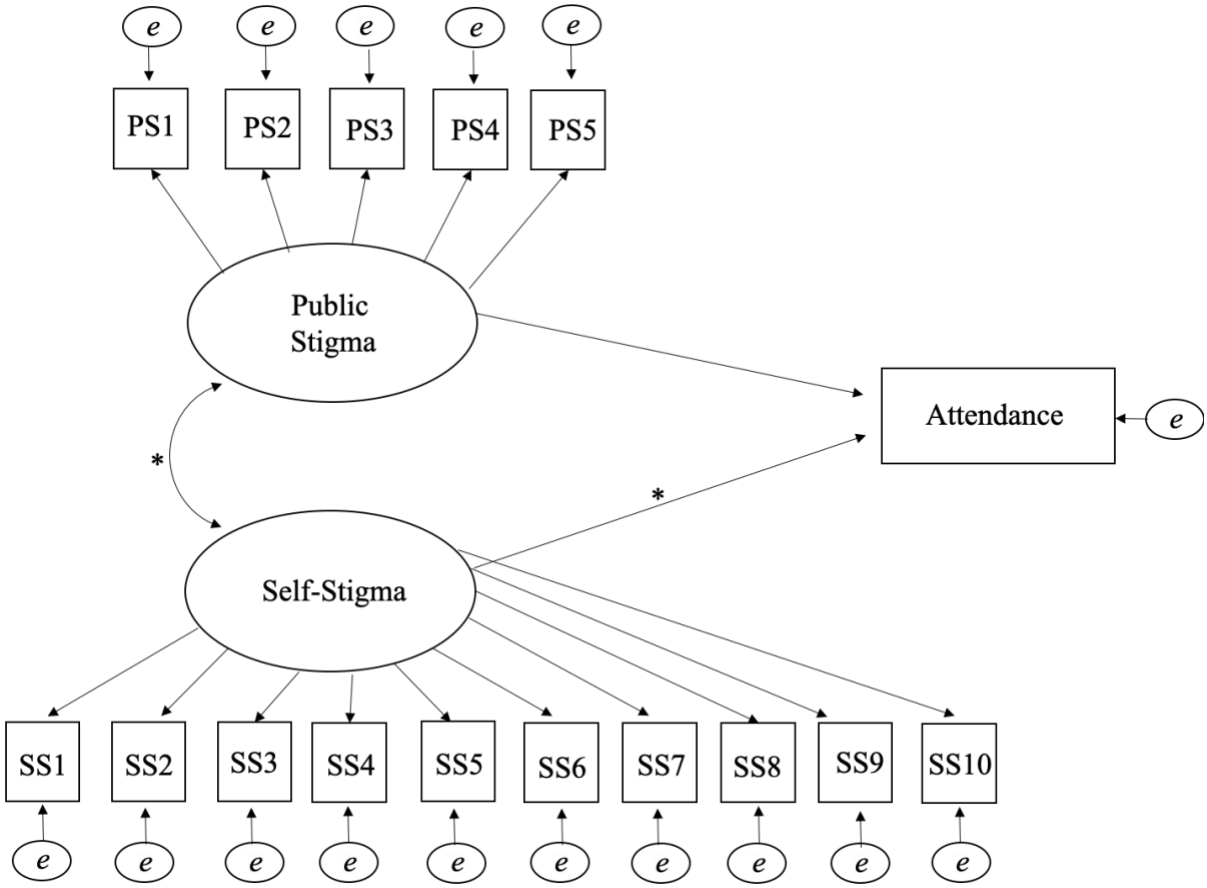
SEM Model for Therapy Anxiety, Intrinsic Motivation and Attendance



Hypothesis five was also tested using a structural equation model with public and self-stigma as the predictor variables and attendance as the outcome variable (see below for the model diagram). The preregistration stipulated that hypothesis five will be considered supported if the regression coefficients for public stigma and self-stigma are negative and statistically significant at *p* less than .05 (2 tailed). See Figure 7 below for the path diagram.

Figure 7

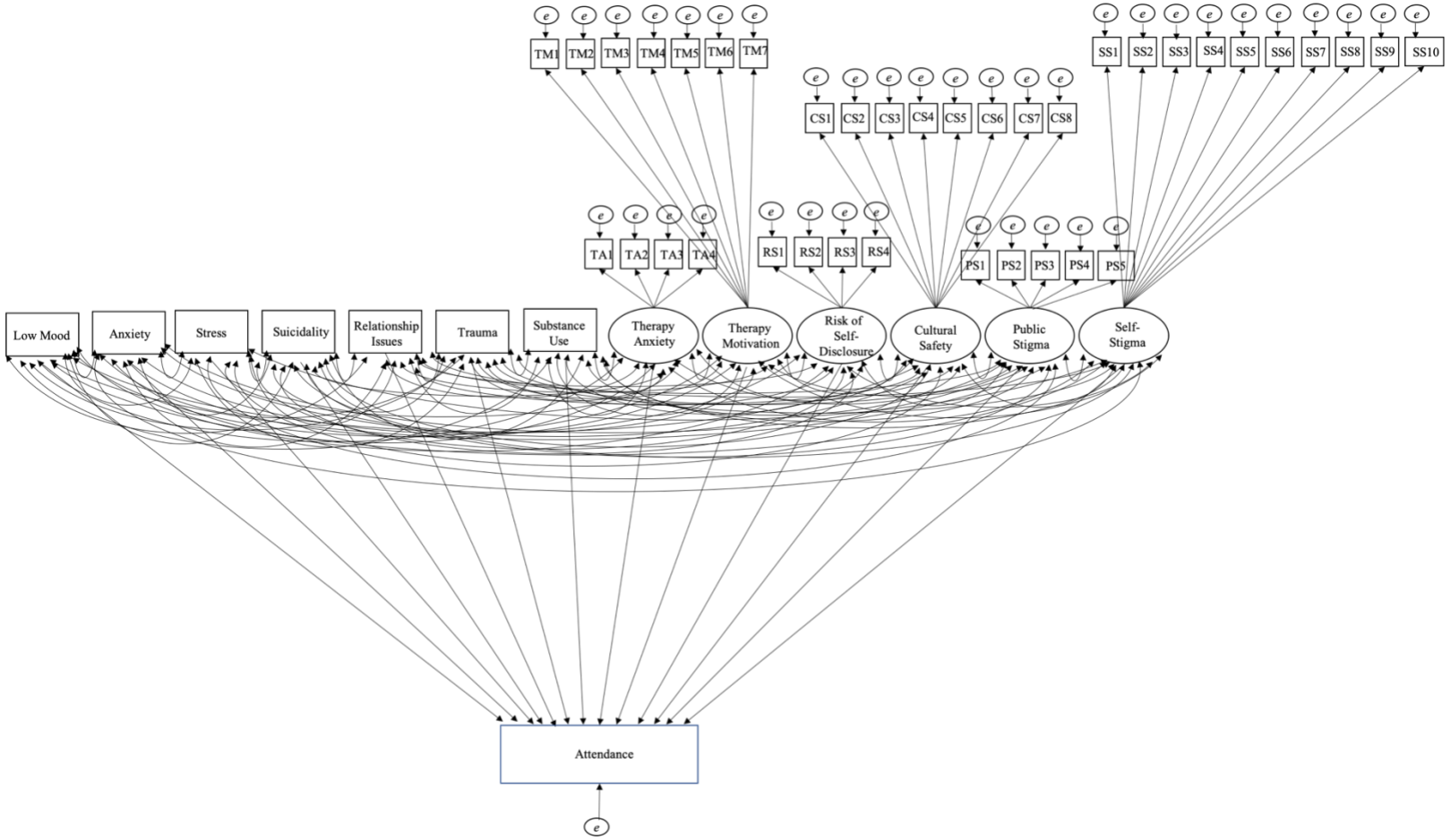
SEM Model for Stigma and Attendance



Exploratory question two was tested using a structural equation model. Therapy anxiety, motivation for therapy, self-stigma, public stigma, risk of self-disclosure, low mood, trauma, stress, anxiety, suicidality, relationship issues, substance use, and cultural safety were the predictor variables with attendance as the outcome variable. Once the regression coefficients for each variable were calculated, these were standardised to provide comparable effect sizes (see Figure 8 below for the proposed path diagram).

Figure 8

SEM Model for Psychological Factors and Attendance



Ordinal Logistic Regression

Logistic regression can be used to estimate the relationship between one or more predictor variables and a single outcome variable (Bürkner & Vuorre, 2019; Liddell & Kruschke, 2018). Three main types of logistic regression exist: binary logistic regression, nominal logistic regression and ordinal logistic regression. Binary logistic regression assumes a dichotomous dependent variable (Bürkner & Vuorre, 2019). Multinomial logistic regression is an extension of binary logistic regression and uses maximum likelihood estimation to evaluate the probability of categorical relationships (Chan, 2005). However, the output would be highly complex to interpret as there would be multiple slopes for each predictor corresponding to different levels of the outcome variable. Ordinal logistic regression can be used if the outcome variable is ordered and categorical and includes more than two categories, as is attendance. Therefore, the current study used ordinal logistical regression.

Within the class of ordinal regression models there are a number of specific models. These models have been categorised into three distinct classes: cumulative, sequential and adjacent category models (Bürkner & Vuorre, 2019). Cumulative models (also known as the graded response model; Samejima, 1997) are well suited to Likert-item data sets given their categorical nature, where ordered verbal labels are used to obtain responses about a psychological variable. Given the number of Likert scales used in psychological research, cumulative models are considered one of the most important classes of ordinal models (Bürkner & Vuorre, 2019).

There are two main assumptions of the cumulative model: equal variances and global category effects. However, these assumptions are not necessarily appropriate. The assumption of global category effects assumes all predictors have the same effect on different response categories. This assumption may not be appropriate as it is possible the predictor has different effects on different response categories. Little can be done to minimise this

assumption within a cumulative model but it can be loosened in other models such as the sequential or adjacent-category models (Bürkner & Vuorre, 2019). However, these models would be extremely complex with many parameters to estimate. The second assumption of equal variances assumes the variance of the latent variable remains the same regardless of the levels of the predictor variables. Bürkner and Vuorre (2019) suggests this assumption can be minimised by modifying the model to include additional regression formula to account for the variance component. Bürkner and Vuorre advocate that not only is including the difference between variables essential for accurate parameter estimates but also offers theoretical interest (Bürkner & Vuorre, 2019). Given the outcome variable attendance is ordinal and non-linear, and the complexities of the other models discussed, ordinal logistic regression (unequal-variances cumulative model) was used for exploratory question one.

Exploratory question one was assessed using an ordinal logistic regression model in R using the polr command in the MASS package (Venables et al., 2002). Employment (nominal, five categories), education (nominal, four categories), type of referral (nominal, five categories), and the timeliness of referral process (interval) work commitments, family commitments, cost, access, forgotten appointments were the predictor variables and attendance was the outcome variable. The preregistration specified the following factors would be included in an ordinal logistic regression model as previous literature supports their impact on attendance. The factors included employment, education, type of referral, and the timeliness of the referral process. However, this list did not include a number of the other factors researched, outlined elsewhere in the preregistration, and measured, thus these additional factors were added to the analysis. These additional factors included work commitments, family commitments, cost, access, forgotten appointments, being physically sick, having restricted time, and childcare restrictions.

The preregistration also specified that the fully standardised logistic regression coefficient method would be used to take into account the variation in the outcome variable as well as in the predictors (Menard, 2004). However, upon reflection calculating standardised coefficients wouldn't work well given that some of the predictor variables are nominal. Furthermore, it is not recommended to standardise dummy variables as it makes it more difficult to interpret (Israëls, 1987). The dummy variables already have simple interpretations, and thus have not been standardised.

Descriptive Analysis

Descriptive analysis can be used to describe the basic features of data. It provides simple summaries about the measures and the sample. These include measures of central tendency (mean, median and mode), variability (standard deviation), divergence from normality (skewness and kurtosis) and probability (confidence intervals; Mishra et al., 2019). Descriptive analysis was used to address exploratory questions three and four.

Exploratory question four, with the aim of understanding cultural safety across ethnicities, was addressed using a purely descriptive analysis to calculate the mean cultural safety scores and a confidence interval for each ethnicity. No statistical significance tests were performed.

Exploratory question three, with the aim to determine the most commonly selected response of non-attendance behaviour, was assessed by calculating the proportion of each attendance category. This question was addressed by using confidence intervals for binomial proportions using the binconf function in the R package hmisc (Harrell, 2020).

Content Analysis

Content analysis is a systematic and flexible technique which involves coding many words into fewer content categories based on explicit coding rules (Stemler, 2001). Content analysis allows large volumes of data to be sifted in a systematic manner (Stemler, 2001).

There are three different approaches to content analysis: conventional, directive or summative (Hsieh & Shannon, 2005). Each of these approaches involve interpreting meaning from the content of text data. There are several key differences among these three approaches. In a conventional approach, the categories are obtained during data analysis from the actual data (Hsieh & Shannon, 2005). In a directed content analysis, existing theory or prior research is used to develop initial code schemes before data analysis. Then, as the analysis proceeds, additional categories are developed and the original are revised (Hsieh & Shannon, 2005). The summative approach is significantly different. This approach looks at single words within a particular context rather than analysing the whole data. This method is often used to analyse existing texts such as nursing books (Hsieh & Shannon, 2005). Different research questions require different analysis techniques. Therefore, it is important to determine the research question's purpose. As responses were expected to differ beyond the current literature it would not have been useful to have initial coding based on theory or literature.

A conventional content analysis was performed on the data from the single open ended question to answer exploratory question five. The aim of the question was to explore the most commonly self-reported reasons of non-attendance beyond the survey questions using an open-ended question. The question asked participants to, "Please provide any other reasons which impacted your ability to attend an appointment at a psychological service". However, a mistake was made within the survey flow with the redirection of questions in the survey software Qualtrics. The participants who had sought therapy but had not engaged with a service did not receive a number of the questions given to those who actually attended as they were relevant to attendance behaviours. One question relevant to attending which was included in this block of questions was the open-ended question asking participants to report other factors beyond those captured in the survey. This meant those participants did not have

the chance to voice their reasons for not attending. Furthermore, it meant these participants could not be included in the content analysis for exploratory question five.

The response option to the open ended question was set as “request response”, which means participants were prompted with a reminder pop-up message if they did not complete the item - but they could choose to ignore this message and progress onwards in the survey. Following exclusion of the irrelevant responses such as “N/A” or “I didn’t miss any” and the missing responses from those who did not receive the question 283 responses remained. An ‘essay response’ box was provided for participants to elaborate on factors they perceived as relevant, many responders offered single word responses or a simple sentence while other participants offered a paragraph highlighting multiple factors. Responses were coded inductively based on the factors identified. The commonly identified categories were obtained during data analysis of the raw data to answer this question and can be found in the results section below. The content analysis was coded manually, with responses including multiple factors captured across categories. Following the development of the initial codes, code names were adapted to capture more responses within the subcategories. For example, travel, location, and transport were all combined to make the code physical access or travel. Given the length and content of some of the responses, some entries were allocated multiple codes to capture each theme. The coding categories were reviewed by the writer’s supervisors though no further trustworthiness checks were applied.

Supplementary Analyses

The main measure of non-attendance was the ordinal scale as outlined previously. However, non-attendance was also measured as a percentage of attended appointments for the supplementary analyses. To create a percentage of non-attendance for each participant, participants entered the number of appointments attended and the number they missed in the survey to provide a percentage of missed appointments (see Appendix A: Survey to view the

survey questions). The number of attended appointments item was measured with an open-ended textbox to allow clients to enter the exact number of appointments they had attended without having to present many options in a multichoice format or by using ranges (e.g., 1-5, 6-10, 11-15) which would have been challenging to interpret into an accurate percentage. However, having an open-ended item relies on the participants to provide a translatable answer (in numerical form) which was not always the case. A number of participants gave text responses such as “all”, “fortnightly”, “weekly”. For these responses they required modification and a degree of approximation. When deciding on how to make fair approximations several concepts were considered. Firstly, the timeframe was an 18-month period. If we consider that many services or clinicians would be unavailable between the December and January holiday period for approximately 2-4 weeks then that leaves 74 possible weeks. Those who endorsed that they attended weekly appointments were recorded as 74 and 37 for those who indicated they attended fortnightly. There were several responses which could not be appropriately interpreted such as “all” or “didn’t count”. These responses were marked as “NA” and not included in the sample. Furthermore, those who answered “No” to the question asking whether they had seen a therapist were not presented with the questions pertaining to attendance experiences and thus were not included in the sample. This exclusion ruled out a number of participants. This was not ideal but the sample size and statistical power were less essential for the supplementary analyses.

Once the items were recoded to represent the appropriate number of appointments attended a percentage of attended appointments was calculated. Following this the analyses relevant to attendance were re-run using the percentage as the measure of attendance. These analyses included three Spearman’s correlations (hypothesis one to three) and three structural equation models (hypothesis four, hypothesis five, and exploratory question two). These analyses were run in R using the same code scripts with the only adaptions being the outcome

variable. The measure of non-attendance was adapted from an ordinal variable (levels of attendance) to a ratio (percentage of attendance). For more information see section 12 of the R script (https://osf.io/teb8k/).

CHAPTER 6: Results

The following chapter begins with the descriptive analyses to provide some basic descriptive statistics as well as to answer exploratory questions three and four. These results provide a clear picture of the sample and set the tone for the subsequent analyses. Following on, the confirmatory analysis results are presented to answer hypothesis one to five. Subsequently, the results for exploratory questions one and two are presented within the exploratory analyses section. Then, the results from the content analysis are presented to answer exploratory question five in the qualitative section. Finally, the supplementary analyses results are presented.

Descriptive Statistics

Table 5 below provides descriptive statistics for the main variables of the study. With the exception of two variables, scores ranged across the entire available range (1 to 5) for the majority of the variables. The two exceptions, which ranged almost the full range were safety behaviours (1.12 to 4.81) and self-stigma (1.00 to 4.90). The mean for the majority of the variables fell between 2.00 and 3.00 on the item response scale, indicating a mean near the midpoint of the possible range. There were just two exceptions. Cultural safety had a mean score of 4.05, indicating a majority of individuals reported a cultural safety score towards the upper end of the item range. While this score may represent high levels of cultural safety, it may also reflect the fact that most participants were not from minority cultures. Public stigma had a mean score of 1.94, indicating individuals tended to report towards the lower end of the item range indicating lower level of perceived public stigma. The median scores tended to fall between 2.00 and 4.00 indicating roughly symmetrical item distribution.

Table 5

Descriptive Statistics for Survey Scales

	Mean	Median	SD	Min	Max
Therapy anxiety	3.02	3.00	1.00	1.00	5.00
Safety behaviours	2.67	2.65	0.64	1.12	4.81
Cultural safety	4.05	4.12	0.67	1.00	5.00
Self- disclosure	3.31	3.50	1.10	1.00	5.00
Motivation	2.99	3.00	0.93	1.00	5.00
Public stigma	1.94	1.60	0.94	1.00	5.00
Self-stigma	2.47	2.40	0.82	1.00	4.90

Note. All scales presented in this table had a possible range of 1 to 5.

Exploratory Question Three: Levels of Non-Attendance

Exploratory question three asked "What is the most common point at which people disengage?" The most common option selected was, "I attended all the appointments that I made with the therapist" (complete-attenders), with 324 responses (48.57%). However, this option relates to people who fully engaged with therapy, and thus does not directly answer the research question. Amongst the remaining options (i.e., amongst those participants who were not complete-attenders), the most commonly selected answer was, "I came to most of my appointments but missed a few in between". This level of non-attendance had 111 responses (16.6% of the overall responses). For further details Table 6 below.

Table 6

Levels of Non-Attendance Behaviours

Attendance Description	Frequency	Percentage of sample	Mean number of appointments attended	Mean number of appointments missed	Mean percentage of appointments attended
I was referred, but never booked in (1) – *non-engager*	75	11.21%	3.60	0.80	85.38%
I booked an appointment but cancelled or didn't show up (2) – *non-attender*	14	2.09%	2.14	0.85	69.04%
I came to my first appointment and then didn't return (3) – *early drop-out*	41	6.12%	1.23	0.53	80.08%
I came to most of my appointments but missed a few in between (4) - *low-attender*	111	16.59%	18.26	2.34	83.42%
I stopped coming after attending several appointments (5) – *delayed drop-out*	102	15.24%	4.48	1.02	82.15%
I attended all the appointments that I made with the therapist (6) – *complete-attender*	326	48.72%	8.90	0.19	98.33%

As this was a new measure of attendance behaviours several subsequent tests of validity have been completed. Firstly, the frequency of missed appointments was compared across the six ordinal levels of the measures to determine whether these levels were ordered appropriately. In particular it was important to compare the frequency of appointments attended for level 4, “I came to most of my appointments but missed a few in between” and level 5, “I stopped coming after attending several appointment”, to ensure they were ordered correctly, as these levels represent similar levels of engagement. The results of a comparison of the mean number of attended appointments suggested level 4 and 5 may have been ordered incorrectly, with those who selected level 4 having a mean number of attended appointments of 18.26, and those who selected level 5 having a mean number of attended appointments of 4.48. These results suggest those who selected level 4 attended more appointments than those who selected level 5. It should be noted, however, that the mean number of attended appointments was likely inflated by several participants in the level 4 group who indicated they had attended over 80 appointments in the past 18 months, with one individual indicating they attended 120 appointments and another suggesting they had attended 300 appointments. These scores are unlikely given the 18 month time period; attending 300 appointments would be more than every second day. It is possible such individuals were overestimating the number of appointments they had attended or not containing their responses to the 18 month time period.

The mean number of missed appointments across attendance levels was also tested. The result demonstrated that participants who selected level 4, with a mean number of missed appointments of 2.34, tended to miss more appointments than those who selected level 5, with a mean score of 1.02 missed appointments. These results suggest the levels of non-attendance behaviours were in the appropriate order.

In a further test to assess the order of the levels, mean percentage of missed appointments were also compared across the different levels of the ordinal measure of non-attendance. In this analysis, the mean percentage of appointments attended was slightly higher (83.42%) for participants in level 4 than it was for participants in level 5 (82.15%). This is arguably inconsistent with the assumed ordering of these ordinal levels (albeit only very slightly so). As a robustness check, the two levels of the ordinal variable were therefore reordered in R studio and the five main analyses were re-run. The results did not differ substantially, with most of the estimated relationships remaining nearly identical, and no changes to which hypotheses were supported. For a comparison of results see Appendix C: Robustness Check.

In running the additional tests of validity, an inconsistency in responses across the two measures became evident for several participants. Twelve participants selected levels 1 or level 2, suggesting they had not attended any appointments, but responded to the percentage measure of attendance behaviours reporting they had attended and missed appointments. This inconsistency is evident in Table 6 presented above. This finding reflects the notion that people often interpret survey items in ways different than intended. The open data and analysis script is available for interested readers who may wish to run further analyses https://osf.io/teb8k/.

A final test of validity was completed. Two measures of attendance behaviours were collected in the study - the main study's ordinal variable where participants selected a description that matched their attendance behaviours and a percentage measure whereby participants entered the number of appointments they attended and the number they missed, and a subsequent percentage score was calculated. As there were two measures, a Spearman's correlation coefficient was calculated as a measure of convergent validity. The results demonstrated a moderate to strong relationship between the two measures ($r = .61$, $p < .001$).

The moderate to strong relationship suggests the two scores relate closely and are likely measuring the same construct – attendance behaviours. No changes have been made to the order of the original ordinal variable in the analyses reported below, but these additional tests are reported for both transparency and evidence of validity.

Exploratory Question Four: Cultural Safety Across Ethnicities

Exploratory question four assessed the mean cultural safety scores across ethnicities. When interpreting the results, it is important to consider the variation in the number of ethnicities included in this study. For example, 330 individuals identified as English, 115 as Pākehā / New Zealand European, 10 as Māori, five as Chinese and one as Samoan. Therefore, a great deal of uncertainty surrounds the mean scores for some ethnicities reflected in the 95% confidence intervals. Those ethnic groups with fewer than 10 participants were excluded from the table below. Notwithstanding, to answer exploratory question four, the two ethnicities with the lowest mean cultural safety scores were Indian (*M* = 3.63, SD =0.73) and Māori (*M* = 3.85, SD = 1.13). See Table 7 below for a representation of the mean cultural safety scores across ethnicities.

Table 7

Mean Cultural Safety Scores Across Ethnicities

Ethnicity	N	*M*	SD	SE	95% CI
Australian	18	4.26	0.35	0.08	4.08 – 4.44
Canadian	18	3.97	0.78	0.18	3.58 – 4.36
English	330	4.04	0.65	0.04	3.97 – 4.11
Indian	14	3.63	0.73	0.20	3.21 – 4.05
Māori	10	3.85	1.13	0.36	3.04 – 4.66
Pākehā / NZ	115	4.24	0.57	0.05	4.14 – 4.34

Scottish	10	4.13	0.69	0.22	3.64 – 4.62

Confirmatory Analyses

Hypothesis One: Safety Behaviours and Non-Attendance

The Spearman's correlation indicated a weak negative relationship with a correlation coefficient value of $r = -.20$, $p < .001$. As such, hypothesis one was found to be supported.

Hypothesis Two: Anxiety and Non-Attendance

The Spearman's correlation indicated a weak negative relationship with a correlation coefficient value of $r = -.26$, $p < .001$. As such, hypothesis two was found to be supported.

Hypothesis Three: Motivation and Non-Attendance

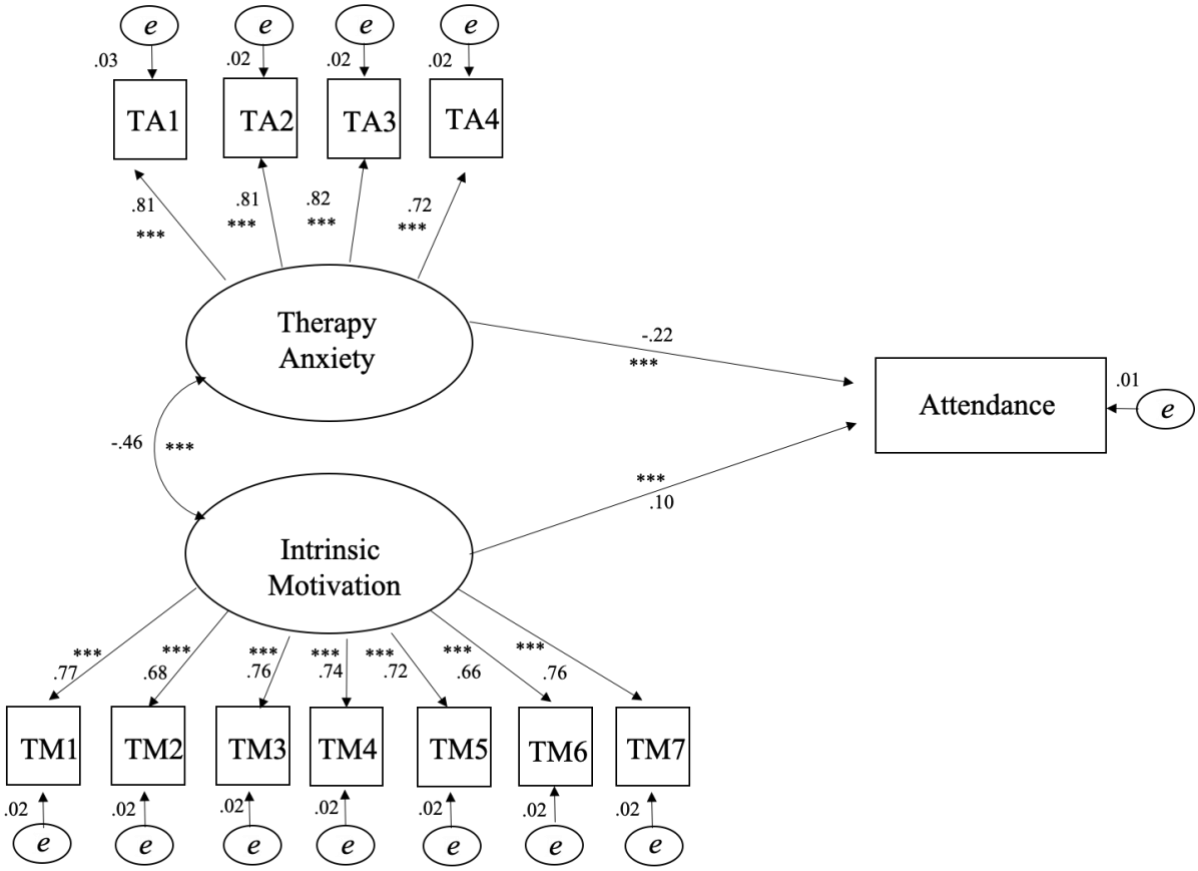
The Spearman's correlation for hypothesis three indicated a weak positive relationship with a correlation coefficient value of $r = .18$, $p < .001$. As such, hypothesis three was found to be supported.

Hypothesis Four: SEM of Motivation, Anxiety and Non-Attendance

Hypothesis four was tested using a SEM with therapy anxiety and intrinsic motivation as the predictors and attendance as the outcome variable. The model fit well: χ^2 (52) = 142.8, $p < .001$, RMSEA = .05, 90% CI [.04, .06], SRMR = .053, CFI = .98. The model met the fit criteria specified in the preregistration. The path diagram for hypothesis four can be found in Figure 9 below. The SEM model for hypothesis four demonstrated a weak statistically significant negative relationship ($\beta = -.22$, $p < .001$) between therapy anxiety and attendance. Intrinsic motivation showed a statistically significant positive relationship with attendance ($\beta = .10$, $p < .001$). Based on the findings, hypothesis four was supported.

Figure 9

Path Diagram for Hypothesis Four



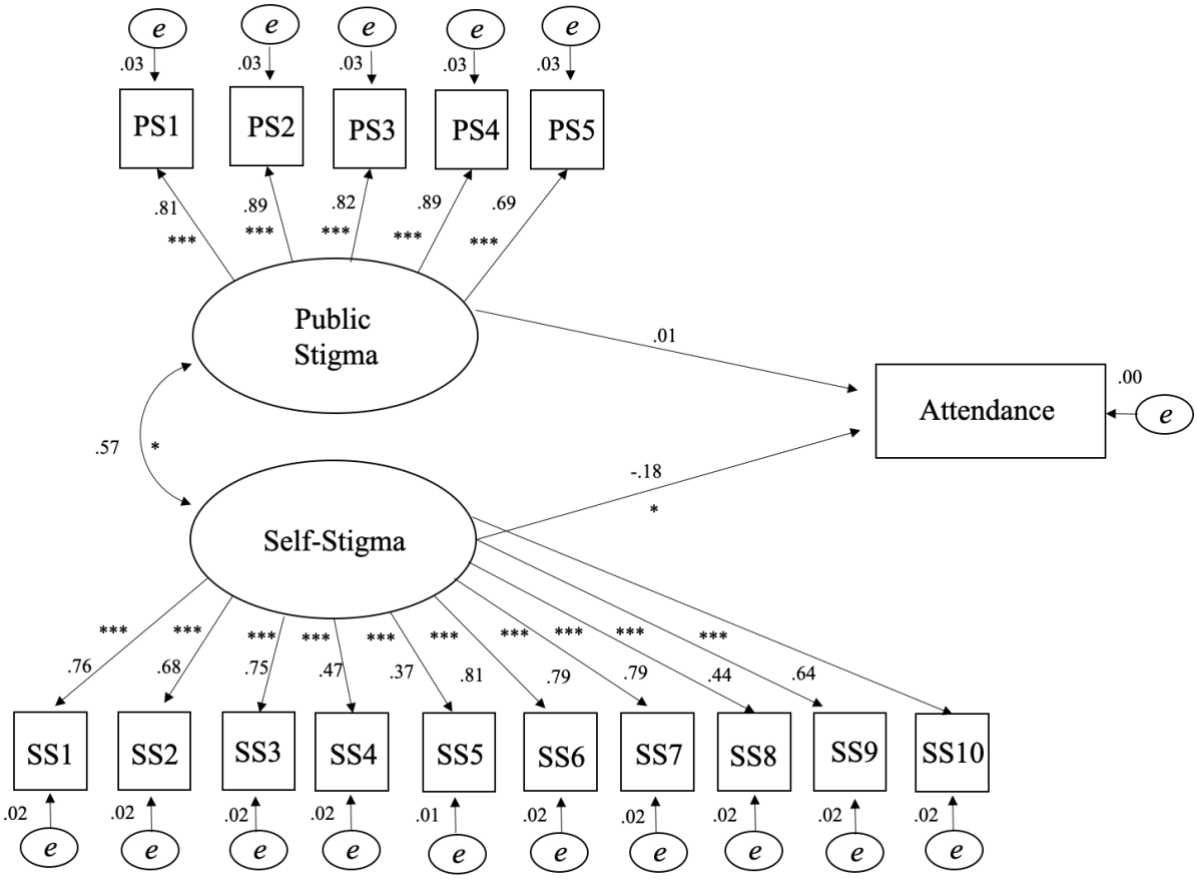
Note. *p < .05. **p < .01. ***p < .001.

Hypothesis Five: Self- Stigma, Public Stigma and Non-Attendance

Hypothesis five was tested using a SEM with self-stigma and public stigma as the predictors and attendance as the outcome variable. Overall fit was good as evidenced by a large CFI value, small RMSEA and SRMR values, χ^2 (102) = 106.20, p < .36, RMSEA = .00, 90% CI [.00, .02], SRMR = .03, CFI = 1.00. The path diagram for hypothesis five can be found below in Figure 10. The SEM model for hypothesis five indicated no statistically significant relationship between perceived public stigma and attendance (β = .02, p = .55) and a weak negative relationship between self-stigma and attendance (β = -.18, p < .001). Based on the findings hypothesis five was not supported.

Figure 10

Path Diagram for Hypothesis Five



Note. *p < .05. **p < .01. ***p < .001.

Exploratory Analyses

Exploratory Question One: Practical Factors Predicting Non-Attendance

Exploratory question one, assessing the practical factors which are the strongest predictors of non-attendance, was investigated using an ordinal logistic regression. Table 8 below presents data for the relationship between practical factors and non-attendance of psychological appointments. As employment, education and referral source were coded as factors in R, they each have a reference category not included in the table below. Full time was the reference category for employment; the coefficients part time, unemployed, retired,

and student indicate the extent to which individuals who meet these employment types differ from people who work full time. Primary school was the reference category for education; the coefficients secondary school, technical/trade certificate, and university degree indicated the extent to which people who have those levels of education differ from individual's with primary school education as their highest level of education. Doctor was the reference category for referral source with the coefficients: another therapist, family/friend, self-referred, and other health professional; the coefficients indicated the extent to which these referral sources differed from individuals who were referred by a doctor. Wait time was treated as a numerical value in R. Participants selected the degree to which they agreed with the following statement (on a five-point scale): "The referral process proceeded quickly enough to meet my needs (e.g., an appointment was offered within a reasonable time)". Of the practical factors investigated, three variables demonstrated statistically significant relationships with non-attendance: part-time employment (r = -.42, p =.04) and forgotten appointments (r = -.14, p =.02) and family commitments (r =.13, p = .02). Notably, the study used a measure of *current* employment status but attendance behaviours over an 18 month period. A person's *current* employment status cannot affect their *past* attendance behaviour. Therefore, the employment status variable is only a plausible cause of attendance behaviour to the extent that it serves as a rough proxy of employment status over the previous 18 months. It is possible participants' employment status changed across these 18 months and thus it may not be appropriate to assume participants' employment status remained the same throughout the time interval. This was a plausible and quick measure of employment and did not add complexity to the analysis. However, results should be interpreted with caution.

Table 8

Ordinal Logistic Regression for Exploratory Question One

	Logistic coefficient	Standard error	*t* value	*p* value
*Employment**				
Part-time	**-.42**	**.21**	**-2.02**	**.04**
Unemployed	-.42	.24	-1.76	.07
Retired	-.00	.59	0.19	.98
Student	-.39	.23	-1.63	.10
*Education **				
Secondary School	.38	.81	0.47	.63
Technical/Trade Certificate	.07	.81	0.09	.92
University Degree	.45	.80	0.56	.57
*Referral ****				
Another therapist	.78	.47	1.64	.10
Family / friend	.30	.36	0.83	.40
Self-referred	.08	.17	0.50	.61
Other health professional	.01	.29	0.04	.96
Wait time	.08	.08	1.07	.28
Work commitments	-.03	.08	-0.39	.69
Family commitments	**.13**	**.07**	**2.19**	**.02**
Too expensive	-.02	.07	-0.46	.64
Forgotten appointments	**-.14**	**.07**	**-2.42**	**.01**
Physically sick/ unwell	-.10	.07	-1.16	.24
Access difficulties	.09	.07	0.58	.56
Lack of time	-.00	.07	0.52	.60
Lack of childcare	-.03	.07	-1.08	.28

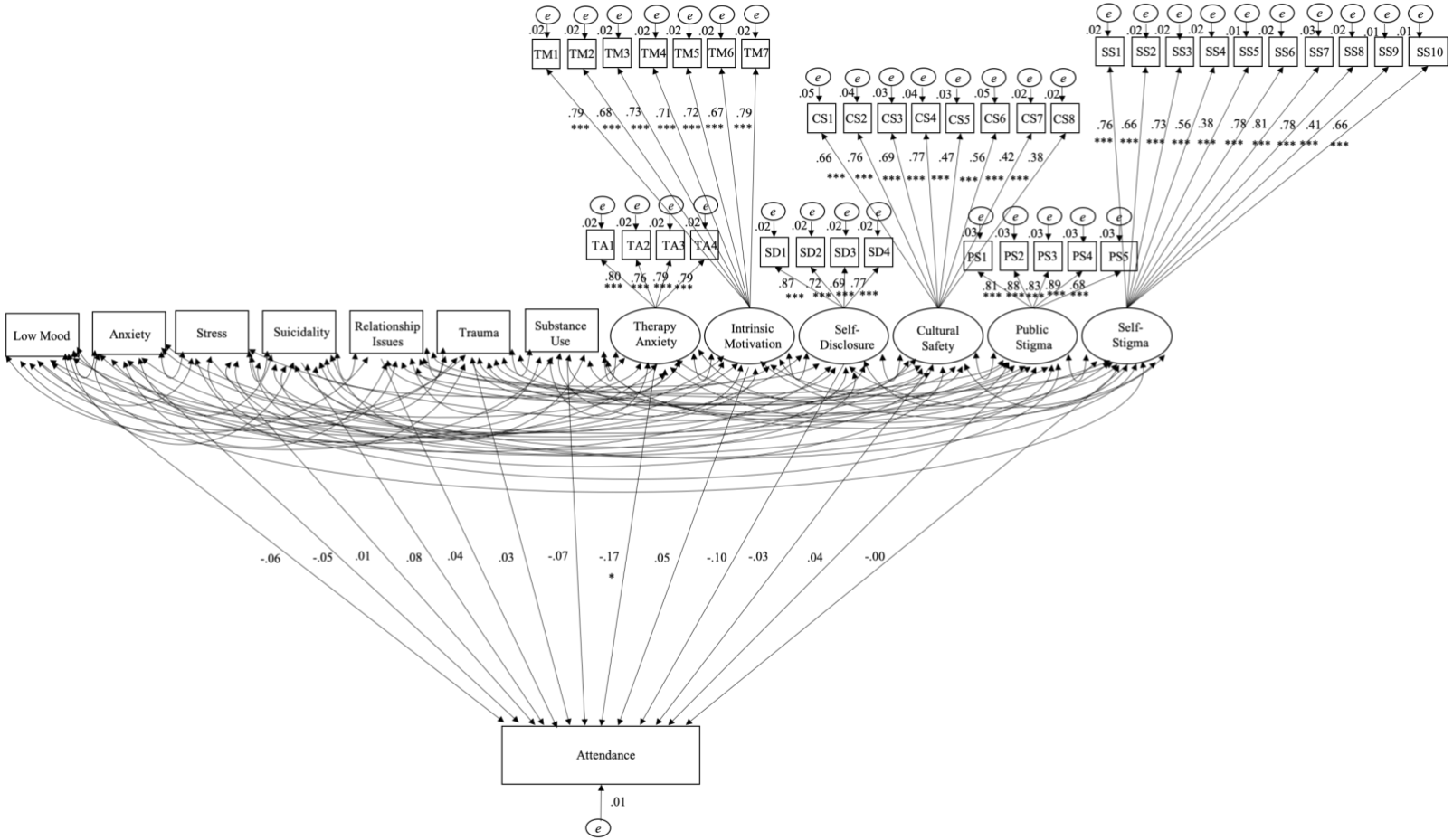
Note. *Reference level for employment was “full time”, ** Reference level for education was “primary school”, *** Reference level for referral was “doctor”. Results with a *p*-value <.05 are marked in bold.

Exploratory Question Two: Psychological Factors Predicting Non-Attendance

Exploratory question two, assessing the strongest predictor across a range of psychological factors, was addressed using a SEM. The model fit well, χ^2 (948) = 1429.11, p < .001, RMSEA = .03, 90% CI [.02, .03], SRMR = .05, CFI = .98. RMSEA, SRMR and CFI all indicate good fit, but chi-square is significant so the null hypothesis of exact fit can be rejected. The aim of exploratory question two was to identify which psychological factors were the strongest predictors of non-attendance. Therapy anxiety had the strongest relationship with non-attendance (β = -.17, p <.05). This finding suggests therapy anxiety was the strongest psychological predictor of non-attendance. Following this, the remaining factors were not statistically significant. For the remaining factors see the path diagram in Figure 11 below.

Figure 11

Path Diagram for Exploratory Question Two



Note. *p < .05. **p < .01. ***p < .001.

Qualitative Analyses

Exploratory Question Five: Self-Identified Reasons for Non-Attendance

Exploratory question five, assessing the most common self-identified reasons for not attending appointments, was explored using a content analysis. Responses were coded inductively based on the factors identified. Following the development of the initial codes, code names were adapted to capture more responses within the same subcategory. For example, travel, location, and transport were all combined to make the code *physical access or travel.* Given the length and content of some of the responses, some entries were allocated multiple codes to capture each theme. Table 9 below provides an example of responses that have single and multiple codes. These codes were then grouped within five main categories: *psychological factors* (37.42%), *practical factors* (27.30%), *clinician factors* (15.34%), *other commitments* (14.11%), and *service factors* (5.83%). Within the five categories 38 codes were created. See Table 9 and Table 10 below for more information.

Table 9

Example of Coding Participants' Response

Question	Participant's Response	Primary Code	Main Category
"Please provide any other reasons which impacted your ability to attend an appointment at a psychological service".	"My anxiety makes it very hard to talk to people about my problems, it was extremely difficult to even turn up knowing I would have to talk to strangers"	Anxiety	Psychological factors
	"I could not afford to get to my appointment. I am unable to drive and I'm unable to use public transit because of my conditions. My only option to get to my appointments is find a ride with a friend or uber/cab."	Cost and travel	Practical factors

Psychological Factors

Psychological factors were identified by 37.42% of responders. This category included a range of psychological factors many of which were included within the main survey items. The self-identified psychological factors were a *fear of disclosure, anxiety, depression, motivation, stigma, substance use, mental health, feeling embarrassed,* and feeling therapy was *unnecessary*. Anxiety at 16.56% was the most common psychological factor identified followed by low motivation /energy at 4.91%. Both of these sub-categories were assessed within the main survey items. See Table 10 for further details on *psychological factors.*

Practical Factors

Practical factors was another commonly identified category with 27.30% of responses. The category was comprised of a number of factors assessed within the main survey item as well as several additional factors. The practical factors identified included: *cost or funding, physical access or travel, inconvenient timing,* being *physically sick, forgetting,* and *privacy*. Of those who responded, 9.51% reported cost or funding to be a barrier. The cost of appointments was reported with responses such as: "I attended to the point I could not afford it anymore", "I would love to be able to attend weekly sessions but it's too expensive for me at present". Financial pressure was also reported beyond the appointments, such as "travel was expensive". Limited funding was also reported as a barrier. Funding responses included "was only free for a limited time" and "only 5 were funded". See Table 10 for further details.

Clinician Factors

Clinician factors were identified by 15.34% of the responders. This category included a *lack of connection with the clinician, the clinician cancelling* and clients feeling the

clinician was *unhelpful*. Interestingly 7.98% of participants felt therapy was unhelpful. See Table 10 for further details.

Other Commitments

The *other commitments* category included *family, child, work,* and *university commitments* with 14.11% of the responses. A total of 7.36% indicated work commitments as a barrier to therapy. A number of the responses involved being unable to make appointments that were within work hours, the need to earn their wage and not take time off, feeling they had too much work on to miss, or being unwilling or unable to disclose the appointment to their employer. See Table 10 for further details.

Service Factors

Service factors were made up of factors such as *availability,* long *wait times* and *miscommunications* and were indicated by 5.83% of responders. *Availability* and *wait time* made up 3.68% of the reported factors. These factors reflected services which lacked available appointments both at suitable times of day as well as in frequency. See Table 10 for further details.

Overall, there were five main categories commonly identified by participants these included: psychological factors (37.42%), practical factors (27.30%), clinician factors (15.34%), other commitments (14.11%), and service factors (5.83%). To answer exploratory question five, the most common self-identified specific factors, within these categories, which contributed to non-attendance were anxiety (16.56%), physical access or travel (12.27%), cost or funding (9.51%), feeling therapy was unhelpful (7.98%), work commitments (7.36%) and didn't connect with clinician (5.21%). The majority of these factors were not beyond the scope of the content of the current survey (as specified in the exploratory question). The most commonly identified factors beyond the main survey items

were clinician factors, feeling therapy was unhelpful (7.98%) and didn't connect with clinician (5.21%).

Table 10

Codes for Categories and Subcategories

Categories	Subcategories	Frequency	Percentage
Psychological factors		122	37.42%
	Anxiety	54	16.56%
	Low motivation / energy	16	4.91%
	Mental health issue not specified	15	4.60%
	Unnecessary	9	2.76%
	Therapy content challenging	6	1.84%
	Fear of disclosure	6	1.84%
	Depression	6	1.84%
	Embarrassed	4	1.23%
	Self-doubt	3	0.92%
	Suicide risk	1	0.31%
	Stigma	1	0.31%
	Substance use	1	0.31%
Practical factors		89	27.30%
	Physical access / travel	40	12.27%
	Cost / funding	31	9.51%
	Physical health / sickness	13	3.99%
	Inconvenient time	3	0.92%

Categories	Subcategories	Frequency	Percentage
Practical factors continued			
	Forgotten	1	0.31%
	Privacy	1	0.31%
Clinician factors		50	15.34%
	Clinician was unhelpful	26	7.98%
	Didn't connect with clinician	17	5.21%
	Clinician cancelled	7	2.15%
Other commitments		46	14.11%
	Work commitment	24	7.36%
	Family commitment	7	2.15%
	Child care	6	1.84%
	Other commitment	4	1.23%
	University commitment	3	0.92%
	Family death	2	0.61%
Service factors		19	5.83%
	Availability	8	2.45%
	Miscommunication	7	2.15%
	Wait time	4	1.23%

Supplementary Analyses

Six supplementary analyses were run using an alternative measure of non-attendance. The main measure utilised in this study was an ordinal variable of different levels of non-attendance (as previously outlined). The second measure of non-attendance relied on participants to report the number of appointments attended and the number missed. From there a percentage was calculated and this percentage was used to represent each participant's

score of non-attendance. This measure of non-attendance was then used to re-run the main analyses which assessed non-attendance. These analyses included:

- Hypothesis one, a Spearman's correlation of safety behaviours and non-attendance;
- Hypothesis two, a Spearman's correlation of therapy anxiety and non-attendance;
- Hypothesis three, a Spearman's correlation of motivation and non-attendance;
- Hypothesis four, a structural equation model of motivation and anxiety as the predictor variables and non-attendance as the outcome variable;
- Exploratory question one, a structural equation model of practical factors and non-attendance;
- Exploratory question two a structural equation model of psychological factors and non-attendance.

Supplementary Analysis One: Safety Behaviours and Non-Attendance

The Spearman's correlation indicated a weak negative relationship (r = -.16, p < .001). This outcome was similar to the main measure of attendance used for hypothesis one (r = -.26, p < .001). As such, hypothesis one was also found to be supported in this supplementary analysis.

Supplementary Analysis Two: Therapy Anxiety and Non-Attendance

The Spearman's correlation indicated a weak negative relationship (r = -.20, p < .001). This finding was similar to that of the main analysis testing hypothesis two (r = -.26, p < .001). As such, hypothesis two was also found to be supported in this supplementary analysis.

Supplementary Analysis Three: Intrinsic Motivation and Non-Attendance

The Spearman's correlation for hypothesis three indicated a weak positive relationship (r =.09, p = .01). This was similar to the results from hypothesis three (r =.18, p

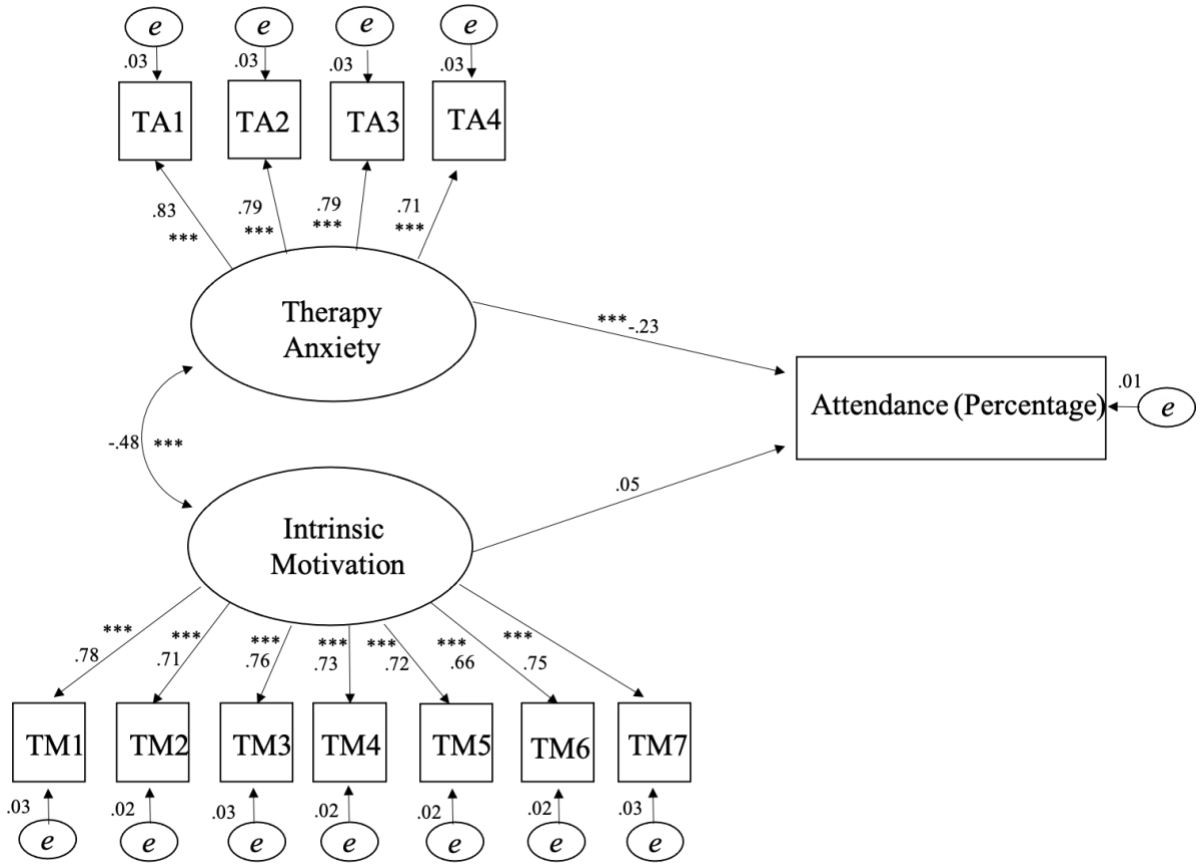
< .001) though a very weak relationship. As such, hypothesis three was also found to be supported in this supplementary analysis.

Supplementary Analysis Four: Intrinsic Motivation, Therapy Anxiety and Non-Attendance

Supplementary analysis four measured the relationship between intrinsic motivation, therapy anxiety and attendance using a structural equation model. The model was the same as the main model used to test hypothesis four aside from the outcome variable using the percentage of attended appointments as opposed to the levels of attendance used for the main study. The model fit well, χ^2 (52) = 124.25, $p < .001$, RMSEA = .04, 90% CI [.03 .06], SRMR = .05, CFI = 0.98. Figure 12, presented below, illustrates a significant negative relationship ($\beta = -.23$, $p < .001$) between therapy anxiety and attendance. This standardised regression coefficient is similar to that of the main analysis (-.22). The relationship between motivation for therapy and attendance was not statistically significant ($\beta = .05$, $p = .11$). This differs from the statistically significant relationship found in the main analysis ($\beta = .10$, $p <$ .001) albeit the magnitude of the estimates was fairly similar. As such, hypothesis four was not found to be supported by this supplementary analysis.

Figure 12

Path Diagram for Supplementary Analysis Four



Note. *p < .05. **p < .01. ***p < .001.

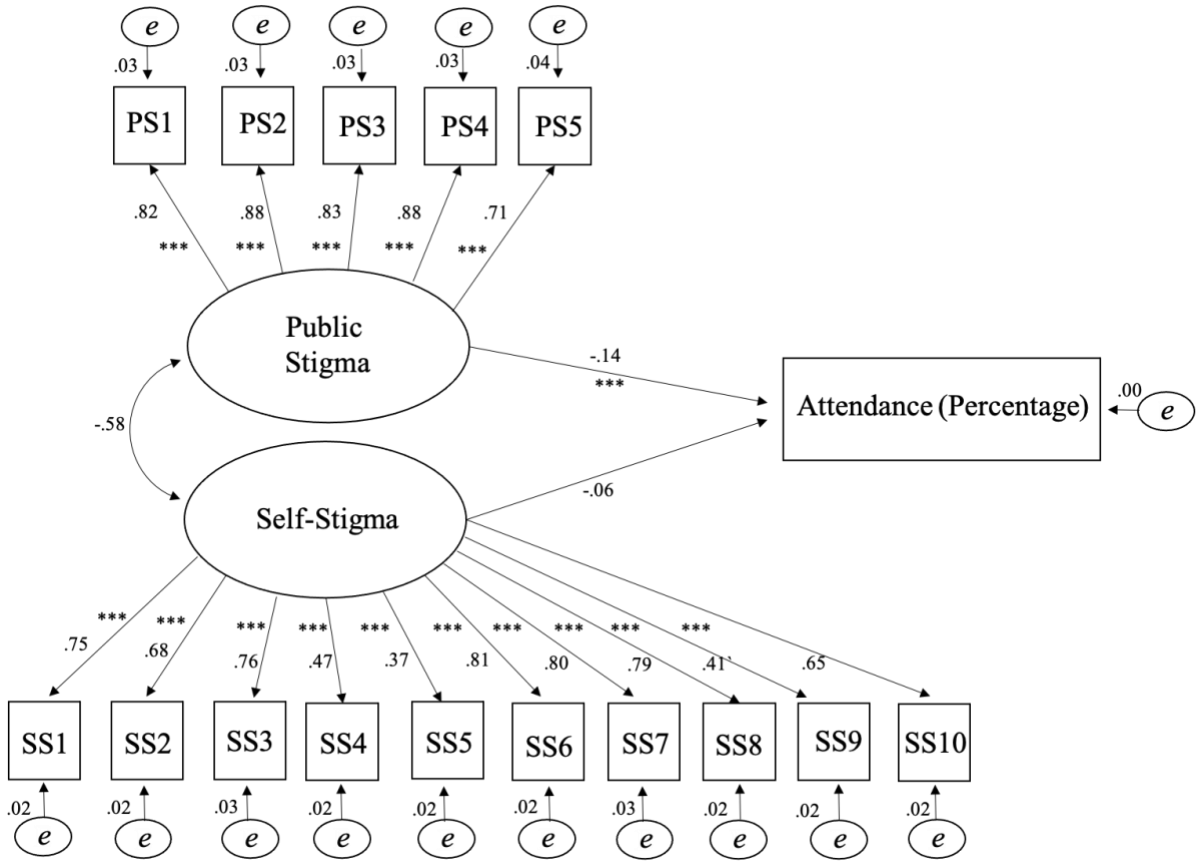
Supplementary Analysis Five: Self-Stigma, Public Stigma and Non-Attendance

Supplementary analysis five was completed using a SEM to assess the same relationship measured in hypothesis five (self-stigma, public stigma and non-attendance) using the percentage of attended appointment as the outcome measure. Overall, the model fit well, χ^2 (102) = 94.54, p = .68, RMSEA = .00, 90% CI [.00 .01], SRMR = .03, CFI = 1.00. The SEM model for supplementary analysis six is presented below in Figure 13. The SEM model indicates a negative relationship between public stigma and attendance (β = -.14, p < .001) and no relationship between self-stigma and attendance (β = -.06, p = .09). These

findings were the opposite of that found in hypothesis five with no statistically significant relationship between perceived public stigma and attendance (β = .02, p = .55) and a weak negative relationship self-stigma and attendance (β = -.18, p < .001). Despite the opposite findings, neither hypothesis five nor this supplementary analysis were found to be supported.

Figure 13

Path Diagram for Supplementary Analysis Five



Note. *p < .05. **p < .01. ***p < .001.

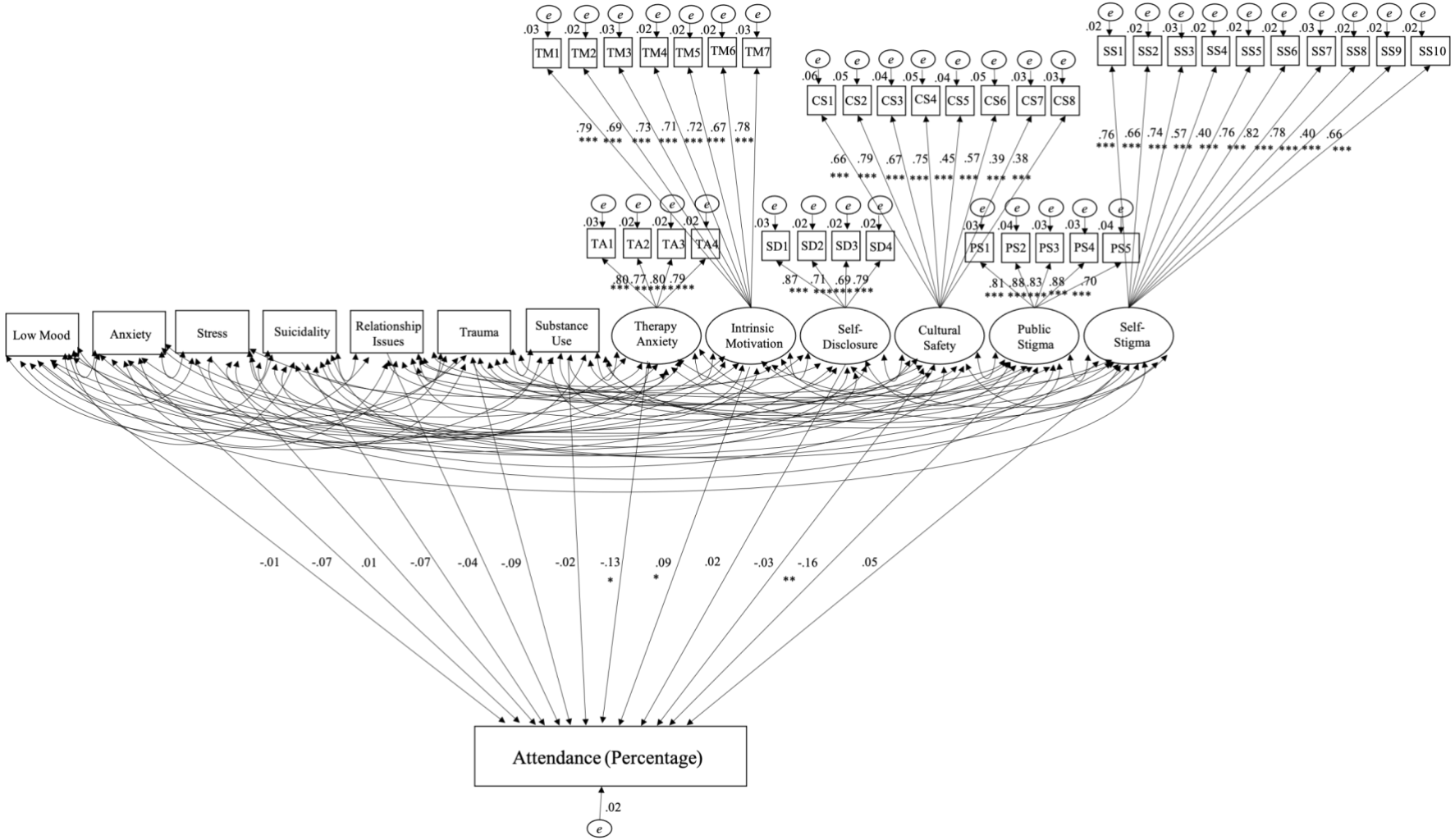
Supplementary Analysis Six: Psychological Factors and Non-Attendance

Supplementary analysis six assessed the same psychological factors as exploratory question two using a SEM with the percentage of attended appointments as the outcome variable. The aim of this question was to identify the strongest psychological predictor of non-attendance. Overall, the model fit well, χ^2 (948) = 1274.52, p < .001, RMSEA = .02,

90% CI [.02, .03], SRMR = .05, CFI = .98. The factor which had the strongest relationship was public stigma (β = -.16, $p < .05$) followed closely by therapy anxiety (β = -.13, $p = .05$). Therapy anxiety result was the strongest predictor in exploratory question two; however, public stigma was not. Supplementary analysis six found three measured predictors to be statistically significant. These included: therapy anxiety (β = -.13, $p = .05$) public stigma (β = -.16, $p < .05$) and intrinsic motivation (β = .09, $p < .05$). In contrast, for exploratory question two only therapy anxiety was statistically significant. See Figure 14 below for the path diagram of supplementary analysis six and Figure 8 for exploratory question two.

Figure 14

Path Diagram for Supplementary Analysis Six



Note. *p < .05. **p < .01. ***p < .001.

CHAPTER 7: Discussion

Non-attendance of psychological appointments is a global phenomenon that prevents many individuals from receiving psychological support. It is essential to understand the barriers to attendance in order to develop effective interventions which enhance engagement and attendance. The discussion begins with a review of the study's main findings from the five hypotheses, five exploratory questions, and six supplementary analyses. Following on, the limitations of the current study and directions for future research are explored. Lastly, the practical implications of the study's findings are presented.

Summary of Main Findings

Safety Behaviours and Non-Attendance

The first hypothesis was derived from the cognitive theory, indicating that safety behaviours are a maintaining factor for anxiety and a barrier to therapy outcomes (Mowrer, 1960). Hypothesis one, with the proposal that the tendency to engage in safety behaviours would be negatively correlated with appointment attendance amongst clients seeking psychological therapy, was tested using a Spearman's correlation. The results indicated a weak negative relationship offering support for hypothesis one. Supplementary analysis one, which analysed safety behaviour scores using the alternative measure of non-attendance, offered further support for the relationship between safety behaviours and non-attendance. This analysis demonstrated a weak negative relationship between these two variables. Despite the reasonably small effect sizes in both hypothesis one and supplementary analysis one the findings suggest safety behaviours may be a relevant factor for understanding non-attendance. This is one of the first studies to investigate safety behaviours in relation to non-attendance of psychological appointments, more research is needed to understand this relationship further.

Therapy Anxiety and Non-Attendance

The second hypothesis, with the proposition that therapy anxiety would be negatively correlated with appointment attendance amongst clients seeking psychological therapy, was tested using a Spearman's correlation. As stated, the relationship between dental anxiety and attendance is well documented (Armfield & Ketting, 2015; Heyman et al., 2016; Skaret et al., 1999) but the relationship between anxiety and psychological appointments is less evident. The results of the current study indicated a negative relationship between therapy anxiety and attendance finding evidence to support hypothesis two. Offering further support to this relationship was supplementary analysis two. Using the alternative measure of non-attendance, the analysis demonstrated a weak negative relationship between therapy anxiety and non-attendance. It is important to consider that the modified dental anxiety measure has not been validated, and thus, may not be the most appropriate measure of therapy anxiety. This relationship as evidenced by the two analyses is purely correlational and no causal conclusion can be explicitly drawn. However, this finding does begin to contribute to the literature. Exploratory question two investigated a range of psychological factors using a SEM while controlling for other confounding variables. This model indicated therapy anxiety remained a relevant factor in predicting non-attendance. In fact, therapy anxiety had the strongest relationship (albeit still weak) with non-attendance across all of the psychological factors investigated. Though causality cannot be assumed, this complex model may offer tentative support for a causal relationship between therapy anxiety and non-attendance. As the literature in this area continues to develops and a greater number of studies incorporate controls for plausible confounding variables stronger evidence of causal effects could be produced.

Intrinsic Motivation and Non-Attendance

The third hypothesis was based on the Self-Determination Theory (SDT) of motivation (Deci & Ryan, 2012). The SDT has been applied across a range of other fields such as physical education (Standage et al., 2006), addiction (Williams et al., 2006), health care (Ng et al., 2012), general education (Niemiec & Ryan, 2009), politics (Losier et al., 2001), and religion (Neyrinck et al., 2005). However, the research surrounding psychological appointments is minimal. Hypothesis three stated that intrinsic and integrated regulation motivation would be positively correlated with appointment attendance amongst clients seeking psychological therapy. Hypothesis three was assessed using a Spearman's correlation. The findings indicated a weak positive relationship evidencing support for the hypothesis. Supplementary analysis three offered further evidence for a weak positive relationship between intrinsic motivation and non-attendance. These analyses was correlational in nature, and thus, causal inferences cannot be explicitly applied. However, these findings are consistent with the SDT which proposes that intrinsic motivation is predictive of behaviour. Furthermore, these findings are consistent with a number of studies in the existing literature which have also found a relationship between intrinsic motivation and attendance of psychological appointments (Bados et al., 2007; Ryan et al., 1995; Westmacott & Hunsley, 2017).

Intrinsic Motivation, Therapy Anxiety and Non-Attendance

Hypothesis four was based on the potentially counterproductive relationship between motivation and therapy anxiety. The balance between intrinsic motivation and therapy anxiety has not yet been investigated; however, this relationship has been demonstrated across a range of other domains such as dentistry (Halvari et al., 2010) and education (Jain & Sidhu, 2013). A SEM was used to test hypothesis four: Anxiety levels will be negatively related to attendance history and intrinsic and integrated regulation motivation will be

positively related to attendance history. As hypothesised, the results demonstrated increased therapy anxiety was associated with a decrease in attendance behaviours and an increase of intrinsic motivation was associated with an increase in attendance behaviours. In addition the model demonstrated the effect of therapy anxiety on attendance was twice as big as the effect of intrinsic motivation. With similar findings, supplementary analysis four offered further support for hypothesis four demonstrating increased anxiety was related with less attendance behaviours and increased intrinsic motivation was associated with more attendance behaviours. Furthermore, both of these models demonstrated a substantial negative correlation between therapy anxiety and intrinsic motivation. This may suggest the possibility that therapy anxiety may negatively impact intrinsic motivation, which could suggest therapy anxiety may reduce attendance both indirectly and directly. Alternatively it may suggest a lack of intrinsic motivation may negatively impact therapy anxiety.

The association of intrinsic motivation and therapy anxiety were further assessed within a SEM including a number of other psychological factors including stigma, self-disclosure and different diagnoses or presenting concerns. As aforementioned the association between therapy anxiety and attendance behaviours was demonstrated to be statistically significant when controlling for other potential confounding variables. However, when controlling for other potential confounding variables intrinsic motivation did not have a statistically significant relationship with non-attendance. This suggests intrinsic motivation may not be a relevant factor in understanding non-attendance behaviours. Greater investigation is needed to understand the role of intrinsic motivation and the potentially mitigating or mediating factors contributing to non-attendance. Using a SEM, supplementary analysis six investigated the same variables using the alternative measure of attendance. This analysis found statistically significant relationships between non-attendance and motivation, therapy anxiety, and public stigma. This analysis offers support for hypothesis four

suggesting both intrinsic motivation and therapy anxiety are relevant factors in predicting non-attendance. Given the variation in findings across the analyses further investigation is needed.

Self-Stigma, Public Stigma and Non-Attendance

Hypothesis five was based on the modified labelling theory of stigma (Link et al., 1989). As previously outlined, this theory demonstrates a relationship between perceived public stigma and self-stigma and how this internalised stigma can lead to negative consequences such as withdrawal (Link et al., 1989). The current literature has predominantly assessed psychological help-seeking attitudes and intentions as opposed to physical attendance of psychological appointments (Deane & Todd, 1996; Komiya et al., 2000; Leaf et al., 1987; Vogel et al., 2005, 2011). Hypothesis five stated individuals who rated highly on the public stigma and self-stigma scales would have a poorer attendance history. Hypothesis five was tested using a SEM with self-stigma and public stigma as the predictors and attendance as the outcome variable. Overall, the goodness of fit measures indicated good fit. The SEM model indicated a weak statistically significant relationship between self-stigma and attendance, however, the findings did not demonstrate a statistically significant relationship between perceived public stigma and attendance. Based on the findings hypothesis five was not supported. In further exploration of the stigma, supplementary analysis five examined self-stigma, public stigma and the alternative measure of non-attendance. The supplementary analysis did not demonstrate a statistically significant relationship between self-stigma and non-attendance but did demonstrate a statistically significant negative relationship between public stigma and attendance behaviours. Hypothesis five was developed based on the modified labelling theory. The hypothesis proposed that both public stigma and self-stigma would relate to non-attendance. However, the findings of the current study did not support hypothesis five but are consistent with some

of the empirical findings aforementioned (Clement et al., 2015; Vogel, Wade, et al., 2007). The main analysis of this study found support for the relationship between self-stigma and non-attendance but not for public stigma. This finding was consistent with Clement et al. (2015) who reported self-stigma was significantly associated with help-seeking but public stigma was not. These results were also consistent with Vogel, Wade, et al. (2007) findings which illustrated the relationship between the two forms of stigma. Vogel, Wade, et al. (2007) reported public stigma leads to the internalisation of negative external messages and it was these internal messages which predicted attitudes to psychological help-seeking; thus suggesting you cannot have self-stigma without public stigma. However, it was not the public stigma which impacted attendance but the internalisation of it. These findings may suggest a mediating model where public stigma leads to self-stigma which leads to reduced attendance. The current study did not use a mediation model to test this relationship though it could be a possible direction for future research. The supplementary analysis findings are inconsistent with the existing literature. Future studies could extend the mediation model proposed by Vogel, Wade, et al. (2007) by looking directly at attendance behaviours as opposed to help-seeking attitudes or intentions.

Practical Factors and Non-Attendance

Moving on from hypotheses that have a significant focus on psychological factors, the current study also recognised practical factors may also play a part in non-attendance and sought to explore these further. Therefore, the purpose of exploratory question one was to identify the strongest practical predictors of non-attendance while controlling for possible confounding variables. The following factors were included in an ordinal logistic regression, as previous literature supported their impact on attendance behaviours. These factors included employment, education, type of referral, timeliness of the referral process, work commitments, family commitments, cost restrictions, forgotten appointments, being

physically sick, physical access difficulties, time restrictions and childcare restrictions. Of the 12 variables investigated, three were found to be statistically significant predictors of attendance. These included part-time employment, forgotten appointments, and family commitments. The findings from exploratory question one were inconsistent with the findings within the existing literature (Coles et al., 2004; Warnick et al., 2012; Olfson et al., 2009) and suggest the majority of the practical factors measured were not strong predictors of non-attendance. It is possible the relationships between the included practical factors and non-attendance do exist but that the effect sizes were too small or that there was too much variability for the effects to be detected. One possible explanation for the lack of statistically significant relationships with the assessed practical factors could be the way in which these factors were assessed. The items which assessed practical factors were not validated measures but instead were single unvalidated items. For example, the item to identify participants' education was assessed by asking participants to select from a multi-choice question the highest level of education they had achieved. It is possible a more comprehensive and validated measures which provides great reliability and construct validity may yield different results.

Of the statistically significant relationships, part-time employment was the strongest practical predictor of non-attendance behaviours. These results were in line with the recent study by Martinez et al. (2020) who reported precarious employment was the most commonly endorsed barrier to attending mental health services. Notably, as highlighted in the results section these results should be interpreted with caution as the measure of employment was flawed. Employment was measured by asking participants to select their current employment status, it is possible participants' employment status changed throughout the previous 18 month period. Future studies should ensure that the period over which

employment status is recorded is consistent with that over which attendance behaviour is measured.

The relationship between forgotten appointment and non-attendance is unsurprising given the strong support for this relationship within the literature. What remains unknown is how forgotten appointments can be minimised given the evidence for the ineffectiveness of text reminders (Clough & Casey, 2014; Filippidou et al., 2014). Further investigation as to whether forgotten appointments were more prevalent during the early stages of engagement (non-engagers, non-attenders and early drop-outs) or later in the therapy process may contribute to the understanding of the role of forgotten appointments to inform effective interventions.

Lastly, the relationship between family commitments and non-attendance was highlighted suggesting family commitments reduce clients' ability to attend appointments. This is congruent with the literature suggesting alternative commitments and time constraints are barriers to attendance (Alhamad, 2013; Kourany et al., 1990). The findings suggest of the commitments investigated, family commitments were the only type of commitment of relevance. This is in contrast to the qualitative component of the study which highlighted work commitments as the most commonly reported commitment out of family, child, work, and university commitments. Overall the findings of this analysis suggest several practical barriers to therapy are relevant in addition to psychological factors. Further investigation of practical factors would highlight the importance of interventions which minimise practical barrier to psychological therapy.

Measuring Non-Attendance Behaviours

The analysis for exploratory question three examined the different points at which individuals do not attend therapy. A number of studies have investigated non-attendance, although they often look only at one point of non-attendance, such as not attending at all or not attending

after the first appointment. In determining how to measure non-attendance within the current study, many other existing measures and studies were reviewed. It was evident there was currently no agreed upon way to measure non-attendance behaviours, particularly in self-reported studies without access to service attendance records. Furthermore, the usefulness of a method differs across contexts. For example, some measures of non-attendance rely on service records, which may be considered more reliable than self-report; however, it is not possible for a study which is not linked to any specific service or set of services to rely on service records. Furthermore, service records do not provide the opportunity to include participants who have not engaged with a service. Therefore, the current study implemented two measures of non-attendance to endeavour to capture non-attendance behaviours using self-report. Exploratory question three sought to understand the most commonly selected response to indicate which level of non-attendance was most common in the sample. Identification of the most common non-attendance behaviours could inform the priority of interventions. The most common option selected was, “I attended all the appointments that I made with the therapist”, endorsed by almost half of participants. This finding indicates that almost half of the sample seemed to have engaged fully with their most recent experience of therapy. This may suggest the sample did not offer a fair representation of the population and significantly reduces the sample size of those with a history of non-attendance. Though it is also possible that most people who contact a service do indeed follow through with therapy. The second most frequently endorsed response, which identified the most common point at which people miss appointments was option four: “I came to most of my appointments but missed a few in between”, endorsed by 16.59% of participants. This was followed closely by option five: “I stopped coming after attending several appointments”, endorsed by 15.24% of participants. These two types of non-attendance behaviours suggest these participants were sufficiently able to manage initial anticipatory anxiety in order to attend therapy for at least

several appointments. The individuals aligning with these levels of attendance would likely benefit from interventions which target maintaining engagement as opposed to early engagement interventions.

There was also a significant portion of individuals who demonstrated an interest in attending as indicated by a referral or booking in but experienced barriers to attend. These individuals may benefit from interventions which target barriers that are present during the initial stages such as anticipatory anxiety. Of further interest in the findings of exploratory question three was the diversity of participants across the different levels of non-attendance. A minimal number of participants (6.12%) indicated that they stopped coming after the very first appointment. This finding suggests most individuals who attended a first appointment did return for further therapy. This finding could be interpreted in a several ways. One interpretation is that for most individuals in this study their experience of the intake assessment (first appointment) was not a factor that impacted non-attendance. Alternatively, these individuals may not have established good rapport with the therapist or felt the service met their needs. While the advertising asked, “Have you sought psychological therapy in the past 18 months?” it is possible those who read the advertisement could have assumed, because they had not attended or had not attended regularly, their experience did not meet the criteria and therefore did not opt to participate. The diversity of the findings for exploratory question three supports the notion that non-attendance behaviours are diverse and require greater understanding.

Non-attendance was also measured by asking participants to indicate how many appointments they had attended and how many they had missed in order to generate a percentage score for each participant. This alternative measure of non-attendance was included as currently within the literature there is no agreed upon way of measuring this phenomenon. The two measures of non-attendance behaviours were correlated and

demonstrated a moderately strong correlation. The correlation between these two measures suggest they are measuring the same or similar construct and may speak to the robustness of factors investigated given the demonstrated relevance to both measures of non-attendance. As outlined in the results chapter, the two measures of attendance behaviours were compared in a number of validity tests. Of interest it is noted that those who selected level 4, "I came to most of my appointments but missed a few in between" attended more appointments than those who selected level 6, "I attended all the appointments that I made with the therapist". This may suggest although individuals who selected level 4 missed several appointments they maintained long-term engagement. One possible explanation may be that those who selected level 4 had more complex or chronic mental health needs than those who selected level 6, which may explain why they missed several appointments as well as why they needed a long duration of therapy. It may be possible those who selected level 4 may be more likely to be impacted by external or practical factors such as other commitments rather than psychological factors such as motivation or anxiety. Further investigation and understanding of these different types of attendance behaviours would be informative.

Cultural Safety, Ethnic Identity, and Non-Attendance

The current literature has illustrated indigenous cultures experience lower rates of cultural safety within medical health care (Jansen et al., 2009; Johnson et al., 2004). Surprisingly there has been minimal investigation of cultural safety within the field of mental health care. Exploratory question two and four were included to begin to draw an understanding of the presence of cultural safety across a range of ethnicities within psychological services and to understand if cultural safety could be a predictor of non-attendance. Exploratory question two, investigating a range of psychological factors in a SEM including cultural safety did not find cultural safety to have a statistically significant relationship with non-attendance. Exploratory question four sought to understand the

differences in mean cultural safety levels exist across ethnicities. Exploratory question four was assessed using inferential statistics looking at the mean scores and confidence intervals. Small sample sizes for most ethnicities meant there was an insufficient basis to justify testing for the presence of statistically significant differences in cultural safety levels across ethnic groups. Therefore results should be interpreted with caution. Furthermore, when considering the findings of this question it is important to realise the diversity in the number of participants from each ethnicity. For example, there were 330 individuals who identified as English, 115 as Pākehā / New Zealand European, 10 as Māori, five as Chinese and one as Samoan. Thus, the confidence intervals and standard error for some of the ethnic groups are large and mean cultural safety scores are less representative and comparable and should be interpreted with extreme caution. Ethnic groups with less than 10 individuals were excluded from the analyses, leaving seven ethnic groups to be analysed. The remaining ethnic groups included: Australian, Canadian, English, Indian, Māori, Pākehā /New Zealand European, and Scottish. The ethnic groups with the lowest scores of cultural safety were Indian and Māori. These ethnic groups are considered minorities within the countries included in this study. On the contrary, the highest cultural safety scores belonged to the dominant ethnic groups Australian and Pākehā. These findings may be considered consistent with the literature which suggests health care services are designed for the dominant, westernised culture and are not always culturally appropriate or safe for minority or indigenous cultures (Barwick, 2000; Baxter, 2002; Bramley et al., 2005; Hansen et al., 2010). The ability to interpret the current findings surrounding cultural safety and ethnicity is limited by the unrepresentative sample. Furthermore the measure of cultural safety was based on the Meihana model, which is specific to the indigenous people of New Zealand and has not been validated across other cultures. It is also possible some of the ethnic categories (e.g., European) used in the analysis comprised subgroups (e.g., Pākehā, Australian, British and Canadian) and may have had

different attendance behaviours. However, this would not necessarily be apparent from the results of analysis. To resolve this possible issue would require a far larger sample size including larger samples of the various ethnic groups and subgroups.

To assess cultural safety scores more accurately across ethnicities it would be important to have a large sample that equally and sufficiently represented each ethnic group. In particular a sample should have a sufficient sample size representation across ethnic minorities and indigenous cultures. The literature demonstrates health disparities and cultural barriers for indigenous and minority cultures though the current study does not effectively capture these cultural groups. The ethnic group options provided in future studies should be considered carefully to appropriately capture the indigenous and ethnic minorities of the countries being investigated. Furthermore, validation of the cultural safety measure is needed across an international sample. This study is one of the first to look at cultural safety in psychological services across ethnicities. However, much more research is needed to draw any conclusions.

Self-Identified Barriers to Attendance

The fifth and final exploratory question was intended to acknowledge the complexity of non-attendance as well as the individual differences experienced when seeking support. The question also intended to provide participants with an opportunity to express their voice and feel their reasons were being heard. While the survey was broad and included a range of common factors, the intention was also to identify common factors which may have been missed within the scope of the survey items. Exploratory question five was analysed using a content analysis of an open-ended question, which provided participants with the opportunity to share additional ideas beyond what was included within the survey: Exploratory question five was as follows: “What are the most common self-identified reasons for not attending appointments?”

From the responses five main code categories emerged. These five main categories were psychological factors (37.42%), practical factors (27.30%), clinician factors (15.34%), other commitments (14.11%), and service factors (5.83%). Of the five main categories, the vast majority of the factors self-identified by participants were covered by items in the main survey. Overall, of the five main categories, with 37.42%, psychological factors were the most commonly identified category. Within the five main categories, the most commonly reported factors were anxiety (16.56%), physical access and/or travel (12.27%), cost or funding (9.51%), finding therapy unhelpful (7.98%), work commitment (7.36%), and didn't connect with clinician (5.21%). These factors were mentioned by many participants. However, the majority of these factors were not beyond the scope of the current survey as specified in the exploratory question. The most commonly identified factors beyond the main survey items were clinician factors: feeling therapy was unhelpful (7.98%), and didn't connect with clinician (5.21%).

Psychological factors were the most frequently identified factor overall. The majority of these factors were captured within the main survey; thus, while they did not identify new ideas, they did reinforce the relevance of the current survey. Within the psychological factors category one of the subcategories was titled "unnecessary". Several of the responses were brief and hard to decipher the reasons why the participants felt therapy was unnecessary. For example, responses included: "I decided it wasn't necessary", "I didn't have issues", "services not needed" and "I was feeling better and started new medication". These responses illustrated the idea that therapy was unnecessary but they do not speak to the reasons or factors that contributed to this perspective. Therefore, it would be interesting to develop greater insight for those who feel therapy is unnecessary.

Practical factors was another commonly identified category. The practical factors identified included: cost or funding, physical access or travel, inconvenient timing, being

physically sick, forgetting, and privacy. This category of factors revealed interesting information about cost, funding, and travel, three areas that were not closely measured in the survey. The main survey items included only a single item relevant to cost. More than 30 responses were coded as relating to cost and funding (9.51%); further research could investigate these factors within greater depth. One explanation of funding being a barrier could be that the process of accessing funding was too difficult, particularly when individuals are experiencing significant mental health issues. For example, in New Zealand to access 30 funded sessions from Work and Income (WINZ; New Zealand's social welfare or financial aid) there are a number of steps required. Firstly, individuals and their partners must earn below a certain income threshold. Then individuals must be able to self-fund an initial appointment with a therapist and also with their doctor to access their signatures for the funding forms (WINZ, 2020). These forms then need to be submitted and can take time to be approved. For many individuals experiencing significant mental health issues this process can be practically and financially challenging.

Clinician factors was the main category identified by responders which was not well captured within the items of the main survey. This category included the following factors: a lack of connection with the clinician, the clinician cancelling, and clients feeling the clinician or therapy was unhelpful. Clinician factors were identified by 15.34% of participants. These findings demonstrate the importance and relevance of also assessing factors surrounding clinicians. Interestingly 7.98% of participants felt therapy was unhelpful. This could indicate that participants can get better on their own or that they do not see value in following through the whole process once they start to improve and reap the benefits. The reported clinician factors may suggest more time could be spent making therapy a more collaborative experience and ensuring clients see the value and benefit in the sessions they attend. Prior research has supported the relationship between therapeutic alliance and therapy attendance

(Cournoyer et al., 2007; Meier et al., 2006; O'Keeffe et al., 2018). Meier et al. (2006) reported participants who reported a weaker therapeutic alliance were likely to stop attending sooner than those who reported a strong therapeutic alliance. Furthermore, the relationship between therapeutic alliance and attendance was illustrated by Cournoyer et al. (2007). The researchers reported participants who perceived their therapist as less understanding were more likely to discontinue attending appointments (Cournoyer et al., 2007).

Other commitments included family, child, work, and university commitments. A total of 7.36% responders indicated work commitments as a barrier to therapy. Many of the responses involved being unable to make appointments within work hours, having to prioritise work to earn their wage and not take time off, feeling they had too much work on to miss, or being unwilling or unable to disclose the appointment to their employer. To overcome these work commitment barriers, offering a greater number of therapy hours outside of work hours could make appointments more accessible for those unable to take time off work.

The main survey items of this study did not have a significant focus on service factors. However, they were highlighted within the self-reported responses by 5.83% of participants. These service factors included appointment availability, long wait times and miscommunications. These responses further illustrated the multitude of factors that influence attendance and further investigation of relevant service factors would be valuable.

Many of the identified factors for exploratory question five were factors measured within the main survey items. However, several factors beyond the main survey items including service and clinician factors were identified. Overall these findings offer validation in that participants self-identified the included factors as the most significant factors for them. In summary, the results from exploratory question five highlighted a range of commonly identified barriers to therapy as well as several newly identified common factors. The

findings demonstrated the variation and complexity of non-attendance factors and offered reinforcement for the current survey's breadth of factors. The newly identified common factors offer several key areas for future exploration including clinician factors, service factors, and cost and/or funding.

Strengths and Limitations

As with most studies, the current study had strengths and weaknesses which are worth noting for transparency, understanding of the findings, and future research. This study was cross-sectional in design and conclusions about cause and effect are therefore tentative. However, the findings of this study may be considered alongside other similar studies to triangulate possible causal relationships. To ensure results are interpreted with the intended meaning and to provide consistent and appropriate terminology the following paragraphs explore the role of causality for the analyses of the current study.

A correlation between two or more variables does not explicitly demonstrate one variable caused another (Grosz et al., 2020). Students in the behavioural and social sciences have long been taught that experimental design which involves random assignment and control conditions are the gold standard for making causal inferences about behaviour (Grosz et al., 2020; Hatfield et al., 2006; Leary, 2012). This has led many psychological researchers to avoid explicitly making causal inferences in cross-sectional studies. However, causality is often implied through misleading language such as "impact" or "affecting". Grosz et al. (2020) argues that even experimental research involves speculative causal inferences; thus, the blanket rule to avoid causal assumptions in non-experimental research may be invalid and unhelpful in developing our understanding of phenomena. Furthermore, even if researchers do not explicitly state causality by using careful language such as "relationships" or "associations", many readers will interpret these findings as causal conclusions (Asendorpf, 2012; Bleske-Rechek et al., 2015).

Hernán (2018) suggests no single study can reliably estimate a causal effect but three key components together can offer more reliable estimates of causality. These components include: specification, emulation, and triangulation (Hernán, 2018). Specification involves clearly defining the causal questions or hypotheses in a falsifiable way. Emulation is the production of multiple studies using a variation of data, statistical methods, and assumptions to measure the same phenomenon. Triangulation is a method used to increase the credibility and validity of research findings (Noble & Heale, 2019). It involves combining theories, methods, and data sources to explore and explain complex human behaviour using a variety of methods to offer a balanced explanation and pinpoint a true causal effect (Noble & Heale, 2019). Together these three components can enhance the reliability and validity of causal claims. However, to reliably triangulate, and draw these causal conclusions based on emulated studies, researchers need to precisely define causal effects of interest and not avoid making the causal claims all together (Hernán, 2018).

The current study used a range of analyses, some of which are simple correlations and others which include statistically controlling for carefully considered plausible confounding variables. When interpreting the results of the simple correlations causality should not be assumed. However, when interpreting the results of these more complex analyses, estimated relationships between predictors and attendance represent very tentative evidence of causal effects, although it remains possible that the relationships observed could be due to unmeasured confounding variables not included in the analyses. It is important to look at these findings in the context of existing and future research. As the majority of these factors such as therapy anxiety, intrinsic motivation, cultural safety and stigma have had relatively minimal investigation in relation to non-attendance of psychological appointments causality should be assumed with caution. As the quantity and quality of the literature surrounding

these phenomena continues to develop so too may a greater confidence in the causality of these relationships.

Moving on from causality, the next point worth highlighting relates to the self-report method. Self-report studies have been widely criticised as a methodological weakness. For instance, recall errors may occur as participants have been asked to report experiences from up to 18 months prior. There are three main types of recall errors: forgotten entirely, recalled inaccurately, or time errors. Time errors include the tendency to evaluate an event older than it actually is, or mis-estimate the frequency of events for a given time interval (Dex, 1995). These errors, particularly the time errors, could have potentially occurred in the current study when individuals were asked to report the number of appointments they have attended and missed. Despite the possible methodological weaknesses, self-report studies offer a way to collect data which is low cost, time-efficient and provides participants an opportunity to voice their own experiences. Furthermore, self-report measures remain one of the most widely used measurement tools in psychology (Haeffel & Howard, 2010). This possible limitation was considered carefully when deciding the most appropriate way to have participants report their attendance history; thus, two measures of non-attendance were collected. While it is important to acknowledge the limitations of self-report measures, it is important to consider the aims of this study and consider the strengths this method may offer. The use of self-report may only be considered weak if there was a more superior method. The use of self-report in this study allowed for a large number of participants to be reached thus increase statistical power. Furthermore, self-report allowed participants to be included separate from a particular service which may have encouraged more honest responses. he alternative method of using service records has the advantage of providing more behavioural observations that are not reliant on self-report, but that may make it difficult to achieve adequate power, and that may present ethical challenges.

A number of the scales included in the study are worth highlighting for their possible limitations. Within the seven scales selected, the majority have been validated; however, two measures were modified or developed for the purpose of this study and therefore were not validated. This presents as a limitation as we cannot assume validity and reliability of the measures. Thus, when interpreting the results it is important to consider the need to validate measures and future research should seek to do so. The unvalidated measures included the modified version of the Corah's Dental Anxiety Scale Revised (DAS-R), the cultural safety items and the items relating to practical factors. The DAS-R measure was modified to include questions specific to therapy anxiety not dental anxiety. The modification are presented in Table 2 in the Measures section above. The other measure not validated was the items assessing cultural safety. At the time of selecting a measure to assess cultural safety, there were not any developed measures which directly assessed cultural safety. Since then, in March 2020, a validation study for a new measure, the Cultural Safety Survey, was published (Elvidge et al., 2020). This measure contained 23 Likert scale items to assess cultural safety within a hospital setting. The items were organised into five domains: *communication (positive), communication (negative), trust, environment,* and *support for Aboriginal families and cultural.* This measure offered a number of useful and relevant questions to assess cultural safety. For example, "Do you feel the hospital staff genuinely respect your cultural values and practices", or "How often have you felt unfairly treated at this hospital because of your race or cultural background?" (Elvidge et al., 2020, pg. 8). These questions were predominantly focused on experiences within the hospital using terms such as the "hospital staff", "Aboriginal Hospital Liaison Officer", or "hospital environment" (Elvidge et al., 2020). If this measure was to be used to assess cultural safety within psychological services, the terms and wording would need to be modified. Nonetheless, this measure would have

been modified and implemented in the current study had it been published at the relevant time.

Another limitation arose due to a mistake made within the survey flow and the redirection of questions in the survey software Qualtrics. The participants who had sought therapy, but had not engaged with a service, did not receive a number of the questions given to those who actually attended. For example, those participants who attended therapy were asked to rate on a 5-point scale the degree to which they perceived 'the therapist treated me with dignity and respect'. As these questions related to experiences of attending appointments, they were not presented to individuals who had not attended. One question relevant to attending which was included in this block of questions was the open-ended question asking participants to report other factors beyond those captured in the survey. This meant those participants did not have the chance to voice their reasons for not attending. Furthermore, it meant these participants could not be included in the content analysis for exploratory question five. This question excluded non-engagers, those who expressed interest but did not attend. Non-engagers have had little investigation within the literature and while this study does include them within the sample and within the rest of the survey they were not included in the open-ended qualitative question. Care when setting up the survey flow and redirection of questions needs to be taken to ensure participants aren't unnecessarily excluded. Further exploration of barriers to non-attendance should focus specifically on this group.

Further limitations related to the participant sample. Firstly the sample was a self-selected sample whereby participants agreed to participate in a study. A self-selected sample may create a degree of self-selection bias. The decision to participate in a particular study may suggest particular characteristics of a participant (Heckman, 1990). For example, participants who want to give an opinion or participants with greater access to resources such

as the internet may be more likely to participate than those who do not. Given this method the representativeness of the sample may be limited. Furthermore, there was also an under sampling of indigenous and minority populations from the respective countries and thus conclusions relating to ethnicity are limited. Furthermore, the sample was primarily made up of those who reported attending all of their appointments and therefore presented an under sampling of those demonstrating non-attendance behaviours. Of the 669 participants included in the final sample, 324 individuals (48.57%) attended all of their appointments. While this highlights a range of factors which were not barriers to attendance for certain individuals, this meant the sample of participants who missed appointments was smaller than initial expectations and therefore may not have been as fruitful in identifying barriers to attendance.

In regard to the qualitative analysis of the current study, there were no trustworthiness checks used to ensure the reliability of the codes. There is some debate within the literature whether trustworthiness checks are a necessary and appropriate step for coding qualitative research (O'Connor & Joffe, 2020). Given qualitative analyses are a largely subjective process it is worth highlighting as a possible limitation and future studies may wish to implement trustworthiness checks.

Lastly, in light of the current global pandemic impacting communities and individuals around the world, it is important to consider contextual events and their possible impact on attendance and the way services are delivered and received during an unprecedented time. The data from the current study was collected prior to the significant restrictions of COVID-19 and the introduction of more widely available telehealth; therefore, the impact was not captured within the current study's results. However, future research and interventions relating to psychological appointment attendance have the potential to be influenced by these changes. As of October 2021, the virus has infected more than 239 million individuals with more than 4.8 million deaths (WHO, 2020). COVID-19 has resulted in significant and

unsettling changes to daily life in an attempt to contain the spread of the virus. These changes have included locking down countries, closing borders, closing schools and workplaces, and reducing access to face-to-face health and mental health care. These changes have had, and continue to have, a significant impact on society and individuals' ability to function. The unpredictability and gravity of the virus, as well as social isolation and misinformation, has contributed to increased stress and mental health difficulties (Zandifar & Badrfam, 2020).

Research on previous global diseases have demonstrated an increase in health anxiety, general anxiety, post-traumatic stress, general stress, and suicidality (Wheaton et al., 2012; Yip et al., 2010). Data is emerging highlighting the possible impact of COVID-19 on the psychological wellbeing of many individuals across the world. A recent meta-analysis of longitudinal studies demonstrated there was a small increase in mental health symptoms soon after the initial outbreak of COVID-19 though this was seen to decrease again several months later (Robinson et al., 2022).

While there has been some evidence of an increase in mental health difficulties, a silver lining has been the increase in the availability of remote services. To meet the needs of individuals, and to adhere to physical distancing protocols, many mental health services have adopted new modalities of service provision. Telehealth or online therapy (therapy delivered by audio or video call) has rapidly become an alternative form of support and therapy for those experiencing health and mental health difficulties (Connolly et al., 2020; Imlach et al., 2020; Madigan et al., 2020; McBeth, 2020). Telehealth reduces many of the practical barriers that may prevent individuals from receiving psychological therapy. These factors include cost and time associated with travel, location of services, childcare, time away from family or work and limited availability of local mental health services (Moring et al., 2020). Many of these factors were reported by participants of the current study in the open ended qualitative question as practical barriers to attending psychological therapy as well as identify in the

quantitative analysis of practical factors. These forced changes have meant many services have quickly adapted and become able to offer remotely delivered care through telehealth. For many individuals, services have become more practically attainable. Telehealth may also positively impact therapy anxiety by removing many of the anxiety provoking components of attending a service. These may include access to parking, going to an unfamiliar clinical setting, and being exposed to new and unfamiliar people. By using telehealth, individuals would be able to attend the appointment from the comfort, safety, and privacy of their own home. Home is a familiar place and often a place where individuals feel safe and secure. Engaging in therapy in one's own space which is set up to make them comfortable and meet their needs may also allow individuals to feel more culturally safe. However, it is possible telehealth may result in more of a challenge to shift into a face-to-face therapeutic space when it becomes possible, as clients may have become comfortable within the safety of at home telehealth. Future research will need to take into consideration telehealth and the possible impact of COVID-19 on mental health and help-seeking behaviours.

Practical Implications

The current study's findings have implications for those working alongside individuals seeking psychological support in clinical practice. The following section details the potential practical implications of this current study and other relevant literature.

Therapy Anxiety

One of the main findings that was identified across a number of the research questions was the relationship between therapy anxiety and non-attendance. Therapy anxiety had the strongest relationship across all of the psychological factors and was also the most commonly self-identified reason for not attending psychological appointments. Furthermore, therapy anxiety remained relevant when controlling for a number of other psychological factors. Anxiety is the most common global mental health concern. In 2017, approximately 3.8% of

the global population experienced an anxiety disorder (Ritchie & Roser, 2018). Not only is anxiety the most common global mental health concern but it is also a significant barrier to accessing and attending psychological therapy, as highlighted in the current study and previous literature (Issakidis & Andrews, 2004; Schneider et al., 2016; Zartaloudi & Madianos, 2010). While anxiety poses a significant barrier to attending therapy, evidenced based approaches such as CBT have strong empirical support for their efficacy in treating anxiety (Hans & Hiller, 2013). Therefore, the goal should not only be to improve therapy modalities for the high number of individuals who experience anxiety; if this relationship is indicative of a causal effect of therapy anxiety on attendance *then* it would be useful to minimise therapy anxiety.

Minimising therapy anxiety may be achieved in a number of ways. One possible option may be by providing exposure and information prior to appointments to reduce the unknown. Buckner et al. (2007) trialled two pre-therapy interventions involving an "imagine-the-experience" exercise and an information condition. The imagination exercise required participants to dedicate several minutes to imagining walking into the clinic, talking with their therapist, leaving, and then returning the following week. The information condition group was provided with an information sheet about the relationship between attending therapy and improvements. The results illustrated those individuals diagnosed with an anxiety disorder who were in the imagination condition group attended a greater number of appointments and experienced less symptom severity at the termination of therapy compared to those individuals in the information condition. A further study sought to increase attendance by increasing awareness about therapy expectations (Swift & Callahan, 2011). The study found those who were provided information prior to their first appointment stayed in therapy significantly longer with a Cohen's *d* effect size of .55 and were more likely to complete therapy. These studies support the notion that a pre-therapy intervention that

increases understanding and awareness may support those experiencing therapy anxiety and improve attendance rates.

An informative video resource could reduce therapy anxiety, minimise safety behaviours and promote cultural safety. A number of previous studies have illustrated the effectiveness of informative videos in reducing anxiety prior to physical health procedures such as gastrointestinal endoscopy (Arabul et al., 2013), elective coronagraphy (Ruffinengo et al., 2009), spinal anaesthesia (Dias et al., 2016) and colorectal cancer (Kim et al., 2019). The informative videos included information about the procedure, doctor and patient relationship, possible complications, and possible feelings the patients might experience. The studies all reported a significant reduction of anxiety compared with control groups. As yet, to the best of my knowledge, there has not been research trialling an informative video prior to psychological therapy. Research into this would be valuable.

The informative video could demonstrate a tour of the clinic or service, the available parking, the clinicians, and the process of the appointments. A video could promote cultural safety by including greetings in the language of the indigenous people and encouraging a more collective approach with the inclusion of family/whānau support. The video could show a whānau (family) seeing the therapist rather than just an individual. Offering an informative video could be a time and cost-effective way to provide information, remove the unknown, start to build a relationship in a culturally relevant way, and consequently, reduce therapy anxiety, minimise safety behaviours and enhance cultural safety. Further research to determine which information is most helpful and the best way to deliver this information would be valuable.

A video resource may a useful intervention to reduce initial therapy anxiety about the unknown and in turn might improve attendance for non-engagers and non-attenders. However, it is unlikely to impact the low-attenders or drop-outs. Therefore, further research

and understanding are needed in order to create interventions which support these individuals. The findings of exploratory question five identified clinician factors as a common barrier to therapy. Over 15% of the responders reported clinician factors as a barrier. This category included a lack of connection with the clinician, feeling the clinician was unhelpful and the clinician cancelling appointments. The identification of clinician factors may highlight a target area of barriers which impact low-attenders or drop-outs.

Care taken to build a strong therapeutic alliance is likely to be an essential component to improve engagement across these later levels of attendance. Therapeutic alliance includes a collaborative relationship between the therapist and client, an affective bond, and shared goals for therapy (Gaston, 1990). A number of previous studies have supported the relationship between therapeutic alliance and therapy attendance (Cournoyer et al., 2007; Johansson & Eklund, 2006; Meier et al., 2006; Piper et al., 1999; Sharf et al., 2010; Tryon & Kane, 1995). It is possible an increase in therapeutic alliance may also contribute to a decrease in therapy anxiety as clients may feel more safe and trusting throughout the therapy process. While the current study did not assess the therapeutic alliance of individuals across the different levels of attendance, enhancing this alliance may be an effective way to minimise non-attendance for low-attenders and drop-outs.

Safety Behaviours

As aforementioned, the current study found evidence of a relationship between safety behaviours and non-attendance of psychological appointments. This is one of the first studies to investigate this relationship. Safety behaviours have been well documented in the literature as a maintenance factor of anxiety (Clark, 1999; Freeman et al., 2007; McManus et al., 2009; Salkovskis, 1996; Veale & Riley, 2001) yet have not been investigated as a barrier to attending therapy. The relationship between safety behaviours and non-attendance is of

particular interest given the commonness of anxiety symptoms in the general public as well as within this study.

As this study was one of the first to assess safety behaviours in relation to non-attendance of psychological appointments, the analysis was simply correlational to see if a relationship exists. The study demonstrated a relationship between the two variables but little is understood about how this relationship works. There is minimal understanding how exactly safety behaviours impact non-attendance or whether non-attendance impacts safety behaviours. Furthermore, it is unclear which levels of non-attendance are relevant to safety behaviours. It is possible safety behaviours prevent initial engagement, as individuals avoid speaking with a service. Alternatively, safety behaviours could contribute to drop-out or inconsistent attendance depending on exposure to particular therapeutic activities. For example, a client may be given homework or attend an appointment that they perceive as too challenging and in turn may use a safety behaviour to avoid further challenging experiences. This could interact with clinician factors (for example, being unable to tell the clinician that they feel unable to do the homework) which could lead to drop-out. On the contrary, non-attendance is considered an avoidance behaviour; the act itself could provide a reduction of anxiety therefore reinforcing avoidant or safety behaviours. Greater in depth exploration of the role of safety behaviours using experimental design would begin to provide more understanding and identify possible causal conclusions. Future studies of this nature would likely inform relevant interventions which appropriately address safety behaviours.

Cultural Safety

The study's findings around cultural safety were insignificant. However, it is important to note the measure used has not been validated and may not have adequately assessed cultural safety. Furthermore, the sample was not a fair representation of a range of ethnicities particularly some minority ethnicities who are less likely to feel culturally safe.

With that in mind, further investigation is needed to understand the existence and form of the relationship between cultural safety and non-attendance. Based on the limited prior research (Johnson et al., 2004; Kaur Gurm & Cheema, 2013; Pomare, 2015), cultural safety could be a significant barrier for minority or indigenous cultures where services are significantly inconsistent with their cultures. While the study did not find a statistically significant relationship between cultural safety and non-attendance, the study offered limited support for the notion that individuals of minority and indigenous cultures experience less cultural safety than the dominant cultures. The study investigated cultural safety across a number of ethnic groups, but the results of this analysis were limited by the small numbers of individual per ethnic group. When comparing cultural safety scores across ethnicities, the ethnic groups with the lowest scores of cultural safety were Indian and Māori. These ethnic groups may be considered minorities within the countries included in this study. On the contrary, the highest cultural safety scores belonged to what may be considered dominant ethnic groups Australian and New Zealand European / Pākehā. These findings may suggest cultural safety is a more significant barrier for ethnic minorities or indigenous people; had the current study's sample had a greater representation of these cultures, the relationship between cultural safety and non-attendance may have been significant. However, it is important to recognise the analysis of cultural safety across ethnicity is limited and interpretation should be made with great caution. In particular the ethnic groups represented in the study were not equally representative with such few participants. Attending therapy can be a daunting, unfamiliar and uncomfortable experience. The complexity of a service and therapeutic approach that does not align with one's culture may add an additional challenging layer but further research is needed to understand this relationship.

Practical Factors

A number of practical factors were investigated in exploratory question one. Three of the 12 practical factors measured demonstrated a relationship with non-attendance. Part-time employment, forgotten appointments, and family commitments were the three factors found to be predictive of non-attendance, albeit these relationships were weak. A number of studies have demonstrated work commitments are often a barrier for attending scheduled psychological appointments (Al-Jeaid et al., 2015; Ramlucken & Sibiya, 2018). However, there has been minimal investigation in the existing literature as to which types of employment presents the greatest barrier to attendance. The current study sought to understand the relationship between levels of employment (full-time, part-time, unemployed, retired or student) and non-attendance. One of the significant relationships detected in this study was part-time employment (albeit the measurement was flawed). As outlined earlier, intuitively you would imagine full-time employees would face a greater number of work commitments and be less flexible to attend appointments. However, the results suggest otherwise. While further exploration is needed to infer why this may be, there are a few possible explanations.

One possible explanation is part-time employees represent individuals with lower socio-economic status (SES) and it may be the lower SES which is related to non-attendance. Less financial security for part-time employees may create additional pressure to work rather than attend an appointment. Another possible explanation is part-time employment may indicate higher levels of ill-heath which may impact one's ability to work full time as well as attend appointments. Alternatively, part-time workers may have less consistency in the times or days they work. This variability may result in frequent schedule clashes and make booking appointments in advance challenging. Furthermore, the reason for working part-time may

reflect other additional responsibilities such as study or family commitments. Without further investigation little can be interpreted about this relationship.

To address the practical barriers of work commitments particularly for part-time employees there are a few options. Firstly, it would be important to determine the nature of work commitments and if they arise without notice or if scheduling a number of appointments in advance would be useful. It would also be insightful to gain an understanding of times and days which are most convenient such as late nights or weekends. A number of studies have reported providing a number of appointment options rather than specifying just one appointment option improves attendance rates (Dusheiko & Gravelle, 2018; Parmar et al., 2009). Increasing the availability of appointments to include late nights, early mornings, and weekends could ensure appointments can accommodate work commitments.

The literature surrounding after-hours appointment times is very limited. The few studies which have investigated the relationship between time of day and attendance only compared morning and afternoon appointments (McLean et al., 2014; Moore et al., 2004). The results of these studies were variable. One study found morning appointments to have lower levels of attendance (Moore et al., 2004) and another found afternoon appointments to have lower attendance (French, 2005, as cited in McLean et al., 2014). Of particular interest were the findings by Kong et al. (2020). The researcher observed weekday attendance was highest in the early morning or late afternoon (Kong et al., 2020). This finding may suggest those appointments which are the least disruptive to the work day are more suitable; thus, the option of after-hours appointments could encourage better attendance. These studies were not based on psychological appointment but other health appointments (such as physiotherapy); thus, the willingness to get time off work may be different. Furthermore, these studies did not look at after-hours appointments such as evenings and therefore no conclusions around the

usefulness of after-hours appointments can be drawn. Further research investigating the impact of after-hours appointments on attendance would be useful. Alternatively, a greater number of appointments could be made available through remote methods such as telehealth to minimise travel time.

Forgotten appointments was also predictive of non-attendance, albeit the relationship was weak. Furthermore, in the open ended qualitative analysis and in previous studies participants commonly reported practical factors such as forgetting their appointment as a barrier to attending psychological appointments (Filippidou et al., 2014; Lin et al., 2016; Long et al., 2016; Olfson et al., 2009). These studies suggest forgotten appointments are a relevant factor which needs addressing to reduce forgotten appointments and improve appointment attendance behaviours. Intuitively it would be expected the solution to forgotten appointments would be appointment reminders. However the research is of the contrary suggesting text reminders were not effective in reducing non-attendance for psychological appointments (Clough & Casey, 2014; Filippidou et al., 2014). Furthermore, it is possible changing the frequency or timing of the text reminders could yield different results. An alternative form of reminders may be more useful for increasing memory, and possibly email reminders which add a calendar invite or a phone call may be more effective reminders for some individuals. Interestingly appointment text reminders were found to be effective in improving appointment attendance for medical appointments (Filippidou et al., 2014). This may suggest a further interacting factor could contribute to forgotten appointments. For example, depression and anxiety are known to inhibit concentration and thus may impair memory and performance (Kizilbash et al., 2002), it is possible an alternative method of reminders is needed to reduce the impact of depression and anxiety on memory. A greater depth of understanding of forgotten psychological appointments is needed to be able to offer

and implement appropriate and effective intervention to reduce forgotten appointments and increase attended appointments for those experiencing mental health difficulties.

A statistically significant relationship between family commitments and non-attendance was also detected. The relationship between family commitments and non-attendance was highlighted suggesting family commitments reduce individuals' ability to attend appointments. This is congruent for the literature suggesting alternative commitments and time constraints are barriers to attendance (Alhamad, 2013; Kourany et al., 1990). This finding offers further detail as to which type of commitments may be most relevant for individuals. The findings suggest family commitments were relevant but work commitments were not. This insight could be used to inform relevant interventions to minimise the impact of family commitments specifically. For example a service could offer childcare services, or appointments after-hours or during school hours. Further exploration of the relationships between non-attendance and part-time employment, forgotten appointments, and family commitments is needed to inform future interventions and improve rates of attendance.

Clinician Factors

The content analysis highlighted clinician factors as a relevant barrier to attendance. The clinician factors included participants feeling a lack of connection with the clinician and feeling the clinician was unhelpful. An effective way to assess and enhance the therapeutic alliance or helpfulness of therapy could be achieved through regular check-ins or feedback with the client on the usefulness of their therapy experience. Feedback Informed Therapy (FIT) has become increasingly recognised for its empirical support in improving therapy outcomes, reducing non-attendance, and reducing the length of needed therapy which in turn reduces cost and increases the availability of resources (Goodman et al., 2013; Miller et al., 2015). FIT involves regularly monitoring clients' experiences of therapy and gaining their feedback to inform clinical practice. Measures such as the Outcome Questionaire-45 (OQ-45;

Lambert et al., 1996), Outcome Rating Scale (ORS; Miller et al., 2003) and the Session Rating Scale (SRS; Duncan et al., 2003) have been developed to measure clients' experiences and the therapeutic alliance. This client feedback then guides therapy. If a negative experience is reported by a client, it can guide the approach or style of the therapist to ensure the client feels therapy meets their needs appropriately. The implementation of the FIT approach in services and the use of one of these outcome measures could enhance the therapeutic alliance, ensure therapy is useful, and improve attendance. Furthermore, the FIT approach may improve other barriers such as the financial cost of therapy by requiring a smaller number of appointments and may enhance cultural safety to clients who are able to self-report elements of the therapy which do not meet their cultural needs.

As discussed earlier, non-engagers, those who have sought therapy but not engaged, have had minimal investigation within the literature and further exploration should focus specifically on this group. Non-engagers are a more difficult group to create service level interventions for as these individuals have not made significant contact with a service. A greater understanding is needed in order to identify ways to create early interventions during the referral process to reduce therapy anxiety, remove physical and practical barriers, and enhance engagement. Within the majority of services, each individual is reviewed as a part of the triage or screening process. During this review, a discussion with the client around individual's goals for therapy as well as the identification of potential perceived barriers could be useful to establish an initial relationship, begin building rapport and minimise barriers before they occur. Furthermore, to mitigate the impact of other commitments, the service could provide a number of time options for an appointment as opposed to designating one time which may not work. The reality of individuals being able to restructure their schedules to accommodate an appointment is challenging. Providing a range of appointment

options could serve to demonstrate some flexibility and workability around other commitments.

Societal Level Changes

Changes at a societal level could also be made to enhance appointment attendance. Access to funding and the cost of appointments present as a barrier for many individuals not only in this study but also within the wider literature (McAlpine & Mechanic, 2000; Rowan et al., 2013; Sareen et al., 2007). The literature shows those who experience mental illness are less likely to have health insurance (Garfield et al., 2011). In New Zealand, DHB services only see individuals with severe mental health issues; those who are considered to have low to moderate mental health concerns are expected to see their general practitioner (GP) at their own expense (Ministry of Health, 2009). This leaves many individuals without health insurance and without funded care. To alleviate this lack of funding, governments' budgets should seek to dedicate more funding to mental health to allow for more affordable or free services which allow a greater number of individuals to access needed mental health care (Kvalsvig, 2018; Ministry of Health NZ, 2019).

Summary of Practical Implications

Each of the hypotheses and research questions addressed within this study have created opportunities for further understanding and exploration. This is particularly relevant for those less researched topics. These include the way non-attendance relates to cultural safety, safety behaviours, and therapy anxiety. Further data and refinement of measures and methods is necessary to enhance understanding and to create relevant and effective interventions which diminish these barriers and encourage individuals to access and attend the psychological therapy that they deserve.

Directions for Future Research

The current study was one of the first to look at a number of new concepts within the context of attendance of psychological appointments. This study also provided a platform to identify new factors not currently understood within the literature. It is clear barriers to mental health support continue to present challenges for individuals seeking psychological support. This study contributes to the growing literature in the hope of improving attendance of psychological appointments and ultimately improving mental health outcomes.

Exploratory question three identified diversity across the different levels of non-attendance, ranging from not attending at all, attending sporadically, dropping out after several appointments or attending every appointment. This finding likely suggests different barriers would impact these individuals across the different levels of non-attendance. For example, individuals who are non-engagers and do not attend any appointments may have therapy anxiety in anticipation of what is to come but this is less likely for those who disengage after attending several appointments (drop-outs). While it would be valuable to investigate factors predicting each level of non-attendance, this investigation was beyond the scope of the current study. The uneven spread of participants across the levels of non-attendance would reduce the sample size and statistical power. This is particularly relevant for the second level, “I booked an appointment but cancelled or didn’t show up”, with just 14 participants. Further research with a large sample size for each level would be valuable to understand the factors which impact differently across the varying levels of non-attendance and inform future interventions to enhance attendance for all individuals.

Conclusion

Non-attendance is a complex phenomenon. The current study highlighted not only a range different non-attendance behaviours, but also a broad number of factors which are predictive of non-attendance of psychological therapy. Of the predictive factors of non-

attendance, the current study highlighted therapy anxiety as the strongest psychological predictor for not attending therapy. This relationship remained present when controlling for a range of other psychological factors. Furthermore, therapy anxiety was one of the most self-reported reasons for not attending psychological appointments.

Overall, the study demonstrated a range of factors which commonly related to individuals' likelihood of attending psychological appointments; these factors are both practical and psychological in nature demonstrating both a vast and complex phenomenon. Individuals seeking psychological care have diverse needs. In order to adapt and improve the client experience with current services it is important to consider the factors which most strongly predict non-attendance. The findings of the current study may suggest that interventions which target a range of the most commonly identified factors would be more effective than trying to target one particular factor of non-attendance. Furthermore, dedicating time to determine clients' goals for therapy and perceived barriers to their engagement may serve to identify issues before they occur as well as establishing rapport and socialising them to therapy.

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Appendix A: Survey

Appointment Attendance Factors: New Zealand

Start of Block: Information Sheet and Consent

Factors that impact attendance of psychological appointments

INFORMATION SHEET

Researcher

Kia ora, Talofa, I am Brooke Yelavich and as part of my Doctorate of Clinical Psychology I am conducting research into factors that impact attendance of psychological appointments or therapy. My supervisors and I hope to develop a further understanding of these factors to improve attendance rates allowing for more people to receive treatment.

Project Description and Invitation

This research project involves an online survey which will take approximately 15 minutes to complete. You are invited to participate in the following survey, please ensure you have read the remainder of the information sheet and that you meet the necessary criteria listed below.

Participant Identification and Recruitment

We are advertising this research and recruiting participants through posters on public noticeboards and at University campuses, on Facebook and through Prolific. As a thank you for your time, we will donate $3 to one of three charities of your choice: Mental Health Foundation, Anxiety New Zealand Trust and Lifeline.

To participate you must be over the age of 18, and have sought psychological treatment or support within New Zealand in the last 18 months. Seeking treatment may include being

referred or enquiring with a service but not engaging or it may include booking in and attending appointments. We ask that you do not participate if you believe you may be negatively affected by answering questions about seeking and attending psychological treatment.

Data Management

The data collected as part of this research will be used solely for research purposes. All answers on the survey will be anonymous (not connected to your name). The data collected in this research will be stored securely and only accessible to the research team. Once the data has been analysed and the doctoral thesis is completed, any identifiable information will be removed and the data shared in an online repository that other researchers, as well as members of the public can access. The purpose of this is to ensure scientific integrity is maintained and any claims and conclusions made by the researcher based on this research are well-founded.

If you wish to receive a summary of the research findings you will need to provide your email address. This information will be collected and stored separately from your survey data and will not be matched to your responses. Any identified data you provide (such as your email address) will be deleted as soon as the research project is complete (estimated date: December 2021). The de-identified data will be stored indefinitely.

Participant's Rights

You are under no obligation to accept this invitation. If you decide to participate, you have the right to: decline to answer any particular question; stop answering questions at any time; be given access to a summary of the project findings when it is concluded.

Project Contacts

Please feel welcome to contact my supervisors or myself with any questions about this research

Researcher:

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Committee Approval Statement

This project has been reviewed and approved by the Massey University Human Ethics Committee: Southern A, Application 19/62. If you have any concerns about the conduct of this research, please contact Dr Negar Partow, Chair, Massey University Human Ethics Committee: Southern A, telephone 04 801 5799 x 63363, email human ethicssoutha@massey.ac.nz.

Support Services

If you feel any distress during or after completing this survey, you could consider contacting the following support services.

Youthline

0800 376 633

Text 234

talk@youthline.co.nz

Depression Helpline

NEED TO TALK?

0800 111 757 or text 4202

Talk to a trained counsellor at the Depression Helpline about how you are feeling or to ask a question.

Māori and Pacifica support and resources

https://depression.org.nz/maori/

https://depression.org.nz/pasifika/

www.auntydee.co.nz

Lifeline

0800 LIFELINE (0800 54 33 54) or free text HELP (4357)

Anxiety Helpline

0800 ANXIETY (0800 269 4389)

Ngā mihi nui,

Fa'afetai,

Thank you very much for your interest

Do you consent to participate in this research?

- ○ Yes (1)
- ○ No (2)

End of Block: Information Sheet and Consent

Start of Block: Sought services

In the last 18 months have you sought information or support from a psychological service? This includes any of the following: calling a service to find out what they offer, looking them up online, getting a referral, or attending one or more appointments.

- ○ Yes (1)
- ○ No (2)

End of Block: Sought services

Start of Block: Demographics

Which country do you reside in?

- ○ New Zealand (1)
- ○ Other (2) _____

What is your age?

- ○ 0-17 (1)
- ○ 18-34 (2)
- ○ 35-49 (3)
- ○ 50-64 (4)
- ○ 65+ (5)

What is your gender?

- ○ Male (1)
- ○ Female (2)
- ○ Gender Diverse (3)

What is your current employment status?

- ○ Full time (1)
- ○ Part time (2)
- ○ Unemployed (3)
- ○ Retired (4)
- ○ Student (5)

What is your highest level of education achieved?

- ○ Primary School (1)
- ○ Secondary School (2)
- ○ Technical or Trade Certificate (3)
- ○ University Degree (4)

What is your ethnicity? (Please select the one you identify most with)

- ○ Aboriginal (1)
- ○ African (2)
- ○ American (3)
- ○ Australian (4)
- ○ Bangladeshi (5)
- ○ Canadian (6)
- ○ Chinese (7)
- ○ Dutch (8)
- ○ English (9)
- ○ Fijian (10)
- ○ Filipino (11)
- ○ French (12)
- ○ German (13)
- ○ Greek (14)
- ○ Gypsy / Irish Traveller (15)
- ○ Indian (16)
- ○ Indonesian (17)
- ○ Italian (18)
- ○ Japanese (19)
- ○ Māori (20)
- ○ Mexican (21)
- ○ Muslim (22)
- ○ Pākehā / NZ European (23)
- ○ Pakistani (24)
- ○ Samoan (25)
- ○ Scottish (26)
- ○ South African (27)

- ○ Spanish (28)
- ○ Tongan (29)
- ○ Other (30) _____

End of Block: Demographics

Start of Block: Seen Psychologist

In the last 18 months have you attended an appointment for psychological therapy?

- ○ Yes (1)
- ○ No (2)

End of Block: Seen Psychologist

Start of Block: Attending

Who referred you to the psychological service?

- ○ Doctor (1)
- ○ Another therapist (2)
- ○ Family / friend (3)
- ○ Self-referred (4)
- ○ Other health professional (e.g., social worker, nurse, physio) (5)

The referral process proceeded quickly enough to meet my needs (e.g., an appointment was offered within a reasonable time)

- ○ Strongly disagree (1)
- ○ Moderately disagree (2)
- ○ Neither disagree nor agree (3)
- ○ Moderately agree (4)
- ○ Strongly agree (5)

To what extent was the physical environment at the psychological service inviting when you visited for therapy?

- ○ Not at all inviting (1)
- ○ Slightly inviting (2)
- ○ Somewhat inviting (3)
- ○ Moderately inviting (4)
- ○ Very inviting (5)

Was the psychological service easy to find and access?

- ○ Not at all (1)
- ○ Slightly (2)
- ○ Somewhat (3)
- ○ Moderately (4)
- ○ Very (5)

Please select which mental health professional you visited in the last 18 months. When answering the following questions it is important to refer to your experience with just one service provider, if you have seen multiple service providers please refer to your most recent experience.

- ○ A psychologist - a person who specialises in the study of mind and behaviour and offers evidence-based diagnoses and treatment of mental, emotional, and behavioural distress. (1)
- ○ A counsellor - a person trained to give guidance on personal or psychological problems. (2)
- ○ A psychotherapist - a licensed mental health professional who helps clients improve their lives, develop better cognitive and emotional skills and reduce symptoms of mental illness. (3)
- ○ A general practitioner (GP) - a doctor based in the community who treats patients with minor or chronic illnesses and refers those with serious conditions to a hospital. (4)
- ○ A psychiatrist - a medical practitioner specialising in the diagnosis and medical treatment of mental illness. (5)
- ○ Unsure (6)

If you stopped attending therapy, did you communicate you weren't returning with the service?

- ○ Yes the therapist and I decided together (1)
- ○ Yes I let them know I wasn't returning (2)
- ○ No I just stopped attended / didn't book back in (3)
- ○ Not applicable (4)

How many appointments did you attend?

How many appointments did you miss?

- ○ 0 (1)
- ○ 1 (2)
- ○ 2 (3)
- ○ 3 (4)
- ○ 4 (5)
- ○ 5 (6)
- ○ 6+ (7)

Please select any of the following if they impacted on your ability to attend an appointment at a psychological service

- ☐ I had a work commitment (1)
- ☐ I had a family commitment (2)
- ☐ Appointments were too expensive (3)
- ☐ I forgot (4)
- ☐ I was physically sick (5)
- ☐ Difficult to access (6)
- ☐ I didn't have enough time (7)
- ☐ I didn't have child care (8)

Please provide any other reasons which impacted your ability to attend an appointment at a psychological service:

_____

_____

_____

_____

_____

End of Block: Attending

Start of Block: Cultural Safety

Please rate on the 5-point scale below the point to which you agree to the following statements from your prior experience of seeing a therapist for psychological help.

	Strongly agree (1)	Somewhat agree (2)	Neither agree or disagree (3)	Somewhat disagree (4)	Strongly disagree (5)
The therapist/staff treated me with dignity and respect. (1)	○	○	○	○	○
The therapist/staff understood my background and values. (2)	○	○	○	○	○
The therapist/staff incorporated my cultural values in our appointment (3)	○	○	○	○	○
The therapist/staff communicated with me	○	○	○	○	○

in a culturally appropriate way (4)				
I would have received better support if I belonged to a different cultural group (5)	○	○	○	○
The therapist judged me unfairly or treated me with disrespect because of cultural background. (6)	○	○	○	○

End of Block: Cultural Safety

Start of Block: Diagnosis

What were your reason/s for seeking psychological therapy?

- ☐ Low mood / depression (1)
- ☐ Anxiety (2)
- ☐ Stress (3)
- ☐ Suicidal thoughts / behaviours (4)
- ☐ Relationship issues (5)
- ☐ Trauma / Post-Traumatic Stress Disorder (PTSD) (6)
- ☐ Substance use (7)
- ☐ Other (8) _____

Which of these best describes your interactions with the therapy service?

- ○ I was referred, but never booked in (1)
- ○ I booked an appointment but cancelled or didn't show up (2)
- ○ I came to my first appointment and then didn't return (3)
- ○ I came to most of my appointments but missed a few in between (4)
- ○ I stopped coming after attending several appointments (5)
- ○ I attended all the appointments that I made with the therapist (6)

End of Block: Diagnosis

Start of Block: Safety behaviours

In a social situation when you felt anxious or nervous how often would you:

	Never (1)	Rarely (2)	Sometimes (3)	Most of the time (4)	Always (5)
Before you arrive, excessively rehearse what you might say or how you might behave (1)	○	○	○	○	○
Remain silent (2)	○	○	○	○	○

Try to keep tight control of your behaviour. (3)	○	○	○	○	○
Speak softly (4)	○	○	○	○	○
Say 'I'm not usually like this' (5)	○	○	○	○	○
Blank out or switch off mentally (6)	○	○	○	○	○
Hold your arms still (7)	○	○	○	○	○
Spend time thinking of good excuses for escaping (8)	○	○	○	○	○
Wear cool clothes to prevent sweating (9)	○	○	○	○	○
Avoid eye contact (10)	○	○	○	○	○

Wear clothes or makeup to hide blushing (11)	○	○	○	○	○
Say ‘it’s hot’ to explain sweating or blushing (12)	○	○	○	○	○
Account for poor performance by saying that you didn’t have time to prepare (13)	○	○	○	○	○
Rehearse sentences in your mind (14)	○	○	○	○	○
Spend hours on grooming prior to the situation (15)	○	○	○	○	○
Wear clothes that will conceal sweating if it occurs (16)	○	○	○	○	○
Say that you are sick/unwell (17)	○	○	○	○	○
Look closely at other people and try to gauge their	○	○	○	○	○

reactions to you (18)					
Avoid asking questions (19)	○	○	○	○	○
Speak in short sentences (20)	○	○	○	○	○
Keep still to avoid drawing attention to yourself (21)	○	○	○	○	○
Hide your face (22)	○	○	○	○	○
Make excuses about your appearance (23)	○	○	○	○	○
Check the redness of your face in a mirror (24)	○	○	○	○	○
Try to think about other things (25)	○	○	○	○	○
Try to think of reasons why the other person is	○	○	○	○	○

inferior to you (26)					
Avoid pauses in speech (27)	○	○	○	○	○
Position yourself so as not to be noticed (28)	○	○	○	○	○
If you are paying attention please select 'Always' (29)	○	○	○	○	○
Hold your cup or glass tightly (30)	○	○	○	○	○
Ask others about your performance (31)	○	○	○	○	○
Imagine you are somewhere else (32)	○	○	○	○	○
Be reserved about what you say (33)	○	○	○	○	○

End of Block: Safety behaviours

Start of Block: Anxiety about therapy

If you had to go to an appointment tomorrow to meet with a therapist how would you feel about it?

- ○ I would look forward to it as a reasonably enjoyable experience (1)
- ○ I wouldn't care one way or the other (2)
- ○ I would be a little uneasy about it (3)
- ○ I would be afraid that it would be unpleasant and painful (4)
- ○ I would be very frightened of what the therapist might do (5)

Imagine you are sitting in the waiting room for the therapist to come and meet you. How do you feel?

- ○ Relaxed (1)
- ○ A little uneasy (2)
- ○ Tense (3)
- ○ Anxious (4)
- ○ So anxious that I might break out in a sweat or almost feel physically sick (5)

Imagine you are sitting in the room waiting for the therapist to start talking. How do you feel?

- Relaxed (1)
- A little uneasy (2)
- Tense (3)
- Anxious (4)
- So anxious that I might break out in a sweat or almost feel physically sick (5)

Imagine the therapist asks you to explain what has brought you to therapy. How do you feel?

- Relaxed (1)
- A little uneasy (2)
- Tense (3)
- Anxious (4)
- So anxious that I might break out in a sweat or almost feel physically sick (5)

Start of Block: Self-stigma

End of Block: Anxiety about therapy

Please use the 5-point scale below to rate the degree to which each item describes how you might react if you were seeking psychological help.

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)

I would feel inadequate if I went to a therapist for psychological help. (1)	○	○	○	○
My self-confidence would NOT be threatened if I sought professional help. (2)	○	○	○	○
Seeking psychological help would make me feel less intelligent. (3)	○	○	○	○
My self-esteem would increase if I talked to a psychologist (4)	○	○	○	○
My view of myself would not change just because I made the choice to see a therapist (5)	○	○	○	○
It would make me feel inferior to ask a therapist for help. (6)	○	○	○	○
I would feel okay about myself if I made the choice to seek professional help (7)	○	○	○	○

If I went to a therapist, I would be less satisfied with myself. (8)	○	○	○	○
My self-confidence would remain the same if I sought professional help for a problem I could not solve. (9)	○	○	○	○
I would feel worse about myself if I could not solve my own problems. (10)	○	○	○	○

End of Block: Self-stigma

Start of Block: Fear of Disclosure

How difficult would it be for you to disclose personal information to a therapist?

- ○ Not at all (1)
- ○ Slightly (2)
- ○ Somewhat (3)
- ○ Moderately (4)
- ○ Very (5)

How vulnerable would you feel if you disclosed something very personal you had never told anyone before to a therapist?

- ○ Not at all (1)
- ○ Slightly (2)
- ○ Somewhat (3)
- ○ Moderately (4)
- ○ Very (5)

Select 'Yes' if you are still paying attention

- ○ Not at all (1)
- ○ Slightly (2)
- ○ Somewhat (3)
- ○ Moderately (5)
- ○ Yes (4)

If you were dealing with an emotional problem, how beneficial for yourself would it be to self-disclose personal information about the problem to a therapist?

- ○ Not at all (1)
- ○ Slightly (2)
- ○ Somewhat (3)
- ○ Moderately (4)
- ○ Very (5)

How risky would it feel to disclose your hidden feelings to a therapist?

- ○ Not at all (1)
- ○ Slightly (2)
- ○ Somewhat (3)
- ○ Moderately (4)
- ○ Very (5)

How worried about what the other person is thinking would you be if you disclosed negative emotions to a therapist?

- ○ Not at all (1)
- ○ Slightly (2)
- ○ Somewhat (3)
- ○ Moderately (4)
- ○ Very (5)

How helpful would it be to self-disclose a personal problem to a therapist?

- ○ Not at all (1)
- ○ Slightly (2)
- ○ Somewhat (3)
- ○ Moderately (4)
- ○ Very (5)

Would you feel better if you disclosed feelings of sadness or anxiety to a therapist?

- ○ Not at all (1)
- ○ Slightly (2)
- ○ Somewhat (3)
- ○ Moderately (4)
- ○ Very (5)

How likely would you get a useful response if you disclosed an emotional problem you were struggling with to a therapist?

- ○ Not at all (1)
- ○ Slightly (2)
- ○ Somewhat (3)
- ○ Moderately (4)
- ○ Very (5)

End of Block: Fear of Disclosure

Start of Block: Public stigma

If you went to see a therapist to what degree do you believe that the people you interact with would _____.

	Not at all (1)	A little (2)	Some (3)	A lot (4)	A great deal (5)
React negatively to you (1)		○	○	○	○
Think bad things of you (2)		○	○	○	○
See you as seriously disturbed (3)		○	○	○	○
Think of you in a less favourable way (4)		○	○	○	○
Think you posed a risk to others (5)		○	○	○	○

End of Block: Public stigma

Start of Block: Motivation for therapy

Why is engaging in therapy important to you? Using the scale below, please indicate to what extent each of the following items corresponds to the reasons why therapy may be important to you by selecting the appropriate number to the right of each item.

	Does not correspond at all (1)	Corresponds a little (2)	Corresponds somewhat (3)	Corresponds a lot (4)	Corresponds exactly (5)
Because I feel that changes that are taking place through therapy are becoming part of me. Because I value the way therapy allows me to make changes in my life. (1)					
For the pleasure I experience when I feel completely absorbed in a therapy session. (2)					
Because through therapy I feel that I can now take responsibility for making changes in my life. (3)					
For the satisfaction I have when I try to achieve my personal goals in the course of therapy. (4)					

Because I experience pleasure and satisfaction when I learn new things about myself that I didn't know before. (5)					
For the interest I have in understanding more about myself. (6)					
Because through therapy I've come to see a way that I can continue to approach different aspects of my life. (7)					

End of Block: Motivation for therapy

Start of Block: End of survey

For every participant we are donating $3 to the charity of your choice, please select 1 of the 3 mental health charities below

- ○ Anxiety New Zealand Trust - provides evidence based treatment and support to people with depression and anxiety related conditions and their families (I work here) (1)
- ○ Lifeline - reduces distress and saves lives by providing safe, accessible, effective, professional and innovative services (2)
- ○ Mental Health Foundation - provides campaigns and services that cover all aspects of mental health and wellbeing. (3)

Would you like to receive a summary of the survey results?

- ○ Yes (1)
- ○ No (2)

Ngā mihi, Thank you for taking the time to participate in this survey, your time and effort is most appreciated.

If you have any questions please don't hesitate to get in contact:

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K.J.Ross@massey.ac.nz

Dr Matt Williams

M.N.Williams@massey.ac.nz

Support Services

If you feel any distress during or after completing this survey, you could consider contacting the following support services.

Youthline

0800 376 633

Text 234

talk@youthline.co.nz

Depression Helpline

NEED TO TALK?

0800 111 757 or text 4202

Talk to a trained counsellor at the Depression Helpline about how you are feeling or to ask a question.

Māori and Pacifica support and resources

https://depression.org.nz/maori/

https://depression.org.nz/pasifika/

Lifeline

0800 LIFELINE (0800 54 33 54) or free text HELP (4357)

Anxiety Helpline

0800 ANXIETY (0800 269 4389)

Massey Health and Counselling Centre (or your university's equivalent, if you do not study at Massey University).

09 213 6700

studenthealth@massey.ac.nz

www.massey.ac.nz/massey/student-life/services-and-resources/health-counselling-services/albany/counselling-services.cfm

End of Block: End of survey

Appendix B: Deviations from Preregistration

The following document outlines the deviations made from the preregistration. Several of these deviations have been covered in the main text, but some were not; this appendix provides a comprehensive description of all deviations from the preregistration. The additional deviations, not described in the main text have been included as an appendix as the deviations do not impact the methods or results. The deviations are minor details which could confuse a reader and make the method section more complex than it needs to be. However, for the interest of transparency and to aid future studies in this area these deviations have been included below.

The first deviation relates to the survey items and was described in the main text. The preregistration stated that the study contained 92 main survey items out of 96 items. This calculation was made by manually adding up the number of items in the Qualtrics survey; however, there was a miscalculation. This number was relevant as it was used to meet one of the exclusion criteria i.e., participants must complete 75% of the main survey items. Once the number of main survey items was accurately determined the exclusion criteria was applied as specified in the preregistration.

The second deviation relates to exploratory question one and is also outlined in the main body of the thesis. This question was assessed using an ordinal logistic regression model in R using the polr command in the MASS package (Venables et al., 2002). Employment (nominal, five categories), education (nominal, four categories), type of referral (nominal, five categories), and the timeliness of referral process (interval) were the predictor variables and attendance was the outcome variable. The preregistration specified that the fully standardised logistic regression coefficient method would be used to take into account the variation in the outcome variable as well as in the predictors (Menard, 2004). However,

upon reflection, calculating standardised coefficients would not work well given that some of the predictor variables are nominal. Furthermore, it is not recommended to standardise dummy variables as it makes it more difficult to interpret (Israëls, 1987). The dummy variables already have simple interpretations, and thus, have not been standardised.

The third deviation from the preregistration related to several errors in the structural equation model path diagrams. The preregistration diagram for hypothesis four had eight items for motivation but this was incorrect. There are actually only seven items in the motivation measure (CMOTS), therefore, only seven items are included in the survey and the analyses. Furthermore the path diagram used the title therapy motivation in the preregistration but this differed from the hypothesis which used the term intrinsic motivation; thus, the path diagram was changed to be consistent. Below are the two diagrams for clarity and comparison.

Figure 15

Path Diagram from the Preregistration for Hypothesis Four

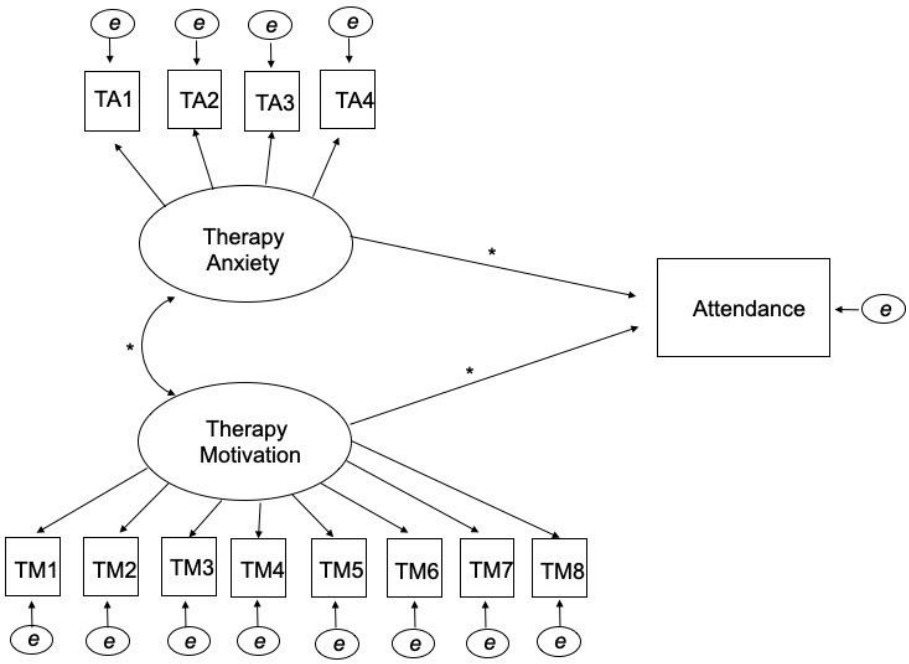
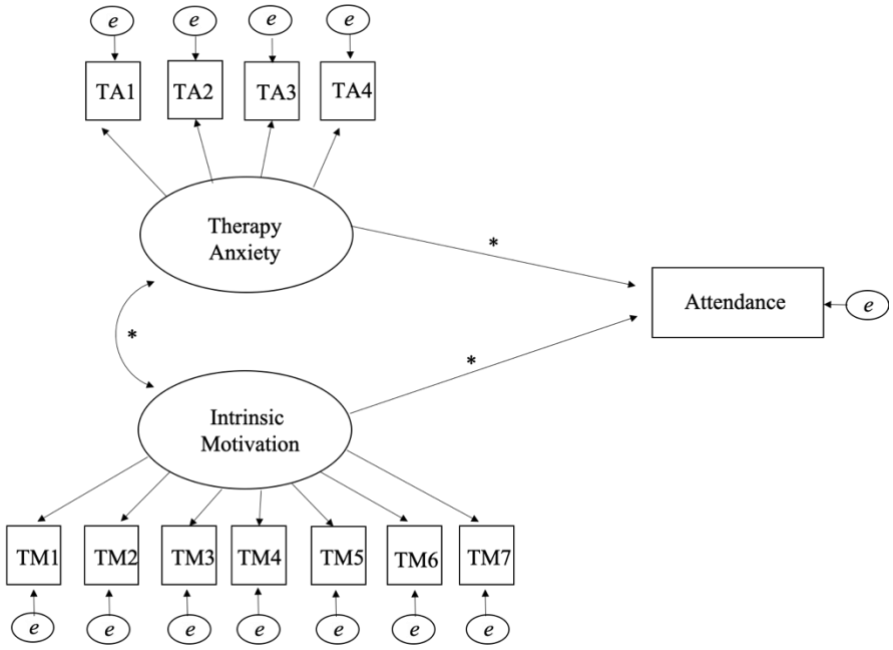


Figure 16

Updated Path Diagram for Hypothesis Four



A further error in the path diagrams was for exploratory question two. Within this preregistered diagram there were several errors. The first error was with the intrinsic motivation measure, which only included five items when there should be seven items. The second error was with the risk of self-disclosure measure. This measure has only four items but was recorded to have five on the preregistered path diagram. Similarly to the above diagram, inconsistent terms were used across the hypothesis, research questions and the path diagram. Therapy motivation was changed to intrinsic motivation and risk of self-disclosure was changed to self-disclosure. Lastly, the public stigma measure has five items but was recorded as four on the path diagram. This was a complex diagram with many different components. The two diagrams are included below for clarity and to compare the differences.

Figure 17

Path Diagram from the Preregistration for Exploratory Question Two

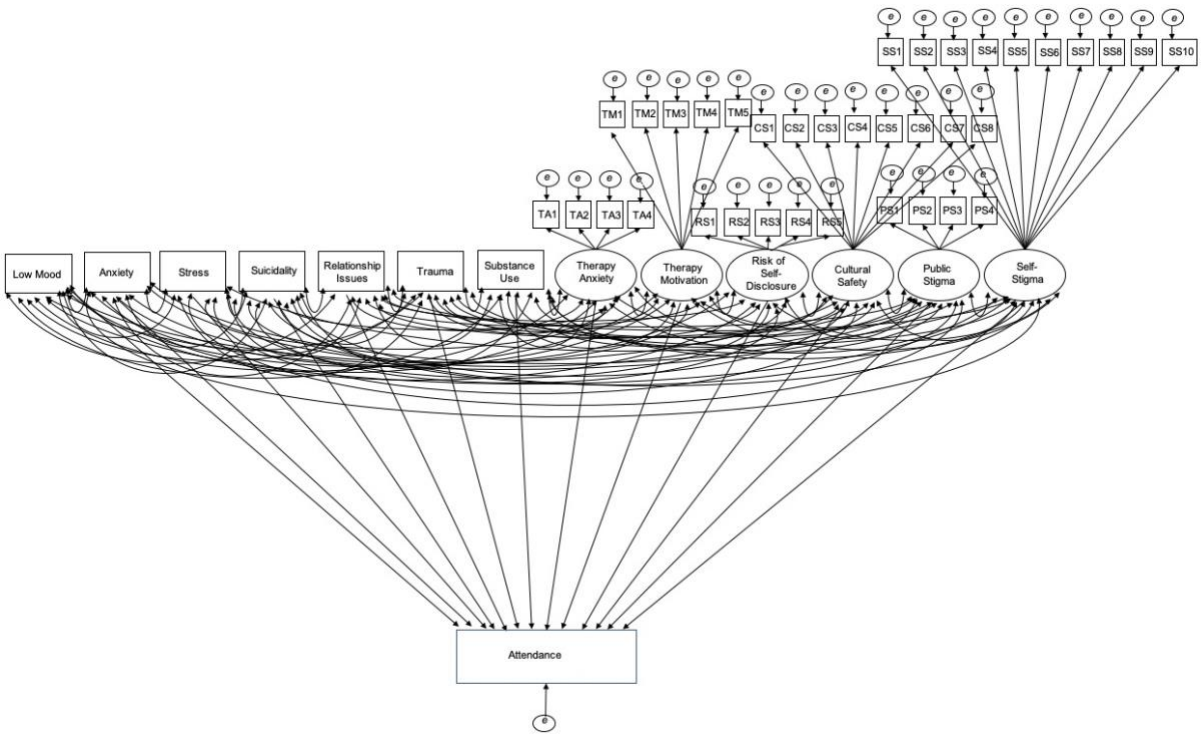
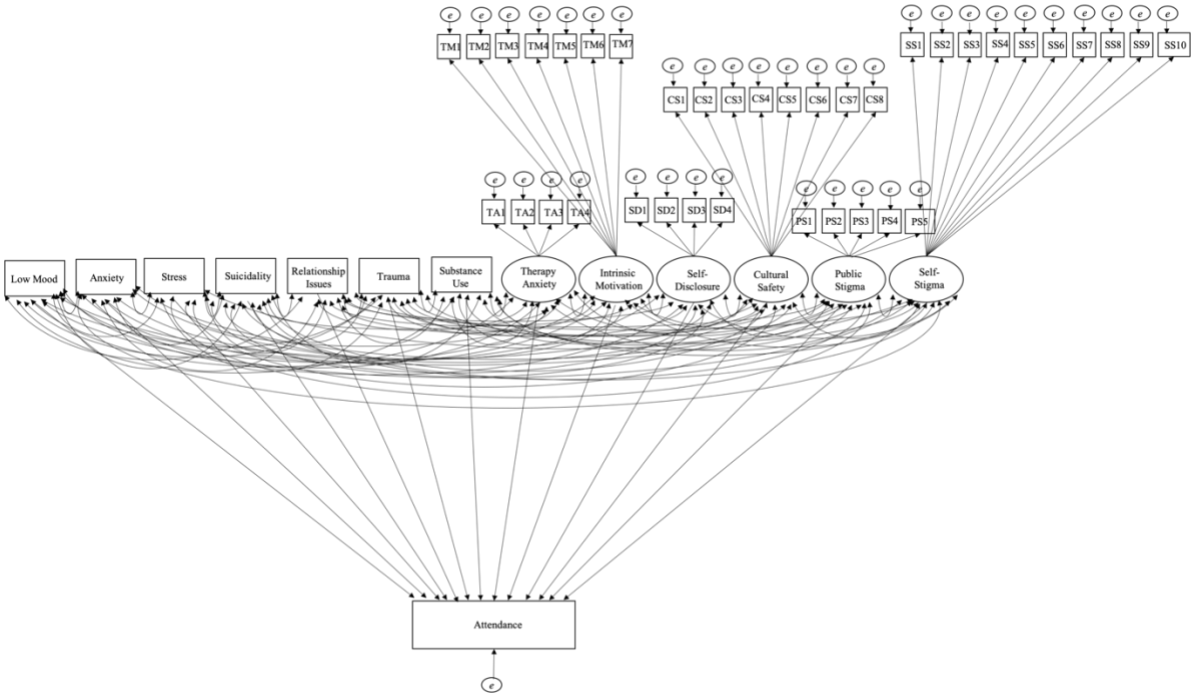


Figure 18

Updated Path Diagram for Exploratory Question Two



Appendix C: Robustness Check

Table 11

Results of Main Analyses with Reordered Ordinal Dependent Variable (Robustness Check)

	Original relationships	Relationships following reorder (levels 4 and 5 transposed)
Hypothesis one	$r = -.20$, $p < .001$	$r = -.21$, $p < .001$
Hypothesis two	$r = -.26$, $p < .001$	$r = -.27$, $p < .001$
Hypothesis three	$r = .18$, $p < .001$	$r = .21$, $p < .001$
Hypothesis four	$\beta = -.22$, $p < .001$ and $\beta = .10$, $p < .001$	$\beta = -.22$, $p < .001$ and $\beta = .13$, $p < .001$
Hypothesis five	$\beta = .02$, $p = .55$ and $\beta = -.18$, $p < .001$	$\beta = .02$, $p = .47$ and $\beta = -.21$, $p < .001$

Appendix D: Research Case Study

To be a competent and effective clinical psychologist one should have the knowledge and skills to combine relevant research and clinical practice. Clinical psychology training and practice are based on the scientist-practitioner model. In clinical practice, psychologists need to have the ability to evaluate research to recognise valid, up-to-date, and relevant evidence-based therapeutic modalities. A competent clinical psychologist must have the ability to formulate an approach to understand human behaviour based on a strong theoretical basis. This empirical and theoretical basis ensures clients receive effective psychological support which has empirical evidence to support its efficacy. My doctoral thesis offers a contribution to the existing literature by providing understanding and new ideas surrounding factors which may impact individuals attendance of psychological appointments. Completing this thesis provided opportunities to enhance my research skills and understanding of what makes a good quality study. Furthermore, knowledge of the factors which impact attendance and engagement inform my clinical practice and the way I engage with clients. The following case study outlines my reflections on the research process and how this has impacted my clinical practice.

Reflection of the Research Process and its Application to Clinical Practice

To be a competent and effective clinical psychologist one should have the knowledge and skills to combine relevant research and clinical practice. Clinical psychology training and practice are based on the scientist-practitioner model. This model emphasises the need for clinical psychologists to not only have efficacious clinical skills but also a strong research background and the ability to apply this empirical knowledge in a meaningful way. This model is based on the premise that psychological knowledge should be dynamic and experimental as opposed to static and prescribed (Jones & Mehr, 2007). The model stipulated that clinical psychology students should be trained as both scientist and practitioners. In clinical practice, psychologists need to have the ability to evaluate research to recognise valid, up-to-date, and relevant evidence-based therapeutic modalities. A competent clinical psychologist must have the ability to formulate an approach to understand human behaviour based on a strong theoretical basis. This empirical and theoretical basis ensures clients receive effective psychological support which has empirical evidence to support its efficacy. My doctoral thesis offers a contribution to the existing literature by providing understanding and new ideas surrounding factors which may impact individuals attendance of psychological appointments. Furthermore, this thesis provided opportunities to enhance my research skills and understanding of what makes a good quality study. The following case study outlines my reflections on the research process and how this has impacted my clinical practice.

My doctoral thesis provided the opportunity to expand on previous research experience and develop a greater ability to critique and evaluate existing and future literature. The following case study will begin with an outline of my doctoral thesis. This is followed by an exploration of the four key skills relevant to being a clinical psychologist. Lastly, the case

study explores the specific skills acquired throughout this thesis as well as how this scientific knowledge has been applied to my clinical practice as an intern psychologist.

Doctoral Research Overview

Using an online survey, my doctoral thesis investigated factors which impact individuals' attendance of psychological appointments at community and private mental health services.

The factors investigated included psychological factors such as therapy anxiety, intrinsic motivation, stigma, safety behaviours, cultural safety, diagnosis and disclosure. As well as practical factors including referral source, wait time, education, employment and demographic factors. The findings were analysed using quantitative methods including descriptive statistics, inferential statistics, structural equation modelling, Spearman's correlation, and ordinal logistic regression. One qualitative method, a content analysis, was used to collect information about further factors beyond the main survey questions that may impact non-attendance. The study highlighted therapy anxiety as the most common psychological barrier for attending therapy. Therapy anxiety was the strongest predictor of non-attendance and was also the most self-reported reason for not attending psychological appointments. Overall, the study demonstrated there are a range of factors which commonly impact individuals' likelihood of attending their psychological appointment, however these factors are vast and complex, as described below.

Study Beginnings

The idea for my doctoral thesis developed from my work at an anxiety clinic. One of my roles was to manage the referrals coming into the service and help support clients to book in for appointments. Through this experience I witnessed many individuals seek support through the form of a referral, a phone call enquiry, or even walking into the service; however, many of these individuals did not progress to making an appointment. I was left

wondering what barriers were standing in the way for these individuals to receive the support they were searching for. I also witnessed those clients who booked in and attended appointments but experienced barriers to attendance which resulted in missed appointments or disengagement from the service. Again I was interested in discovering how to mitigate obstacles that stood in the way of receiving psychological support. From this experience, my interest in the area of factors which relate to non-attendance blossomed.

Study Rationale and Aims

Mental health problems affect millions of people globally. In 2017, a total of 792 million people were estimated to be living with a mental health problem worldwide (approximately one in 10 people; Ritchie & Roser, 2018). Psychological therapy is an important tool to improve mental health issues. However, the high prevalence of mental health issues is not reflected by attendance to mental health services. Many individuals who are referred to a service do not attend or do not complete therapy.

A review of the literature revealed non-attendance was a complex phenomenon influenced by a range of factors. These relating factors varied from psychological factors such as motivation (Bados et al., 2007), stigma (Vogel et al., 2007), and anxiety (Zartaloudi & Madianos, 2010), to practical factors such as cost (Ojeda & Bergstresser, 2008; Xiao et al., 2017), the timeliness of intake following referral (Reitzel et al., 2006; Swift et al., 2012), and forgotten appointments (Filippidou et al., 2014). Demographic and cultural factors were also relevant, such as gender, education, employment status and ethnicity (Coles et al., 2004; Olfson et al., 2009; Warnick et al., 2012). Furthermore how well a service embraced these cultural differences was also highlighted (Jansen et al., 2009; Wilson & Barton, 2012). My doctoral thesis has a particular focus on psychological factors such as motivation, therapy anxiety, safety behaviours, stigma, cultural safety and self-disclosure as well as practical factors. The majority of these factors have demonstrated relationships in other contexts such

as education or physical health care but have had minimal investigation in relation to attendance of psychological therapy appointments. Thus my doctoral thesis sought to offer further understanding of some of the factors already identified within the literature as well as identify new factors not yet extensively investigated.

Methods

This research used a quantitative cross-sectional survey design to investigate non-attendance. Given the complexity of non-attendance the study involved five theory-driven hypotheses about predictors of attendance, five exploratory questions to investigate new possible predictors, and an additional six supplementary analyses.

Participants

The sample size was determined based on the planned analyses to ensure enough statistical power was achieved. The most complex of the planned analyses was a structural equation model (SEM) consisting of 49 free parameters. The N:q ≥ 10 rule for SEM (sample size – free parameter ratio) suggests a sample size with 10 participants to every one parameter would be sufficient to achieve statistical power (Jackson, 2003; Kline, 2016). Thus, to ensure statistical power was achieved and to allow for exclusions the study aimed to collect 650 participants. The study included both international and New Zealand participants. A total of 476 international participants and 253 New Zealand participants ultimately took part in the survey. Following exclusions of those who did not meet the inclusion criteria a total of 460

international participants and 209 New Zealand participants were included in the final sample with a total of 669 participants overall and a total of 83 excluded participants. The participants consisted of 209 individuals (31.24%) who were living in New Zealand, 34 (5.08%) living in Australia, 37 (5.53%) living in Canada, and 389 (58.14%) living in the United Kingdom. The sample included 179 (26.75%) males, 478 (71.44%) females and 10

(1.49%) individuals who identified as gender diverse. The age of participants was predominantly between 18 – 34, a total of 392 (58.59%) individuals.

Procedure

Data for this study was collected via an online survey to ensure anonymity and allow individuals to openly express factors that deter them from attending therapy. The survey explored several key areas: stigma, therapy anxiety, safety behaviour, fear of disclosure, motivation, demographic information, practical factors, cultural safety, and attendance history. The self-report survey was formed based on a range of new and existing scales to measure several constructs. The survey took approximately 10-15 minutes to complete.

Ethics

The current study was reviewed and approved by the Massey University Human Ethics Committee: Southern A, Application 19/62. The process of the ethics application prior to the collection of data was very detailed and ensured all aspects of the study were carefully considered to ensure all ethical considerations were appropriately managed to maintain the safety of participants. Ethical factors considered and mitigated included informed consent, anonymity, recruiting international participants, and using open science practices ethically.

Data Analysis

Data analysis was completed using R version 1.2.5033 (R Core Team, 2019). The findings were analysed using a number of quantitative methods including ordinal logistic regression and structural equation modelling with controls for plausible confounding variables. One qualitative method, a content analysis, was used to collect information about further factors beyond the main survey questions that may predict non-attendance.

Results

The results of the study found statistically significant relationships between non-attendance and the following factors: therapy anxiety ($r = -.26$, $p < .001$), safety behaviours (r

= -.20, $p < .001$), intrinsic motivation ($r = .18$, $p < .001$), and self-stigma ($\beta = -.18$, $p < .001$). These results suggest these factors may be predictive of non-attendance of psychological therapy appointments. Among the practical factors investigated, the majority did not show statistically significant relationships with attendance except for part-time employment.

Conclusion

Overall, the current study identified a range of factors which were predictive of individuals' likelihood of attending their psychological appointment. Of the predictive factors of non-attendance, the current study highlighted therapy anxiety as the strongest psychological predictor for not attending therapy across the statistical models. Furthermore, therapy anxiety was one of the most self-reported reasons for not attending psychological appointments.

While therapy anxiety was the strongest predictor, the study demonstrated a range of predictive factors which commonly related to individuals' likelihood of attending psychological appointments; however, these factors are vast and complex. The findings of the current study may suggest that interventions which target a range of the most commonly identified factors would be more effective than trying to target one particular factor of non-attendance.

Research Skills

Lane & Corrie (2007) proposed four key skills exist under the framework of the scientist-practitioner model. These four skills include the ability to think effectively, to formulate, to act effectively and to critique our work in systematic ways. These four key skills are explored in greater depth below in specific relation to my own learning throughout the doctoral programme.

The Art of Reasoning

The ability to think effectively involves understanding theoretical and methodological frameworks to inform reasoning, decision-making and problem-solving (Lane & Corrie, 2007). As clinical psychologists, a key skill is in the ability to make professional judgement and reasoning to offer informed perspectives and interventions. In my research experience this skill development began through critically evaluating research articles for their strengths, weaknesses and design flaws, and to identify areas where further research was needed. Furthermore, this skill developed through the critical selection of appropriate theories, study design, and methods. In clinical practice, during my internship thus far, this ability to think effectively has been essential to engage clients and select appropriate assessment tools and relevant interventions guided by the literature. Furthermore, this ability is needed to assess the individual needs of each client to incorporate cultural safety.

Formulation and Evaluation

The second key skill is the ability to draw together assessment information, and relevant empirical evidence to formulate and inform process (Lane & Corrie, 2007). In my research, this skill was needed when completing a critical review of the current literature and identifying gaps. Furthermore, the ability draw together information was needed to identify meaning within the responses from participants. In clinical practice, these skills have been essential in developing formulations with my clients. These formulations are grounded in psychological theory and comprised what was meaningful for each client and used to inform individualised treatment and recommendations. The ability to develop formulations has also served as a therapeutic tool in engaging clients and helping them to understand the contributing factors to their behaviour.

Effective Interventions

The ability to apply empirical knowledge effectively is the third essential skill within the scientist-practitioner model (Lane & Corrie, 2007). The effective implementation of

interventions involves the combination of technical knowledge and creative expression. Effective interventions evolve not from ‘knowing about’ but from ‘knowing how’ through experimenting, practice and implementation (Lane & Corrie, 2007). As part of my doctoral thesis I preregistered my hypotheses, design, and methods prior to data collection. Preregistration involves researchers sharing their research rationale, hypotheses, design and analytic strategy online prior to the collection and analysis of data. Preregistering research offers transparency and demonstrates honest procedures as well as minimises false-positive publications, the ability to change hypotheses to meet the findings, changing methods or analysis strategies and p-hacking (Gelman & Loken, 2013). This process provided opportunities to research and understand my design and methodology extensively prior to implementation. However, like in clinical practice not everything can be planned or anticipated. Despite being well researched and thought out, there were several deviations from the preregistration that were not anticipated. This experience highlighted that both thorough planning but also hands on experience is essential for effective interventions.

Beginning my internship year it was clear not only empirical knowledge was necessary but also it would take time to experiment and develop confidence and competence in the practicalities of implementing interventions and assessment. As I have begun to acquire more treatment clients and have had the opportunities to implement a number of intervention strategies I have come to learn you can only plan and prepare so much. Initially I spent significant time developing treatment plans and scripts for how these sessions would go. However, I came to realise that the sessions would never go exactly as planned and the beauty is in what the client brings into the room and how the intervention is received by them. Thus planning is essential but so too is flexibility in implementing evidence based practice based on individual variations.

Critical Evaluation

The fourth key skill is the ability to critique and evaluate our own work (Lane & Corrie, 2007). It is the ability to monitor progress, to gather feedback, and respond and adapt in an appropriate way. In my doctoral research, critical evaluation was important in being able to evaluate the limits of my own work, to be transparent, to recognise and outline limitations, and to ensure future researchers can continue to produce methodologically sound research. The importance of monitoring progress and getting client feedback was also highlighted within my research findings. Many of the participants reported clinician factors as a reason for not attending. These factors included feeling a lack of connection to their therapist and feeling the therapist was unhelpful. These findings highlight the importance of regularly checking in clients to assess how the appointments are going for them, what is working well and what they are finding unhelpful. One way to achieve this is through Feedback Informed Therapy (FIT; Goodman et al., 2013; Miller et al., 2015). FIT involves regularly monitoring clients' experiences of therapy and gaining their feedback to inform clinical practice. FIT has been recognised for its support in improving therapy outcomes and reducing non-attendance (Goodman et al., 2013; Miller et al., 2015). I have tried to utilised feedback informed work with clients by regularly checking in on how the sessions are going for them. I have found this beneficial for engagement and rapport as well as providing a way to work collaboratively.

Knowledge Gained Through Thesis Study

My doctoral thesis investigated factors which impact individuals' attendance of psychological appointments within the community and private mental health services. While my current internship role is based with Ara Poutama, Department of Corrections the factors identified in the thesis are still of relevance. The same psychological factors which related to non-attendance for individuals in the community appear to be relevant to individuals in the

care of Ara Poutama. These psychological factors include therapy anxiety, intrinsic motivation, stigma and cultural safety.

Therapy Anxiety

Therapy anxiety can be defined as fear or anxiety related to seeking and engaging in psychological therapy. Engaging with a therapist can be a potentially stigmatising process but also may be an anxiety provoking experience. Attending a psychological appointment involves being in an unfamiliar setting, speaking openly with an unfamiliar person, allowing oneself to be vulnerable (and being open to possible perceived criticism and judgement) and discussing what is most emotional and distressing. Therapy anxiety had the strongest relationship with non-attendance in my doctoral findings. There is currently no literature on therapy anxiety within the offending population. However, given the experience of engaging with a psychologist within Ara Poutama involves exposure to similar processes therapy anxiety is likely to be prevalent within this population too. Therefore, when initiating assessments or treatment it is important to be mindful of the possibility of clients experiencing therapy anxiety. Within Ara Poutama, given the long consent forms, the initial appointment is often spent purely going through consent and meeting one another. This provides an opportunity for the psychologist and client to get to know one another in a slower, less intensive way. Furthermore, this time allows clients to feel more comfortable with the process. I try to spend time to slowly go through consent forms, clearly explain my role and what would be involved. I seek to remove any of the unknown and reduce some of the potential anticipatory anxiety about therapy by being open and transparent about the process and providing opportunities for clients to ask questions. I am aware and mindful therapy anxietywill persist and it is beneficial to continue checking in with clients and making it a collaborative process that is engaging and feels safe for them.

Intrinsic Motivation

The self-determination theory (SDT) offers an understanding of different forms of motivation which drive human behaviour (Deci & Ryan, 2008). The empirical evidence for the SDT

demonstrate the level and quality of motivation may impact attitudes, performance and education (Chen & Jang, 2010; Deci & Ryan, 2012; Ng et al., 2012; Williams et al., 2006). The results of my doctoral thesis indicated intrinsic and integrated regulation motivation were related positively to attendance. Within a prison or Probation context the motivation for an individual to engage in psychological care may be more extrinsic than those in the general population. For example many individuals attend psychological appointments to meet their parole or sentence conditions. Their engagement may have a direct impact on whether or not they are released from prison before their sentence end date. Therefore, the personal investment or 'buy in' may not be there in the same way as a client who seeks out psychological support. We as psychologists have particular goals for treatment focused around targeting criminogenic risk factors, factors which relate to risk of future reoffending. However, it is important to help identify clients' goals for treatment to increase their motivation in engaging with us. Therefore, with treatment and assessment clients I like to dedicate time to helping clients to identify goals for treatment and goals for the future. I also like to incorporated values based work to help clients identify their values and ways of reaching greater fulfilment in their lives in a prosocial way.

Stigma and Disclosure

A relationship between a fear of emotion and the willingness to seek psychological support has been highlighted in the literature (Komiya et al., 2000; Vogel & Wester, 2003). Furthermore, masculine stereotypes have been documented in the literature as related to help-seeking attitudes and behaviours (Addis & Mahalik, 2003; O'Brien et al., 2005; Yousaf et al., 2015). Several of the ideas associated with seeking help from a health professional relate to

relying on others, needing help, and discussing an emotional problem. These ideas conflict with the masculine stereotype that men should maintain physical toughness, emotional control and self-reliance (Addis & Mahalik, 2003; Pleck, 1987). The theory surrounding masculine stereotype includes the negative consequences for men's wellbeing of adopting particular masculinity ideologies (Addis & Mahalik, 2003; Courtenay, 2000). The ideological position that men should be strong, tough, competitive, and emotionally inexpressive can have negative effects on a man's mental and physical health (Courtenay, 2000). These factors are likely relevant within the corrections setting, particularly a heavily male dominated setting. Furthermore, many of the men in our care have not grown up in a safe environment where they felt they were able to be vulnerable, they have not had disclosure safely and openly modelled to them. As these individuals grow and develop they often live within

systems which can be dangerous creating an additional barrier for vulnerability and disclosure (Kupers, 2005).

Furthermore, within the prison population Skogstad et al. (2005) reported concerns from clients about psychologists breaching confidentiality due to their link with "the system". The role of a psychologist within Ara Poutama is primarily to assess the risk of reoffending, meaning how likely, based on their previous behaviour and current thoughts, ideas, problem solving skills and coping strategies, is it that someone will reoffend and end up reconvicted and reimprisoned. This role also often involves providing recommendations surrounding parole or release from prison as well as communicating assessment information with corrections stakeholders including Probation Officers and Case Managers. This element likely interferes with honest disclosure from clients who are mindful of how the information they share could directly impact the recommendations made for them and could essential result in more prison time. Therefore, there is much more impression management and consideration of what information is revealed. I have really noticed this within my internship

so far. Often engagement is surface level or superficial, clients often initially try and say all the ‘right’ information however when I have attempted to dig deeper they are unable to provide evidence. This is particularly apparent when clients’ comment on previous skills or learning but are unable to be specific about these skills. As psychologists we work hard to establish rapport and create a safe environment where individuals feel able to share and express their experiences. However, working within the risk lens this is heavily impacted. Within the treatment space, our role is not to assess and report risk, there is a greater focus on working with the client to allow them to see they do not need to portray themselves in a certain way. However, it takes considerable time for these individuals to open up and expose their vulnerabilities and needs.

Cultural Safety

Māori and Pacifika people represent approximately 24.6% of the general population (Māori 16.7% and Pacifika 8.1%; Stats NZ, 2019). However, Māori and Pacifika individuals constitute 63.7% of the prison population in New Zealand (52.2% Māori and 11.5% Pacifika; Ara Poutama Aotearoa Department of Corrections, 2020). This is a disproportionately high overrepresentation of these indigenous cultures within Ara Poutama. The current literature suggests minority and indigenous cultures are more likely to have a less culturally safe experience within health services and be less likely to engage (Durie, 2001; Wilson & Barton,

2012). Though my thesis sample did not validly represent a broad range of ethnic group my thesis findings were congruent with the literature demonstrating indigenous ethnic group including Māori had the lowest rates of cultural safety. Providing a culturally safe service should be imperative across all settings but is even more pertinent within Ara Poutama given the overrepresentation of Māori and Pacifika people. This overrepresentation was one of the key factors which evoked my interest and passion for an internship with Ara

Poutama. It provides ample opportunity to work with Māori and Pacifika clients, to develop my own cultural safety, knowledge and skills, and provide a more appropriate and safe experience for these clients.

Hōkai Rangi is Ara Poutama's new strategy to create better outcomes for Māori and their whānau. This strategy focuses of six key outcomes to enhance the wellbeing of Māori: partnership and leadership, humanising and healing, whanau, whakapapa, incorporating a Te Ao Māori worldview, and foundations of participation. Through my research, ethical responsibilities as a psychologist, as well as an Ara Poutama employee and my own individual values I have been striving to continually make my own practice as culturally safe as I can. I have been working with a number of men who identify as Māori and have been incorporating the whakawhanautanga process during my assessments and treatment. It has been very valuable to see the impact of simply opening and closing sessions with karakia and incorporating Māori health models has had on rapport and engagement.

Practical Barriers

Practical barriers differ somewhat for the prison and community corrections population. For those clients in prison there can be a number of practical barriers. Many individuals under Ara Poutama's care have jobs within the prison. There are a number of time restrictions related to unlock hours. Furthermore, many of the individuals in the maximum security units are only able to spend one hour per day in yard and often times this coincides with their psychological appointments. Those individuals engaging with a psychologist through Probation often experience other practical barriers too. These appear to be a lack of transport and a lack of finance to be able to travel. In addition the long wait lists and referral process have been reported as further barriers (Skogstad et al., 2005). As individuals are unable to self-refer they have to rely on prison case management and waitlists that can be up to a year long. Furthermore, many individuals we see within the community

have lives which lack structure and routine and thus they can find it challenging to arrive to appointments on time.

To help minimise some of the practical barrier experienced by my clients I seek to provide appointments which coincide with the days and time they report in to see their Probation Officers to both reduce the cost of travel as well as to help provide consistency. Furthermore, I choose to have some flexibility with time with clients and do not penalise them for being late, helping clients to arrive on time may not be the highest priority in relation to reducing their risk of reoffending.

Summary

Though at times research and clinical practice can feel very disconnected I feel my doctoral research has heavily informed and contributed to the development of my skills, perspective and competence as an intern psychologist. I have both researched and witnessed the barriers individuals face when seeking and engaging in psychological care. I am aware of the many barriers individuals must overcome in order to physically attend appointments. This awareness has made me more mindful of the importance of reducing these barriers, dedicating time to build rapport and creating a collaborative practice where clients feel safe to disclose and work on aspects of themselves which motivates them to live a fulfilling and prosocial life.

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