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Investigating Decision-Regret and Distress Among Psychologists Impacted by Client Suicide

A thesis submitted in partial fulfilment of the requirement for the degree of

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Abstract

Background Mental health professionals are tasked with making critical decisions about their client's care. It is thus unsurprising that client suicide has been described as a distressing experience among professionals. Significant emotional, cognitive, and professional impacts have been reported which include psychological distress, shock, self-blame, guilt, and absenteeism. Due to the variability of impacts reported across the literature, a novel theoretical approach to understanding the impact of client suicide on psychologists was implemented using two decision-regret theories.

Methods A quantitative cross-sectional survey design was used to measure the impact of client suicide on psychologists. By using structural equation modelling, the following factors were investigated: regret, distress, self-blame, supervisory support, and beliefs about suicide preventability. Additionally, two regret theories were tested which included the following variables as predictors on regret: decision-regret, decision justification, decision-process quality, and intention-behaviour consistency. Control models were tested to control for carefully selected confounding variables, and a supplementary qualitative analysis was included investigating the factors related to coping following client suicide. A sample of 248 psychologists from New Zealand, Australia, Canada, United Kingdom, and the United States of America was included in this study.

Results The results identified statistically significant relationships between the following predictor variables on regret: decision-justification, decision-process quality, and beliefs about suicide preventability. Additionally, a significant moderate positive relationship was evidenced between regret (as the predictor) and distress. The qualitative analysis indicated that high-quality supervisory support and understanding the predictive limitations in assessing suicide risk were important factors in coping with client suicide. Additionally,

factors identified that were related to poor coping included judgement, counter-factual thinking and blame, and confidentiality limitations preventing seeking support from loved ones.

Conclusions The present study demonstrates support for two factors which appear to influence regret levels: decision-justification and decision-process quality. Additionally, this study also evidenced regret as a significant moderate predictor of distress, highlighting the role that regret may play in influencing a range of affective states among psychologists following client suicide. The findings of the present study highlight the need for the development of robust support structures that acknowledge the impact of client suicide.

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Table of Contents

Abstract.......... 2

Acknowledgements 4

Table of Contents.......... 6

List of Figures.......... 12

List of Tables 14

Investigating Decision-Regret and Distress Among Psychologists Impacted by.......... 15

Client Suicide 15

CHAPTER 1: Introduction 15

Theories of Suicide.......... 18

Predicting Death by Suicide 23

Predicting Death by Suicide: A Practical Dilemma 23

Predicting Death by Suicide: A Methodological Dilemma.......... 25

Preventing Death by Suicide 26

What About the Professional? 31

Implications for mental health professionals.......... 33

A Note on Nomenclature.......... 34

CHAPTER 2: Impacts of Client Suicide on the Mental Health Professionals.......... 37

Impacts of Client Suicide 37

Factors Related to Increased Distress Responses.......... 41

Treatment Context 42
Differences Between Disciplines 44
Training and Support 45
Attitudes Toward Suicide Preventability 48
Stigma and Blame 50
CHAPTER 3: Theoretical Framework 53
Theorising the Impacts of Client Suicide 53
Theories of Regret 55
Decision-Justification Theory of Regret 59
Intention-Behaviour Consistency and Regret 61
Research Project Rationale 67
CHAPTER 4: Research Questions and Hypotheses 69
Aims and research questions 69
Exploratory questions 69
Exploratory Question One 69
Exploratory Question Two 69
Exploratory Question Three 70
Exploratory Question Four 70
Exploratory Question Five 71
Hypotheses 71
Hypothesis One 71
Hypothesis Two 72

Hypothesis Three 72

Hypothesis Four 72

Qualitative Questions 73

Qualitative Question One 73

Qualitative Question Two 74

CHAPTER 5: Methods 75

Brief Overview of Ontology and Epistemology 75

Critical Realism 76

Recruitment Process 79

Participants 80

Open Science Practices 85

Ethical Considerations 85

Confidentiality 85

Psychological Discomfort 86

Cultural Responsiveness 87

Reward for Participation and Summary of Findings 87

Procedure 88

Materials 89

Pre-Validated Measures 89

Adapted Measures 92

New Measures Created for this Study 94

Data Analysis ... 98
Exploratory Analysis ... 99
Structural Equation Modelling ... 100
Test of Hypotheses ... 102
Hypothesis One Model ... 103
Hypothesis One Control Model ... 104
Hypothesis Two Model ... 105
Hypothesis Two Control Model ... 106
Hypothesis Three Model ... 107
Hypothesis Three Control Model ... 108
Hypothesis Four Model ... 109
Hypothesis Four Control Model ... 110
Estimation Method and Fit statistics ... 111
Confounding Variables ... 112
Rationale for Confounding Variables ... 112
Indices ... 114
Qualitative Analysis ... 114
CHAPTER 6: Quantitative Findings ... 117
Descriptive Results ... 117
Exploratory results ... 119
Exploratory Question One ... 119
Exploratory Question Two ... 119

Exploratory Question Three 119

Exploratory Question Four 123

Exploratory Question Five 125

Test of Hypotheses 128

Hypothesis One 128

Hypothesis Two 131

Hypothesis Three 133

Hypothesis Four 138

CHAPTER 7: Qualitative Results 142

Research Question One Findings 143

Research Question Two Findings 159

CHAPTER 8: Discussion 168

Key Quantitative Findings 169

Exploratory Question One 169

Exploratory Question Two 171

Exploratory Question Three 172

Exploratory Question Four 173

Exploratory Question Five 174

Hypothesis One 175

Hypothesis Two 177

Hypothesis Three 178

Hypothesis Four 179

Key Qualitative Findings ... 181

Research Question One ... 181

Factors that helped ... 181

Factors that Hindered ... 183

Research Question Two ... 187

Implications ... 190

Limitations ... 195

Future Research Directions ... 199

Conclusion ... 201

References ... 203

Appendices ... 231

Appendix A: Information Sheet and Survey ... 232

Appendix B: Recruitment Letter to Professional Organisations ... 233

Appendix C: Research Case Study ... 235

List of Figures

Figure 1 Stroebe and Schut's Dual Process of Coping with Bereavement 54

Figure 2 Path Analysis of IBC on Process and Outcome Regret 64

Figure 3 Hypothesis One Model 103

Figure 4 Hypothesis One Model Control 104

Figure 5 Hypothesis Two Model 105

Figure 6 Hypothesis Two Model Control 106

Figure 7 Hypothesis Three Model 107

Figure 8 Hypothesis Three Model Control 108

Figure 9 Hypothesis Four Model 109

Figure 10 Hypothesis Four Model Control 110

Figure 11 Path Diagram for Exploratory Question Three 120

Figure 12 Path Diagram for Exploratory Question Three Control 122

Figure 13 Path Diagram for Exploratory Question Four 123

Figure 14 Path Diagram for Exploratory Question Four Control 124

Figure 15 Path Diagram for Exploratory Question Five 126

Figure 16 Path Diagram for Exploratory Question Five Control 127

Figure 17 Path Diagram for Hypothesis One 129

Figure 18 Path Diagram for Hypothesis One Control 130

Figure 19 Path Diagram for Hypothesis Two 131

Figure 20 Path Diagram for Hypothesis Two Control 133

Figure 21 Path Diagram for Hypothesis Three 135

Figure 22 Path Diagram for Hypothesis Three Control 137

Figure 23 Path Diagram for Hypothesis Four 139

Figure 24 Path Diagram for Hypothesis Four Control 140

List of Tables

Table 1 Participant Demographics and Characteristics 83

Table 2 The Decision Regret Scale (DRS) Items 91

Table 3 The Impact of Event (IES-R) Scale Items 92

Table 4 Views about Suicide Prevention Clinical Questionnaire Items 93

Table 5 Self-Blame Items 94

Table 6 Decision-Justification Items 95

Table 7 Decision-Process Quality Items 96

Table 8 Intention-Behaviour Consistency Items 97

Table 9 Supervisory Support Items 97

Table 10 Independent and Dependent Variables for Exploratory Analysis 99

Table 11 Independent and Dependent Variables for Hypotheses 101

Table 12 Qualitative Research Questions and Survey Items 116

Table 13 Descriptive Statistics for Scale Response Distributions 118

Table 14 Results Qualitative Research Questions and Survey Items 142

Investigating Decision-Regret and Distress Among Psychologists Impacted by Client Suicide

CHAPTER 1: Introduction

This chapter will begin with a short introduction entailing the prevalence of suicide and some key theories relating to suicidal behaviour. The following sections address the key issues in suicide assessment and prevention, followed by a brief overview of common interventions for suicide risk and behaviour. Finally, this chapter ends with a discussion on the impacts of suicide including the implications faced by mental health professionals working with people who are suicidal or have suicided.

Suicide is a worldwide phenomenon affecting people of all nations, cultures, genders, and socio-economic statuses (World Health Organisation, 2019). Approximately 800,000 people die by suicide every year with many experiencing mental illness and chronic physical health problems (Bachmann, 2018). This present study collected data from participants living in New Zealand, Australia, Canada, United Kingdom, and the United States of America, therefore, respective prevalence statistics are reported. New Zealand has the highest youth suicide rate among Organisation for Economic Cooperation and Development (OECD) countries, with an overall suicide rate similar to the OECD average (*The Social Report,* 2016). In 2021, New Zealand's confirmed suicide rate was 11.6 deaths per 100,000. Significant gender differences were recorded where the rate was 17.9 suicides per 100,000 in men and 5.4 per 100,000 in women (Coronial Services of New Zealand, 2021; Parliamentary Service, 2022). This was a decrease from the year before where rates were 11.8 per 100,000. Among Māori populations, the suicide rate was 15.8 per 100,000 which was a drop from 19.8 in the year before. For youth aged 15 – 19 in New Zealand, the suicide rate confirmed for

year 2020 was 18.7 per 100,000 people. While this a drop from to 23.14 deaths in 2019, it is the second highest rate confirmed since 2013 (Statista, 2022). In Australia, the suicide rate in 2018 was 12.4 deaths per 100,000 people with males accounting for three quarters of deaths by suicide (*Australian Bureau of Statistics,* 2019). In the same period Canada had a comparable suicide rate to that of Australia (12.5 deaths per 100,000 people), whereas the United Kingdom had a slightly lower rate of 11.2 deaths per 100,000 people (World Health Organisation, 2019). In the United States of America, the suicide rate in 2018 was 15.3 deaths per 100,000 people (World Health Organisation, 2019).

It is worth noting that suicide rates may vary slightly within a given period due to cases awaiting coronial ruling. In New Zealand, the provisional figures aforementioned are reported in the Chief Coroner report which include 'suspected' cases where intent is not yet established (Ministry of Health, 2019). If determined by the coroner that suicide is not the cause of death, the case will not be recorded in the official data reported by the Ministry of Health. Other important factors that should be considered include lengthy coronial inquiries, and misidentification. In New Zealand, the average time for coroners to complete a suicide inquiry increased from 318 days to 509 days for inquiries without an inquest; and 676 days to 778 days for inquiries with an inquest between the years 2010 – 2015 (Controller and Auditor – General, 2016). Delays in coronial inquiry are also seen in Australia which may impact the integrity of data for a given period (Studdert et al., 2016). A qualitative study conducted by Jenkin et al. (2022) reported on the way suspected suicide investigations are undertaken in New Zealand. Their results indicated that coroners experience a multitude of pressures such as balancing workload and time stressors while attending to family and community needs. Additionally, they identified that determining intent and making recommendations about prevention a challenging part of their work which might account for the lengthy

investigations. Finally, suicides misrepresented as 'accidental' or 'unintentional' deaths, particularly in the context of substance overdose (Rockett et al., 2015) or miscoding due to stigma (Bachmann, 2018) can also undermine the accuracy of the rates reported. Recently, the High Court of the United Kingdom has recently changed the standard of proof for a case-finding of suicide from 'beyond reasonable doubt' to 'on the balance of probabilities' (Brittan, 2018). This change in standard may result in a higher return of suicide findings in the United Kingdom, and subsequently increase the rates reported per year (Brittan, 2018).

While improving accuracy in coronial outcomes and reporting is important from a prevalence lens, it also bears importance for mental health professionals who are involved in the care of an individual who suicides. Mental health professionals are among the group of people bereaved by an individual's suicide (Ellis & Patel, 2012), and they may experience significant stress and grief, especially during lengthy coronial enquiries and other logistical processes. A systematic review by Stene-Larson and Reneflot (2019) revealed that client contact with primary care and mental health professionals before suicide is common. Their review included thirteen studies between years 2000 and 2017 with samples ranging from 3400 to approximately 17,000,000 across English and non-English speaking countries (e.g., Australia, the United Kingdom, the United States, France, Slovenia, the Netherlands, Denmark, Austria, and Taiwan). In mental health settings, 57% of participants across studies had contact with a mental health professional at least once in their lives; on average 31% accessed care one year prior to suicide (range 21% - 42%). Only one study included in the review investigated contact six months prior to suicide where 50% of the sample had accessed mental health care. In the month prior to suicide 21% accessed care (range 7% - 32%) and 10% accessed care in the week prior to suicide (range 3% - 22%). Contact with primary health care professionals is more common with 80% accessing primary health care

one year prior to suicide; however, the authors note that rates for mental health care contact were variable across studies, except for contact at the twelve month mark (Stene-Larsen & Reneflot, 2019). This suggests that substantial amounts of people are still accessing mental health care twelve months prior to their suicide (Stene-Larsen & Reneflot, 2019).

Theories of Suicide

In considering how a mental health professional might respond to client suicide risk, it is important to acknowledge the psychological theories about suicide and how they might inform preventative efforts. Earlier theories viewed suicide as a unitary phenomenon requiring a 'catch-all' explanation. These theories emphasise hopelessness, social isolation, escape, and psychological pain, but do not account for the progression from these experiences to attempted suicide (Klonsky et al., 2018). The progression from ideation to action is a distinct phenomenon entailing different explanations and predictors respectively, and recently developed ideation-to-action theories attempt to account for this to strengthen suicide risk assessment and preventative efforts (Klonsky et al., 2016, 2018). The Interpersonal Theory of Suicide (IPTS) developed by Joiner (2005) was one of the first theories to acknowledge that suffering alone is not enough to cause suicide. He argued that one must have the capability for suicide (e.g., overcoming the fear of engaging lethal self-harm). Consequently, a new generation of theories acknowledging the progression from ideation to attempts evolved, and these are referred to as 'ideation-to-action' theories. Three key theories include the Interpersonal Psychological Theory of Suicidal Behaviour (IPTS), the Integrated Motivational-Volitional (IMV) model, and the Three-Step Theory (3ST).

Interpersonal Psychological Theory of Suicidal Behaviour (IPTS)

The IPTS argues that thwarted belongingness and perceived burdensomeness leads to suicidal desire, and acquired capability for suicide may lead to lethal suicide attempts.

Thwarted belongingness occurs when an individual's need to belong is unmet. There are two components which include loneliness and an absence of reciprocal care (Ma et al., 2016). Perceived burdensomeness refers to an individual's belief that they a burden to others. This also includes two components which includes self-hate and feelings of liability. While necessary, according to theory these constructs alone do not account for lethal suicide attempts (Klonsky et al., 2016). According to the IPTS, acquired capability caused by exposure to painful and provocative events (PPEs) can lead an individual to habituate to the pain related to self-inflicted injury. Some PPEs include child maltreatment, exposure to combat, and non-suicidal self-injury. This exposure may increase an individual's capacity to endure pain, in turn, increasing the risk of engaging in lethal suicide attempts (Klonsky et al., 2018).

A systematic review by Ma et al. (2016) found mixed support for the IPTS's main predictions across 66 studies. Ma et al. tested the effects of thwarted belongingness, perceived burdensomeness, and acquired capability on suicide ideation and suicide attempt. They found that the main effect of perceived burdensomeness on suicide ideation was the most tested and supported, with 82.6% of the studies returning significant results across a variety of patient settings (e.g., hospital and primary care, mental health and community clinics, and schools). Thwarted belongingness was less frequently tested than perceived burdensomeness and was less supported with 60% of the tests returning non-significant results. Additionally, approximately a third of the tests of thwarted belongingness on suicide attempt were significant (moderate median effect size), and one quarter of the tests of perceived burdensomeness on suicide attempt were significant (large median effect size). These findings indicate that thwarted belongingness and perceived burdensomeness may not be specific to suicide desire alone, which is contrary to the theory's predictions. Finally, the

theory's prediction that acquired capability is specific to suicide attempt is less supported by this systemic review with approximately half of these tests returning significant results. These findings demonstrate that the predictions of IPTS may be more complicated than initially stated, which has implications for the assessment and prevention of suicidal behaviours. Ma et al. argue that interventions focusing on reducing perceived burdensomeness may be more efficacious in reducing suicidal behaviours than addressing suicidal behaviour exclusively. Additionally, due to the variability present across the three key factors of IPTS on suicidal behaviours, it would be worth considering the presence of additional risk and protective factors which may influence suicide-related outcomes. Other theories have considered the presence of additional moderators such as defeat and entrapment, as detailed in the Integrated Motivational-Volitional Model (IMV) of suicide.

The Integrated Motivational-Volitional Model (IMV)

The Integrated Motivational-Volitional Model (IMV) of suicide (O'Connor, 2011) is a tripartite model that accounts for the relationship between background factors and life events (Pre-Motivational Phase), the development of suicidal ideation and intent (Motivational Phase), and suicidal attempts (Volitional Phase) (O'Connor & Kirtley, 2018). In the Motivational Phase, O'Connor argues that life events occurring in the context of poor coping and poor problem solving may lead to feelings of defeat and entrapment. Further, entrapment alongside thwarted belongingness and perceived burdensomeness can lead an individual to consider suicide as a solution. The Volition Phase is the enactment of suicide intention, and includes moderators such as increased capability, impulsivity or planning, and access to lethal means as factors that progress an individual to carry out suicidal behaviour (Klonsky et al., 2018; O'Connor & Kirtley, 2018). Drawing on the IMV, a study by Dhingra et al. (2015) examined factors that were associated with suicide ideation compared with

factors associated with suicide attempts. They predicted that factors related to ideation would be distinct from factors related to attempts, and their findings supported this. Dingha et al. found that individuals who had attempted differed from individuals with ideation on nearly all volitional factors (e.g., fearlessness about death, impulsivity, and exposure to suicidal behaviour). They also found that the individuals who had attempted were more likely to have experienced a loved one self-injure or suicide, and were more impulsive and fearless about death. These findings are comparable to Branley-Bell et al. (2019) who also demonstrated that predictors related to suicide behaviours are distinct from those associated with suicide ideation. Both studies highlight that suicide risk assessment focusing on volitional factors should be prioritised by mental health professionals in order to carefully identify the level of risk someone poses. Both studies offer support for the IMV of suicide.

Three-Step Theory (3ST) of Suicide

The most recently published ideation-to-action theory of suicide is the Three-Step Theory (3ST) by Klonsky and May (2015). The first step argues that both psychological pain and hopelessness causes an individual to develop suicidal ideation, due to increased desire to avoid painful and punishing life experiences. The second step posits that ideation increases when an individual's pain exceeds connectedness to others, roles, or purpose; and the third step suggests that strong suicidal ideation intensifies to attempted suicide when capacity for suicide is present. Three contributors to developed capacity for suicide include dispositional (i.e., high pain threshold or low fear of death); acquired (i.e., exposure to painful and provocative events), and practical (i.e., knowledge of, and access to lethal means). Klonsky et al. (2018) compare the 3ST with the IPTS and state that both theories emphasise the role of connectedness in the development of ideation. However, the 3ST explicitly highlights connectedness as a protective role in the context of pain and hopelessness among those with

suicidal ideation. Further, both theories highlight the role of acquired capacity in the progression from suicide ideation to suicide attempt. One key difference is that the 3ST have left ‘pain’ as a broad concept whereas IPTS detail perceived burdensomeness and thwarted belongingness specifically. Klonsky et al. argue that many types of painful experiences can cause suicidal ideation even without the presence of those noted in the IPTS.

A recent study by Tsai et al., (2021) examined the predictive utility of the 3ST among a sample of psychiatric patients. Their results indicate that pain and hopelessness accounted for most of the variability in suicidal ideation across gender and age, as predicted by the 3ST of suicide. Additionally, among patients experiencing pain and hopelessness, lower connectedness predicted higher suicidal ideation. These findings are also similar to Pachkowski et al. (2021) who found that both pain and hopelessness were strong predictors of current and future suicidal desire, and that connectedness played a protective role against suicidal desire. Thus, it is important for mental health professionals to include psychological pain, hopelessness, and connectedness in the assessment of suicide risk, as well as include these factors as treatment targets to reduce suicidal desire (Klonsky et al., 2018; Pachkowski et al., 2021; Tsai et al., 2021).

Ideation-to-action theories have advanced our understanding of suicidal behaviour. These theories unanimously agree that capability for suicide is an important factor in separating attempters from those who experience suicidal ideation only (Klonsky et al., 2016). However, more research is necessary to understand how suicidal behaviours my fluctuate across time. The subsequent section further describes the practical and methodological limitations in predicting and preventing suicide.

Predicting Death by Suicide

The below section details the issues that professionals have in assessing risk and predicting suicide. These are important considerations because they highlight why the assessment of suicide risk is commonly reported as a stressful and anxiety provoking experience for mental health professionals. Both practical and methodological considerations are described.

Predicting Death by Suicide: A Practical Dilemma

Suicidal presentations are complex and heterogeneous phenomena (Turecki & Brent, 2016). The assessment of risk for suicide is routinely carried out by mental health professionals and is frequently described as a stressful part of their role (Dubue & Hanson, 2020). This may be due to the fact that prediction of suicide is incredibly challenging given the significant variability in the patterns and relationship of risk factors across gender, age, culture, geographic regions, and socio-political environments (Turecki & Brent, 2016). What compounds this stress is that suicide risk assessment is considered a key competency (Oquendo & Bernanke, 2017), yet some professionals argue that their graduate-level training does not well equip them for the frequency of which risk assessment is practiced (Dubue & Hanson, 2020). Additional to these stressors, is the likelihood that the professional would be required to evaluate and defend their risk-intervention decisions in the event of a client suicide (Peruzzi & Bongar, 1999).

Kraemer et al. (1997) states that a suicide risk factor is a characteristic, experience, or event that is positively associated with the probability of a particular outcome occurring. They may be derived from a series of domains such as biological, psychological, and sociological domains (Kraemer et al., 1997). Examples of empirically supported risk factors include both static and dynamic variables such as gender, age, previous suicide attempts,

hopelessness, perceived burdensomeness, thwarted belongingness, substance use, and a diagnosis of major depression and other mood disorders (Holman & Williams, 2022; Welton, 2007). While such factors are empirically linked to suicide ideation and death by suicide, infrequent behaviours, like suicide, are difficult to predict (Michel & Jobes, 2011). Michel and Jobes (2011) liken it to searching for the needle in a haystack, especially since the average mental health professional can expect to encounter a client suicide every three to five years. Additionally, risk categorisation is often determined by risk factors present at the time of assessment, however, many dynamic factors are variable within a matter of hours both intra- and interpersonally. A study by Kleiman et al. (2017) measured short-term change in suicidal ideation. They found that 33% of the variability in suicidal ideation (e.g., desire to die, intentions to kill self, perceived burdensomeness, loneliness) represented within person variance and which changed considerably over a few hours. Thus, while a assigning a risk 'status' might afford some predictive utility within an imminent time period, it does not explain fluctuations in an individual's risk 'state' over time. It may be argued then that routinely relying on risk categorisation may result in a formidable number of false positive and false negative predictions (Somers-Flanagan, 2019).

Risk categorisation is a common approach used to guide clinical decision making and informs the mental health professional on appropriate interventions per risk level. However, the utility of risk categorisation remains questioned in the literature. Firstly, Large and Ryan (2014) argue that inpatient admission policies do not state what type of risk (e.g., absolute or relative) should be reported. Absolute risk refers to a probability of an event occurring within a specific population in a given period; whereas relative risk refers to the increased probability of an outcome in a subgroup of a population, who share a particular characteristic, relative to individuals of that population who do not share that characteristic.

A meta-analysis by Large et al., (2016) contained studies conducted over a period of 40 years. They found that while a statistically strong association between high-risk strata and suicide was present, approximately half of all suicides tended to occur in low-risk groups. Additionally, the positive predictive value indicates that 95% of high-risk clients will not suicide. It would, thus, seem that all inpatients are at a low absolute risk of suicide while an inpatient, but are at high risk of suicide relative to the community risk. Large and Ryan (2014) argue that understanding that high-risk admissions are more likely to end in suicide than low-risk admissions does not alone justify the re-allocation of resources to high-risk clients. Especially since there are no rational interventions that correspond to different risk statuses, which Large et al., argue should be the rationale behind risk categorisation. There are also several other limitations to assessing and predicting suicide that relate to weaknesses in the methodologies of suicide research.

Predicting Death by Suicide: A Methodological Dilemma

Improving research designs and analyses are important pursuits in suicide research. Traditional clinical markers for identifying a client at risk of suicide have emerged from studies, that (like all studies) have several limitations. For example, most suicide research is conducted retrospectively. This approach obscures the measurement of the time passed between the professional's awareness of risk and the client suicide, resulting in identification of long-term risk only. Furthermore, Kleiman et al. (2017) evidenced significant variability of within-person risk factors across just a few hours, highlighting that even known acute risk factors are susceptible to change.

Little, Roche, Chow, Schenck and Byan (2016) recommend a range of improvements that can be made to the measurement of suicide risk. For example, measuring a client's risk *and* protective factors across a range of levels such as family, peer groups, school, and the

community. Additionally, Little et al. recommend measuring beyond individual and family systems and focusing on ecometric evaluation (the measurement of environmental contexts) to allow for multilevel analytic approaches. Finally, they acknowledge the importance of dynamic change processes in (youth) suicidal behaviour and recommend assessing factors at various time points to better capture the interplay among acute and long-term suicide risk factors (Little et al., 2016). Prospective suicide research is an important area for improving our understanding of variable risk factors across time; unfortunately, most of our knowledge concerning suicide risk is informed by cross-sectional retrospective designs (Roos et al., 2013). Consequently, this makes suicide prevention challenging for mental health professionals, especially since they are expected to be able to predict client suicides and distribute resources accordingly based on obscured predictors (Roos et al., 2013). Nevertheless, Klonsky et al. (2018) argue that there is utility in incorporating ideation-to-action theories in the assessment and treatment of suicidal behaviours. The application of these theories with a specific focus on capability may assist mental health professionals in identifying treatment targets that directly influence suicide risk (Anestis et al., 2017; Klonsky et al., 2018).

Preventing Death by Suicide

Mental health professionals are often faced with challenging processes in the prevention of suicidal behaviour among clients. These involve identifying the individual risk for suicide, implementing strategies to help reduce the likelihood of suicide, and finally, treating the individual. This next section describes short and long-term interventions in responding to risk of suicide, along with a brief overview of common treatment modalities used. The aim of this section is to highlight the types of intervention decisions made by

mental health professionals and provide a brief overview of what treatment looks like in practice.

As described in the earlier section, the prediction of suicide is difficult because little is known about predictors of immediate risk (Klonsky et al., 2018). Unfortunately, this means that professionals have to make decisions about who receives urgent support based on inexact criteria (Sher, 2004). Mental health professionals employ both short- and long-term interventions when their assessments indicate that a client is at high risk for suicide. Brief interventions typically focus on the immediate risk and suicide ideation rather than diagnostic conditions. They have three common components, such as understanding the suicidal risk, safety planning, and follow-up contact including other types of psychological support (McCabe et al., 2018). Short-term interventions are action-based and involve concrete steps to decrease a client's level of suicidality (Rosenberg, 1999). For example, hospitalisation, arrangements to stay with family and friends, providing crisis numbers, or increasing face-to-face therapy sessions. When a client is considered stable or has displayed a reduction in risk, maintenance and long-term interventions are considered.

Treatment refers to interventions that generate long-term life supporting assistance (Rosenberg, 1999). Common examples include affective-based therapy with a mental health professional, medications, and other social or community interventions. Unfortunately, long-term treatments addressing suicide specifically are limited (Comtois & Linehan, 2006) with most attention focusing on the reduction of depression 'symptoms' as a means to reduce suicidality (Weitz et al., 2014). However, the literature demonstrates variability in the effectiveness of this approach (Mewton & Andrews, 2016; Watts et al., 2012; Weitz et al., 2014). Interestingly, studies that focus on suicide specifically appear to be more effective in reducing suicidal behaviours. These approaches are detailed below (of note, these

approaches are just a few of the many types of long-term treatment interventions used by mental health professionals to reduce risk of suicide).

In recent years, new approaches have been developed and tested which address suicide and suicidal behaviours specifically. The collaborative assessment and management of suicidality (CAMS) is a therapeutic framework for working with suicidal clients (Jobes, 2006). The CAMS approach to clinical work primarily focuses on the development of a strong therapeutic alliance with the suicidal client. This alliance is considered the essential ingredient for delivering effective clinical interventions, and engages clients as active participants in the assessment of their own suicide risk and suicide-specific treatment plans (Jobes, 2011). Unlike other approaches to suicide assessment, the CAMS approach emphasises the phenomenology of suicidal states to deconstruct the idea that suicide is a symptom of some other psychopathology. Rather, the suffering experienced is of focus and cared for independently to other diagnoses (Jobes, 2011). The framework involves a comprehensive risk assessment, including completion of the Suicide Status Form (SSF). This SSF guides the client's assessment, and treatment, and is developed collaboratively throughout sessions. Many techniques are employed such as narrative and qualitative constructions of the client's experience, with an overarching aim to eliminate or reduce the direct or indirect suicide-specific cause and their impact on suicidality. Direct causes might include thoughts, feelings, and behaviours, where indirect causes might include homelessness, substance use, depression, and PTSD. A pilot study conducted by Ellis et al. (2012) examined the efficacy of CAMS among 20 inpatients. The study was an open-trial, case-focused design across approximately fifty-one days. Findings indicated statistically and clinically significant reductions in depression, hopelessness, suicide cognitions, and suicidal ideation, including drivers of suicide. While CAMS initially intended for outpatient

engagement, these findings indicate that it may be successfully adapted for inpatient units.

Developed by Linehan (2000), Dialectical Behaviour Therapy (DBT) is an empirically supported treatment modality for personality disorders and other relational conflicts. The dialectical element refers to the acceptance of one's experiences, while also acknowledging that they are responsible for making positive changes to manage their emotions and behaviours. The behavioural element involves teaching multiple skill components such as mindfulness, distress tolerance, emotional regulation, and inter-personal effectiveness. Multiple studies have reported on its efficacy in reducing suicidal ideation, self-harm, and suicide attempts across a range of settings (e.g., inpatient and community) (Berk et al., 2020; Kothgassner et al., 2021; Linehan et al., 2015; McCauley et al., 2018; Tebbett-Mock et al., 2021). A single-blind randomised control trial conducted by Linehan et al. (2015) investigated the effectiveness of different DBT approaches in addressing suicidality (e.g., skills training and case management (DBT-S); individual therapy and activities group (DBT-I), and standard DBT which includes skills training and individual therapy). Their sample included 99 women who had at least two suicide attempts and/or non-suicidal injury acts in the last five years. The authors hypothesised that DBT would outperform the other approaches. However, findings indicated that each were comparably effective at reducing suicidality among high-risk individuals. The study also examined the usefulness of the 'skills training' component and found that clients who did not receive this were slower to improve on measures of depression and anxiety during the treatment. Interestingly, the rates of suicide attempts, emergency department visits, and hospitalisations in the follow-up year were each 2.0 – 2.4 times lower in the standard DBT group than in the DBT-S group, suggesting longer lasting gains for those who received standard DBT treatment

compared with DBT-S. While evidence suggests that DBT may be effective in reducing suicidality, treatment with suicidal inpatient clients may be more complex due to the possible iatrogenic effects of hospitalisation influencing their risk and suicidal behaviours (Coyle et al., 2018; Linehan et al., 2015). Tebbett-Mock et al., also argues that inconsistent training quality between professionals and fast staff-turnover within this setting, and problems accessing ongoing agency care following discharge may influence long-term risk maintenance. Given that the risk of suicide is higher among inpatient clients than the rest of the community, more research is needed to ascertain the efficacy of DBT treatments for suicidal individuals in inpatient settings.

Finally, Cognitive-Behaviour Therapy (CBT) is another empirically supported treatment modality used to treat a range of affective disorders, substance use issues, and also severe psychiatric conditions. Developed by Beck at al. (1996), CBT is based on the premise that individuals' thoughts about situations, influence emotional, behavioural, and physiological reactions (Beck & Fleming, 2021). While traditional CBT does not focus specifically on suicide prevention, an adapted method for suicide prevention (CBT-SP) was developed drawing on techniques from a range of modalities including DBT (Stanley et al., 2009). Components include chain analysis (sequencing the events leading to suicidal ideation or attempt), safety planning, psychoeducation, and addressing reasons for living. Findings indicated that CBT-SP was a feasible intervention for adolescents with depression who are of high-risk of suicide; however, the authors hesitated drawing conclusions on efficacy since their study was not randomised. For traditional CBT approaches, a systematic review by Mewton and Andrews (2016) suggested that using techniques focusing specifically on an individual's suicidal cognitions and behaviours was more effective in preventing suicidal behaviours than focusing on mental health diagnoses to treat suicidal behaviours.

However, other studies argue that treating mental health disorders, a factor commonly associated with suicide, is effective in reducing suicidal behaviours (Watts et al., 2012).

This section highlighted the statistical and methodological limitations of risk assessment, including an overview of suicide prevention frameworks. It is evident that there are limitations in the assessment and classification of risk of suicide, including questions about what intervention approach is suitable for the reduction of suicidal behaviours. This is not to suggest that traditional risk factors should be neglected; however, their identification should not be readily accepted as *the only* useful probabilistic estimates for suicide (Mewton & Andrews, 2016). Additionally, while the development of treatment modalities specifically addressing suicide has surfaced in the last ten to fifteen years, more research is needed to ascertain their efficacy long-term (Ellis et al., 2012). Mental health professionals are trained in the assessment of risk, and are thus, expected to make risk-informed decisions and provide empirically supported treatments. Family members of suicidal clients, and the public more broadly, expect professionals to predict attempts and prevent death by suicide (Fawcett et al., 1990) which we have evidenced in this chapter, is difficult. This expectation has serious implications for mental health professionals who encounter client suicide.

What About the Professional?

The loss of a person to suicide is known to have severe impacts on family members and significant others (Bellini et al., 2018; Jordan & McIntosh, 2011). However, a member commonly neglected within this group is the mental health professional (Ellis & Patel, 2012). Many types of mental health professionals experience client suicide thousands of times per year. In a recent study, Finlayson and Simmonds (2018) reported that 31.5% of Australian psychologists had experienced more than one client suicide. The highest known frequency for psychologists was reported by Trimble et al. (2000) where they found that 38.9% had

experienced a client suicide. Counsellors experienced client suicide at a lower rate where McAdams and Foster (1999) reported that 23% had experienced a client suicide. For psychiatrists, the frequency is more than double that of other mental health professional groups where 62% working in institutional settings, and 50% working in private practice have been found to have experienced client suicide (Chemtob et al., 1989).

The literature, while scant, has reported on characteristics that increase the likelihood that a mental health professional will experience a client suicide. Chemtob et al. (1988) reports that characteristics more strongly associated with client suicide include age, gender, theoretical orientation, and years of experience of the professional. However, there is some variability in the literature as other studies have shown no differences in age, and gender (Finlayson & Simmonds, 2018; Trimble et al., 2000). Unsurprisingly, psychologists who have more than eleven years of experience are more likely to encounter more than one client suicide than those who have less experience (Finlayson & Simmonds, 2018). Chemtob et al. suggest that this might be due to the fact that more highly skilled professionals tend to work with clients who present with higher levels of risk and complexity. However, in a given time period psychologists in training may be at a greater risk of experiencing a client suicide (Kleespies et al., 1993). Additionally, psychologists working within teams or within agencies are more likely to experience a client suicide than those working in private practice or within hospital settings (Trimble et al., 2000). For psychiatrists, however, Chemtob et al. (1989) report that the frequency of client suicide was higher for those working in psychiatric hospitals or wards. These differences may be explained by the fact that psychiatrists are more likely to work in psychiatric hospital settings, and thus, treat clients with more severe or complex presentations (Chemtob et al., 1989). Nevertheless, these findings highlight that

mental health professionals routinely engage with clients across a range of settings where suicide risk assessment and prevention is central to their work.

Implications for mental health professionals

Historically, working with suicidal clients has placed a heavy burden of responsibility on the mental health professional for a successful outcome. This high therapist-responsibility orientation cast the professional in the role of the 'healer' and the client as a passive recipient of the 'procedure' (Ellis, 2004). In recent years, this perspective has been challenged after realising the importance of the client's sense of self-efficacy, however, there is still confusion among the public about the role of the therapist (Patel et al., 2018). In particular, the influence of the medical model is especially potent in influencing public perception, whereby the therapist is viewed as the expert who assesses symptoms, and subsequently prescribes treatments for particular mental 'diseases' (Huda, 2021).

Additionally, systemic level influences such as 'managed care' programmes designed to control healthcare costs and liability actions also directly assign responsibility to the therapist (Ellis, 2004). Thus, it follows that those who are assigned to provide interventions for suicidal clients are also prescribed the task of preventing it (Jobes & Berman, 1993). As a result, mental health professionals, particularly in the United States of America, have become targets of blame and retribution in the context of malpractice litigation (Baerger, 2001). Studies have shown that clinicians may refuse to work with suicidal clients for fear of litigation and malpractice charges, or unnecessarily hospitalise at-risk clients to avoid legal repercussions (Gulfi et al., 2010). Finally, political initiatives involving nation reduction targets for suicide rates may also influence system and community expectations of healthcare workers, and consequently assign blame if targets are not achieved – despite noteworthy limitations in the prediction of suicidal behaviours.

As a collective, mental health professionals experience client suicide thousands of times per year and are vulnerable to experiencing a range of personal and professional impacts as a result (Chemtob et al., 1988; Finlayson & Simmonds, 2018; Sherba et al., 2018). Before reviewing these impacts in detail, it is important to consider the terminology used in describing suicide and suicide related phenomena. The language used in modern psychology unfortunately tends to communicate attitudes and historical ideologies that are unhelpful to both the client and professional, and this has been considered throughout the writing of this thesis.

A Note on Nomenclature

Considering the use of language in the context of suicide is paramount in shaping assumptions and reducing stigma. In the 18th century, England, Wales, and other commonwealth societies punished the person whom suicided (Neeleman, 1996) by desecrating their body and confiscating family property (Jobes & Berman, 1993). By the 19th century, most countries had developed laws against suicide including prison sentences for those who attempted (Mishara & Weisstub, 2016; Neeleman, 1996). Consequently, suicide was described as a 'committable' crime punishable by law. While few countries (largely non-Western) still consider suicide a criminal act, this thesis will avoid using legally bound language (e.g., 'commit suicide') when referring to client suicide. Instead, destigmatising terms such as 'suicided' will be used. Additionally, both old and modern literature describe attempts as either being 'successful' or 'unsuccessful', however, these descriptors suggests that suicide as an outcome, is an achievement (Padmanathan et al., 2019). Moreover, it may imply that the person who attempted, but did not suicide, is a failure. As such, this thesis will use 'suicide' and 'suicide attempt' when referring to death and attempts respectively. These

terms were also described as ‘neutral’ and acceptable in Padmanathan et al’s findings relating to language use and suicide.

Finally, western-psychology was originally informed by the disease-model of medicine. Service users are referred to as ‘patients’, features of their problems are called ‘symptoms’, and diagnostic labels are applied to summarise a collection of symptoms. In particular service settings, such as a medical inpatient unit with a multi-disciplinary team, medically bound language is often necessary for shared understanding between professionals. Additionally, organisations such as welfare and insurance systems tend to require client diagnoses to prioritise and allocate resources. However, Shevell (2009) argues that the term ‘patient’ communicates a hierarchy of power within the relationship and enhances the perceived disability or disease of an individual. This might put further responsibility of ‘symptom reduction’ on the mental health professional, and undermine the individual’s intrinsic autonomy. Therefore, this study will use the term ‘client(s)’ when referring to the participants’ service users, as it better represents the collaboration of the assessment and intervention process that characterises modern psychological practice. Given the shifts in attitudes to psychology and suicidal behaviours specifically, it is important that our language is consistent with these changes and avoids stigmatising the people we are describing.

This introductory chapter briefly highlighted the impact of client suicide on mental health professionals. It acknowledged the limitations in the assessment and prediction of suicide risk, including the role that mental health professionals have in carrying out these competencies. It was detailed that mental health professionals commonly work with individuals in the year before they suicide which raises concerns about the impact that client suicide has on treating professionals. Short and long-term interventions were outlined in this chapter, highlighting the fact that few therapy modalities focus on suicide prevention

specifically. Additionally, findings relating to the treatment of mental health disorders and its influence on reducing suicidal behaviours were inconsistent. It is clear from this review that mental health professionals are tasked with the responsibility of assessing client risk, and making decisions around client risk classification and interventions. Notwithstanding public expectation that professionals should, not only predict suicide, but prevent it, professionals are subject to lengthy clinical and coronial inquiry following client suicide which can cause significant stress. It is not surprising that in light of predictive limitations and consequent post-suicide enquiry, mental health professionals describe client suicide as a significantly distressing experience (Chemtob et al., 1988; Gulfi et al., 2010). The subsequent chapter describes in more detail, the impact of client suicide on mental health professionals.

CHAPTER 2: Impacts of Client Suicide on the Mental Health Professionals

The following chapter presents a detailed analysis of the impact of client suicide on mental health professionals. This includes a range of factors that address both individual and professional impacts. Next, a review of the quality of training and support relating to client suicide is included, followed by a discussion on the attitudes of suicide preventability.

Impacts of Client Suicide

Client suicide has significant emotional, cognitive, and behavioural effects on primary care and mental health professionals (Ellis & Patel, 2012; Finlayson & Simmonds, 2018; Sherba et al., 2018; Veilleux, 2011; Wurst et al., 2011). During the course of treatment, mental health professionals tend to develop deep care for their clients, and consequently experience a response to client suicide that compares to the loss of a loved one (Strom-Gottfried & Mowbray, 2006). Almost half of the affected psychologists in Chemtob et al.'s (1988) study reported stress symptoms that significantly impacted their personal and professional lives. This section describes the emotional and psychological impacts of client suicide on mental health professionals.

Distress reactions are commonly experienced in response to traumatic events. Such events may include natural disasters, physical or sexual assault, witnessing the death of a person, and bereavement and unexpected loss. When distress sustains for long duration, a diagnosis of 'Post-Traumatic Stress Disorder' is given. PSTD is a psychological reaction that a person may experience following a traumatic event (American Psychiatric Association, 2013). Types of stress reactions are usually categorised into three main groups: hyperarousal (i.e., being in a vigilant and high-alert state), intrusion (i.e., inability to keep memories relating to the event from returning), and avoidance (i.e., attempts to avoid triggers that may bring memories back). Additionally, mood changes such as loss of interest or pleasure in

activities and guilt; sleep disturbance such as insomnia and nightmares, and psychological impacts such as flashbacks, anxiety, fear, and mistrust are also among the features of PTSD (American Psychiatric Association, 2013). Therefore, PTSD can be an extremely debilitating experience for the individual. Additionally, trauma responses may develop progressively resulting in a maximum stressor response after a period of time has passed following the event (McFarlane, 2010). This is not to suggest that mental health professionals who have experienced client suicide will go on to develop PTSD; however, it is notable that many features of distress reported by professionals reflect some of the PTSD criteria, and these are described below.

A meta-review by Lrya et al. (2021) reported on the current research relating to the impact of client suicide among a range of front-line workers and mental health professionals. After reviewing 25 studies, they found that exposure to client suicide on average is a distressing experience for mental health professionals and this is consistent with earlier studies (Chemtob et al., 1988; Ellis & Patel, 2012; Sherba et al., 2018). Findings indicate that affected psychologists experienced increased irritability and sleep disturbance, including significant levels of intrusion, avoidance, or overall distress immediately following a client suicide (Chemtob et al., 1989). Wurst et al. (2011) conducted a study evaluating the impact of client suicide and found that nearly 40% of mental health professionals experienced severe distress following the incident. Higher levels of distress were reported among those who witnessed the body of their client following client suicide (Sherba et al., 2018). Additionally, professionals also reported sadness, shock, and helplessness as being the most intense emotions (Darden & Rutter, 2011; Finlayson & Simmonds, 2018; Wurst et al., 2011). Other emotions reported included disbelief, denial, and anger (Wurst et al., 2011). Overall, these

impacts reflect generalised grief reactions not limited to suicide, however, unexpected loss such as a client suicide, is related to an array of psychological impacts.

A recent study by Van der Hallen (2021) investigated the short- and long-term impacts of client suicide on mental health professionals. Their sample included 213 mental health professionals and results were analysed using structural equation modelling (SEM). Their findings indicated that mental health professionals are significantly affected by client suicide; in particular, participants on average experienced some PTSD symptomatology in the weeks following the suicide with intrusion symptoms being reported the most. Long-term impacts include increased concern, anxiety, guilt, and increased sensitivity to suicide risk-cues. While their SEM approach provides many benefits to their study (e.g., calculating estimates of model fit and factor loadings), their study relied on cross-sectional data and their models were not informed by a theoretical framework. Additionally, control and mediating variables were not included, therefore, assumptions about causal relationships are extremely tentative. However, these findings are in keeping with earlier studies on the impact of client suicide.

For example, a recent study by Finlayson and Simmonds (2018) investigated the emotional and professional impacts of client suicide on 178 Australian psychologists. In addition, their study focused on feelings of responsibility, including ratings of predictability and preventability of the suicide. Their findings indicated significant positive relationships between responsibility with distress, anger, guilt, shame, shock and confusion. Additionally, higher ratings of preventability and predictability were associated with greater emotional and professional impacts such as self-doubt about competency, loss of self-esteem, and fear about liability. These impacts may have practical implications where psychologists develop hypervigilance to potential risk cues, and consequently increase their tendency to refer at-risk

patients for hospitalisation (Knox et al., 2006; Ting et al., 2006). While these impacts may be conducive to future assessments of at-risk patients (Chemtob et al., 1988), they may have cost and ethical implications, specifically the consequences of excessive hospitalisation (e.g., unnecessary restrictions/medications for low-risk clients, and bed unavailability for high-risk clients).

Additionally, Gulfi et al. (2010) found that while professionals in both private and institutional settings experienced low impact on their professional reactions in the month following client suicide, the most intense reactions reported included anxiety working with at-risk patients, and concern over their own clinical competence. These feelings of anxiety and self-doubt may be further reinforced when a client suicide contradicts the results of a practitioner's risk assessment (Darden & Rutter, 2011; Finlayson & Simmonds, 2018). Importantly, increased shock and confusion were experienced among psychologists when the suicide was considered preventable and unpredictable, whereas less distress was experienced when the suicide was considered an unavoidable event (Finlayson & Simmonds, 2018). These impacts have shown to have important bearings on overall practice. For example, mental health professionals may be more vulnerable to burnout, have higher absenteeism, and/or leave their role entirely following client suicide (Ross et al., 2016; Ting et al., 2006). It is important that agencies can appropriately support their mental health professionals to reduce the impacts of client suicide, and maintain staff retention (Sherba et al., 2018). However, studies have consistently demonstrated that such support is inadequate in meeting the needs of impacted mental health professionals (Finlayson & Simmonds, 2018; Gulfi et al., 2010; Linke et al., 2002; Ross et al., 2016). Limitations in training and support relating to suicide bereavement are addressed in the following section.

Factors Related to Increased Distress Responses

The emotional and professional impacts of client suicide on mental health professionals have been detailed above. This next section addresses factors that may contribute to the severity of these impacts, and these must be considered when supporting professionals coping with post-suicide processes (Dransart et al., 2015).

Dransart et al. (2015) conducted a study to identify typical professional profiles following a client suicide to address the severity of stress reactions and its discriminant variables. A hierarchical cluster analysis deduced three low impacted subgroups, one moderately impacted subgroup, and one highly impacted subgroup of bereaved professionals. Low impacted professionals were characterised either by high support and anticipation of suicide (subgroup A), emotional distance to the patient (subgroup B), or no contact with the patient at the time of suicide (subgroup C). Moderately impacted professionals were characterised by emotional closeness to, and perceived responsibility for the patient's suicide (subgroup D), and high impacted professionals were characterised by lack of support networks (subgroup E). Unsurprisingly, appropriate support following client suicide and in clinical training appear to reduce the level of distress experienced among psychologists and psychiatrists. For example, professionals in the low impact subgroups all expected the suicide, typically felt less close to their clients, and received sufficient support following the event (Dransart et al., 2015). All professionals in the moderately impacted subgroup felt close to their clients and more than two thirds were treating their client at the time of death (Dransart et al., 2015). While 50% of professionals sought support following client suicide, 83.6% reported feeling sufficiently supported. Finally, highly impacted professionals felt close to their deceased client, however, only a small percentage were caring for them at the

time of their death (17.6%). They also felt less supported and received less theoretical suicide education and clinical training than professionals in other subgroups.

These findings highlight the dynamic relationship between risk and protective factors across subgroups. For example, emotional closeness may be considered a risk factor for increased distress, but its degree of risk appears determined by a combination of protective factors (e.g., the level of support received following client suicide, working in institutions). Professionals who feel close to their clients but who receive sufficient support are moderately impacted by their client's suicide, compared to highly impacted professionals who feel close to their client and who receive insufficient support (Dransart et al., 2015). While literature on the impacts of client suicide typically highlights demographic characteristics that render professionals vulnerable, it appears to be the interplay of risk and protective factors that determines the level of distress experienced (Dransart et al., 2015). The highly impacted subgroup comprised the smallest percentage of psychiatrists (11.8%), but the highest percentage of nurses (64.7%) and professionals working in institutional settings (such as hospitals or government run services) (92.2%) (Dransart et al., 2015). Thus, findings suggest that different treatment contexts for client engagement may influence practitioners' stress response following client suicide. Below details several contextual variables that have been associated with increased distress following client suicide. They include, treatment context, differences between disciplines, training and support, and attitudes to suicide preventability.

Treatment Context

Differences in emotional impacts have been documented across settings. While individuals seeking mental health care might approach a range of community services, only comparisons between private practice and institutional care are considered for the purposes of this thesis. This is based on the fact that these settings are relevant to mental health

professionals specifically. A study by Gulfi et al. (2010) investigated the impact of client suicide on mental health professionals and social workers across private practice and institutional settings. Their findings demonstrated that while most psychologists felt responsible for client suicide, those working in private practice tended to feel guiltier than those working in institutions. Gulfi et al. argued that therapists working in private settings typically work with their clients for longer periods of time and feel closer to them, causing increased feelings of responsibility and distress. Finlayson and Simmonds (2018) findings are comparable in that heightened feelings of responsibility led to greater emotional and professional impacts among both psychologists working in private and institutional settings. These results might suggest that the nature of the therapeutic relationship, rather than the treatment context, better predicts distress reactions among mental health professionals.

Practitioners working in teams also tend to have better access to varied types of support than those working in private practice, which may help moderate their distress following a client suicide (Gulfi et al., 2010). However, Hodgkinson (1987) argues that there may be an added responsibility for practitioners working in teams, namely those working in inpatient psychiatric units, to support colleagues while simultaneously managing their own grief. This was also addressed by Gafford (2008), who argues that group therapists have additional demands of supporting bereaved group members, than those who work one-one-one with outpatients. Interestingly, practitioners working in institutional settings became more interested in the phenomenon of suicide following a client suicide, whereas practitioners working in private practice typically refused to work with suicidal patients subsequent to experiencing a client suicide (Gulfi et al., 2010).

Differences Between Disciplines

Recent studies on the effects of client suicide on mental health professionals typically focuses on psychologists and psychiatrists, however, in the United States most clients seeking mental health support receive services from other types of professionals (Sherba et al., 2018). Counsellors, social workers, and primary care practitioners are among the professionals who provide care for suicidal clients and, thus, experience grief following a client suicide. Counsellors experienced profound distress comparable to psychologists following a client suicide, and experienced greater burnout and compassion fatigue than did professionals who held other positions (Sherba et al., 2018). Additionally, loss of self-esteem, guilt, intrusive thoughts, and intensified dreams were commonly reported among counsellors and trainees following a client suicide (McAdams & Foster, 2000).

Mental health social workers are also among the professionals that encounter client suicide (Ting et al., 2006). Additionally, they reported feeling anger towards the system and macro-level structures due to the barriers in providing sufficient help to suicidal clients (Ting et al., 2006). While psychologists have reported feelings of anger towards the media and administrative efforts (Darden & Rutter, 2011), few studies report on their feelings towards macro-level processes that may have been implicated in the death of a client (e.g., declined hospital admissions).

Client suicide is an incredibly painful process for mental health professionals, particularly those still in training (Knox et al., 2006). McAdams and Foster (1999) conducted a study which estimated the frequency and impact of client suicide on counsellors. Of the 23.7% of participants who had experienced a client suicide, one quarter were trainee counsellors at the time (McAdams & Foster, 2000). Findings demonstrated that trainees experienced greater personal impacts than their professional colleagues (e.g., increased guilt,

reduced self-esteem, intrusive thoughts of suicide), however, no differences were observed for professional impacts. These findings were comparable with trainee psychologists who exhibited stress levels significantly higher than those found among professional psychologists (Kleespies et al., 1993). Moreover, trainees experienced acute reactions lasting from one week to two months and were characterised by depression, intrusive thoughts and memories, and feelings including shock, disbelief, sadness, self-blame, guilt, and failure (Kleepsies et al., 1993). This distress may have resulted from trainees relying on their personal qualities during therapy due to their limited familiarity with therapeutic techniques (Foster & McAdams, 1999), and/or having less experience disentangling personal failure from the limitations of the therapeutic process (Brown, 1987). Thus, while trainees may remove themselves from the burden of responsibility while under supervision, research indicates that they may be equally affected, if not more affected than their professional colleagues following client suicide (Foster & McAdams, 1999). Additionally, this has implications for supervisors who are supervising a trainee or a less experienced colleague should client suicide occur.

Training and Support

It is inevitable that mental health professionals will care for clients who present at risk of suicide throughout their career. However, clinicians generally reported feeling underprepared for the eventuality of client suicide (Finlayson & Simmonds, 2018; Grad & Michel, 2004; Knox et al., 2006; Sherba et al., 2018). This is not surprisingly given that formal training on suicide-specific behaviour and post-suicide processes does not match the complexities faced by mental health professionals in practice (Murphy et al., 2019; Sanders et al., 2008; Trimble et al., 2000). In fact, studies that investigated training on risk assessment and management in graduate programmes report that less than half of these programmes

include formal training (Bongar & Harmatz, 1991; Dexter-Mazza & Freeman, 2003; Reeves et al., 2004). This training was also considered of low quality by intern psychologists (Ellis & Dickey, 1998), and is associated with higher levels of distress among psychologists following a client suicide (Gulfi et al., 2010). Trainees and novice therapists especially, have greater optimism regarding the therapeutic process and may overestimate the influence they have on their clients (Ellis & Patel, 2012). Brown (1987) argues that to support trainees in separating their sense of personal responsibility from the limitations of the therapeutic process, training programmes must include both emotional support and an intellectual context for comprehending the experience of client suicide. Cramer et al. (2013) acknowledges this gap in graduate training, and proposes a framework for doctoral programmes that include core competencies for the assessment of suicide risk. However, training on risk assessment should also be balanced with education on the statistical and methodological limitations of risk assessment and prediction. Finlayson and Simmonds (2018) argues that acknowledging the limitations to prediction might help assist psychologists in reducing their sense of self-blame and professional responsibility following a client suicide (Finlayson & Simmonds, 2018).

Insufficient preparation for the possibility of client suicide (Ellis & Dickey, 1998), including associated personal and professional impacts has been linked to greater distress among professionals (Dewar et al., 2000; Foley & Kelly, 2007; Sanders et al., 2008; Schmidt, 2016). Sherba et al. (2018) found that less than half of their participants received training on post-suicide management. Of these participants most (98.1%) found this type of training helpful. However, only approximately one-third (36.0%) of participants reported that their professional training included education on the effects of client suicide on clinicians. It is important to educate practitioners on post-suicide procedures (e.g., coronial inquiry, clinical

review, potential media and legal repercussions), as these have been found to further compound emotional difficulties experienced by the professional (Darden & Rutter, 2011). For example, Murphy et al. (2019) found that mental health professionals needed supports additional to assessment training that included management of potential legal complications/presenting in court.

The sensitive and impactful nature of the occurrence of client suicide demands immediate support, however, mental health professionals argue that postvention care is inadequate (Finlayson & Simmonds, 2018; Murphy et al., 2019; Sherba et al., 2018; Ting et al., 2006). Talking to colleagues over supervisors was considered the most effective coping response following a client suicide (Finlayson & Simmonds, 2018). Professionals tended to express discontent with how their supervisors responded (Finlayson & Simmonds, 2018; Sherba et al., 2018) which led to further stress (Kleespies et al., 1993). For example, trainees reported that they were being notified of their client's suicide by their supervisors via voicemail or in the lunchroom (Knox et al., 2006). Others reported that their supervisors were preoccupied with legal repercussions, or were robotic in their support (Knox et al., 2006). Given that client suicide is often an extraordinarily distressing process for professionals and trainees (Knox et al., 2006), supervisors should ensure they abate further stress and isolation by providing immediate and supportive responses, in appropriate environments (Kleespies et al., 1993).

This might be particularly challenging for supervisors who already have a considerable case load, supervise multiple professionals with varying experience and needs, and who may also be untrained on managing post-suicide processes. Additionally, compassion fatigue and burnout are commonly reported by mental health professionals which might also impact on the quality of the supervision provided (Johnson et al., 2020).

Furthermore, a study by Ross et al. (2016) estimated the impacts on mental health professionals in managing suicidal behaviour in both inpatient and community settings. They evidenced higher levels of exhaustion, distress, and burnout among professionals working in outpatient settings compared with those who worked in inpatient settings. They argue that this is perhaps due to the less controllable nature of risk in the community. Ross et al. also identified that those who received training in stress management and personal care reported less distress than those who did not. Thus, they argue that training that focuses on the burden of responsibility, such as prevention, without supporting the emotional toll of working with suicidal clients, may be counterproductive. The additional burden carried by mental health professionals on behalf of the community may further compound the stress experienced (Pridmore et al., 2006).

Attitudes Toward Suicide Preventability

Attitudes towards suicide preventability is an important factor in the development of suicide-related distress. Research examining professional reactions following a client suicide suggests that beliefs around suicide prevention may influence the amount of distress experienced. For example, Finlayson and Simmonds (2018) investigated the personal attitudes of psychologists toward client suicide to understand how felt responsibility, predictability, and preventability may influence their emotional responses. Finlayson and Simmonds found fairly large relationships between felt responsibility and feelings of guilt, shame, and incompetence. Additionally, relationships between responsibility with distress, shock, and confusion were medium strength; however, greater shock and confusion was associated with lower suicide predictability. In contrast, low ratings of preventability were associated with less distress as psychologists tended to view the client suicide as an unavoidable event. Attitudes have been shown to vary between practitioner types; for

example, counselling psychologists tended to believe that the client is responsible for their suicide and not the therapist, however, clinical psychologists believe this less strongly (Ting et al., 2006). Prevention attitudes of supervisors and colleagues may further impact on the professional who is bereaved by suicide, particularly if the supervisor completing the clinical review believes the professional could have influenced the outcome of the suicide (Darden & Rutter, 2011; Ting et al., 2006).

A study by Ross et al. (2016) examined mental health professionals' attitudes and opinions about managing suicidal clients, and assessed the impacts of this role including support and training needs. The authors developed and validated an instrument for measuring these attitudes with this study's sample. Findings indicate that mental health professionals tended to believe that suicide prevention is one of their main responsibilities and that there are actions that can always prevent suicide. However, Finlayson and Simmonds (2018) suggest that psychologists should be aware of their own personal and professional limitations regarding responsibility for client suicide, and should accept that suicide as a possible outcome, is important for coping with loss. Accepting that suicide may be an unavoidable event, however, means contradicting the inherent belief that all suicides are preventable (Walter & Pridmore, 2012a).

Finally, higher levels of distress among professionals following a client suicide are reported when the suicide is unpredicted, considered preventable, or when it contradicts risk assessment findings (Finlayson & Simmonds, 2018). The limitations of suicide prediction and the fact that treatments rarely address suicide exclusively, prevent mental health professionals from being able to accurately predict and prevent all suicide cases. The search for effective risk markers and prevention should continue to be undertaken, however, public views on prevention without consideration for the fact that suicide is near impossible to

predict, has serious implications for mental health professionals. Public spectators and policy makers primarily wish to prevent suicide (Pridmore et al., 2006). Naturally, this is the fundamental goal, however, a common misconception is that with greater effort in risk assessment and prediction, *all* suicides can be prevented. Despite increasing research and efforts in prevention, suicide base rates are still relatively stable each year resulting in mental health professionals attracting public criticism. Moreover, such criticism weakens people's trust in the mental health system and of interventions available to suicidal people (Pridmore et al., 2006). In fact, Eagles et al. (2001) argue that such expectations of suicide prediction and prevention may contribute to the distress experienced by mental health professionals following client suicide. Linke et al. (2002) examined mental health professionals' support needs following client suicide, and found that many professionals considered an attitudinal change to better reflect the difficulty of suicide prevention was necessary. This may also help reduce the stigma and blame experienced by those who encounter client suicide.

Stigma and Blame

The stigma and blame that is often felt by families following the suicide of a loved one, is also experienced by the mental health professional following client suicide (Ellis & Patel, 2012). Consequently, professionals experience feelings of isolation which are reported as obstacles to their recovery following a client suicide (Darden & Rutter, 2011). Other obstacles include prospects of legal action (Darden & Rutter, 2011), and perceived responsibility immediately following the suicide (Finlayson & Simmonds, 2018). Additionally, Sherba et al. (2018) found that perceived liability increases feelings of distress among mental health practitioners, as does receiving limited compassion or concern from supervisors. Interestingly, the professionals in Darden and Rutter's (2011) study felt less responsible for their client's suicide as they argued that clients are in control of their lives.

This is a marked contrast to most research findings on this topic, where feelings of responsibility and self-blame are predominantly experienced (Gulfi et al., 2010). It appears that these attitudes toward client autonomy may protect professionals from feelings of self-blame and guilt, and thus, moderate distress following a client suicide.

This chapter focused on the emotional, psychological, and systemic impacts experienced by mental health professionals affected by client suicide. It is clear from reviewing the literature that higher levels of distress are commonly reported when support structures are insufficient, there is greater perceived responsibility, a strong therapeutic relationship with the client, and when less is known about suicide theory compared to other professionals. Those less impacted by client suicide reported stronger support networks, greater anticipation of suicide, and emotional distance to (or no contact with) their client at the time of the suicide. The literature was varied regarding the relationship between treatment context and distress following client suicide. Those working in private practice tended to report higher levels of guilt, however, Dransart (2015) found that the majority of professionals who reported higher impacts were working in institutional settings. In terms of training and support, it was consistently highlighted that training on suicide and post-suicide processes across graduate programmes is insufficient; this is associated with higher distress levels following client suicide. Additionally, attitudes towards suicide preventability appear to be related to the development of suicide-related distress. For example, those who considered all suicide's preventable were more likely to experience distress following client suicide than those who considered the limitations in suicide risk assessment and prevention.

Finally, stigma and blame were also found to contribute to increased distress reactions. Client suicide can be an extremely traumatic event for mental health professionals. Thus, developing responsive organisational and support systems is critical in ensuring the

wellbeing of mental health professionals following client suicide (Sherba et al., 2018). In order to do this effectively, a theoretical framework has been considered for this study and this is discussed in the chapter below.

CHAPTER 3: Theoretical Framework

Chapter three details the theoretical framework used in this research project. This is a novel approach to investigating the impact of client suicide, being the first study to apply theory and test relevant hypotheses in this context. This chapter begins by describing the importance of testing theory in this area, followed by an overview of different types of theory more broadly. Next, a discussion on regret theory specifically will be presented, including why its applicable in this context. Finally, the chapter ends with an overview of the two regret theories that will be tested: specifically, the Decision-Justification Theory of Regret, and the Intention-Behaviour Consistency Pathway Model of Regret.

Theorising the Impacts of Client Suicide

In considering the literature presented in chapters one and two, it is clear that there is great variability in the responses reported by mental health professionals following client suicide. Therefore, in order to develop interventions that are useful for bereaved professionals, it is important to theoretically examine why some professionals have greater distress responses than others. In suicide risk assessment and prevention, the mental health professional is required to make important decisions. These decisions need to be well-supported and defensible. Theory from regret literature commonly entails a 'decision' component, arguing that choice-making may be a deeply emotional experience (Connolly & Zeelenberg, 2002). This component rendered regret theory more appropriate over other theories relating to grief and bereavement.

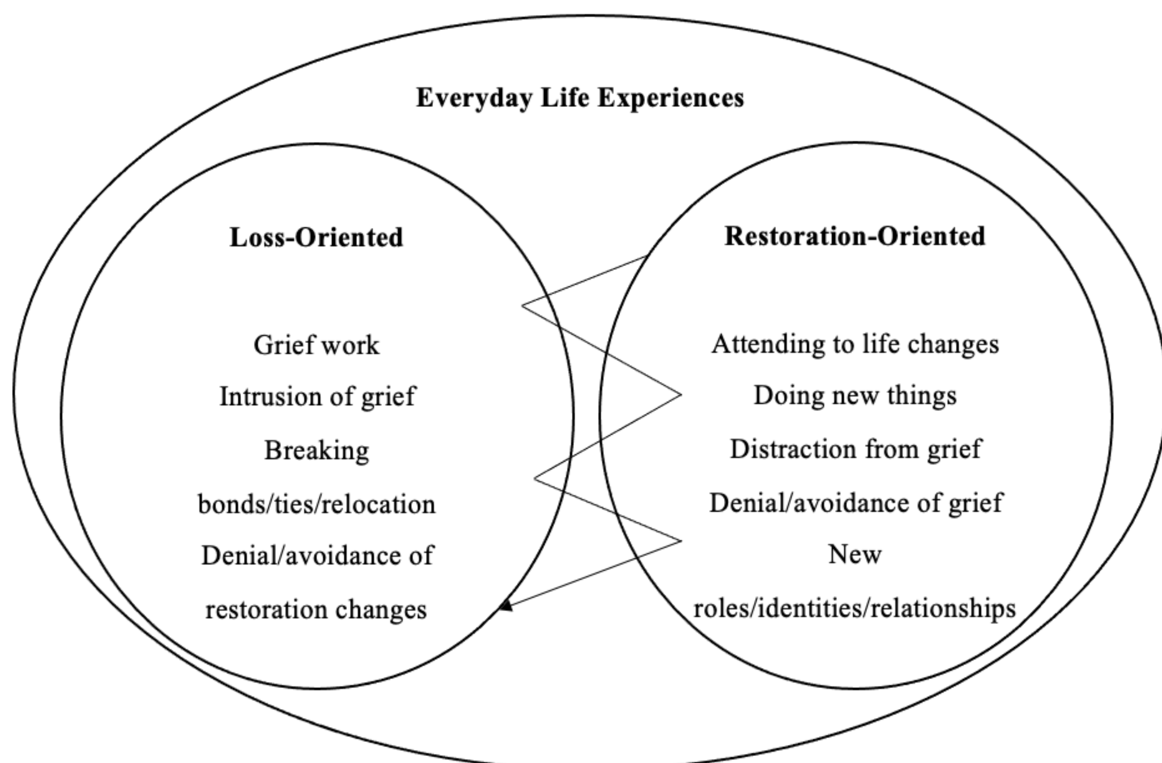
Theories of Grief and Bereavement

Several theories relating to grief include key processes such as breaking ties with the deceased, acceptance, and adjustment. For example, Stroebe and Schut's (1999) 'Dual Process Model of Coping with Bereavement' entails that the bereaved individual shifts

between loss-orientation, and restoration-orientation while moving through loss (please refer to figure one). It is proposed that individuals who struggle with the loss of their loved one will focus on life-restoration plans as an act of avoidance. While life-restoration behaviours may involve activities such as trying new hobbies, they also involve unhelpful behaviours such as denial and distraction. Stroebe and Schut argue that too much activity in either orientation may cause harm as they each act as an avoidance strategy from the other.

Figure 1

Stroebe and Schut's Dual Process Model of Coping with Bereavement



Additionally, Worden's (1996) model of bereavement, 'Tasks of Mourning', outlines four key tasks that describe the mourning process. These include, acceptance of the loss, working through the grief, adjusting to the environment, and emotionally relocating the

deceased person and moving on from the loss. Worden argues that people will likely move backwards and forwards between tasks which is in of itself, a feature of grief. Kubler-Ross and Kessler (2005) also identified that healing from grief is not linear, and developed the 'Five Stages of Grief' model that is widely recognised in pop culture and across academic literature. The model identifies denial, anger, bargaining, depression, and acceptance as important stages in managing the experience of loss.

These theories of bereavement and grief capture several affective and cognitive stages relevant to the processing of grief and loss. They also highlight adjustment and restoration as being important in moving through loss. However, these theories imply close personal relationships between the bereaved and the deceased, which may not be totally relevant for this present study. While strong relationships are built between mental health professionals and clients, the professional has other roles within this relationship that include the assessment of risk, the implementation of appropriate interventions, stakeholder liaison, and case management. In considering the importance of clinical decision making in the context of suicide risk assessment and prevention, theory that focused on decision-making was prioritised. As a result, two theories from regret literature were tested in this to better understand the potential mechanisms relating to the variability in the distress responses reported.

Theories of Regret

The below section begins by defining regret as a general framework, before presenting a brief overview of the evolution of regret theories. Finally, the two regret theories selected for this study, the Decision-Justification Theory of Regret, and the Intention-Behaviour Consistency Pathway Model of Regret, will be discussed.

A widely recognised definition of regret was articulated by Landman (1987) who stated that regret is;

> *"a more or less painful cognitive/affective state of feeling sorry for losses, transgressions, shortcomings or mistakes. The regretted matters may have been sins of commission as well as sins of omission; they may range from the entirely voluntary to the accidental; they may have been actually executed deeds or entirely mental ones; they may have been committed by oneself or by another person or group; they may be moral or legal transgression or morally and legally neutral; and the regretted matters may have occurred in the past, the present or the future" (pg. 153).*

This definition highlights the breadth of regret as a concept, and highlights both affective and higher-order cognitive processes (Connolly & Zeelenberg, 2002; Landman, 1987). It may relate to one's actions or inactions, including the actions or inactions of others; and it can be experienced for past, present, and anticipated future events. However, a key component missing in Landman's definition is 'constitutive thought'. According to Williams (1981, as cited in McQueen, 2017), the constitutive thought of regret evaluates how much better an outcome could have been had another decision been made. Thus, regret is a counterfactual emotion involving one's consideration of alternative possibilities, and thus, how a stressful event or loss could have been avoided (Bagnoli, 2000) .

Theories on counterfactual thinking have also proposed consequences for the direction of the thought. For example, upward counterfactual thoughts involve thinking about ways in which the outcome could have been better and is associated with negative affect and regret. Conversely, downward counterfactual thoughts involve thinking about

ways in which the outcome could have been worse. Unsurprisingly, this is associated with positive affect. Thus, counterfactual thinking is a necessary component of regret involving the evaluation of choices made while comparing the influence of choices foregone (Zeelenberg & Pieters, 2007). An individual experiences regret when they believe that the current situation would have been better if they had behaved differently (Zeelenberg & Pieters, 2007). However, Bagnoli (2000) argues that counterfactual thinking alone is not enough to cause regret; they state that the individual must also value an unmaterialised possibility. Thus, the experience of regret depends not only on having available alternative options, but on the extent to which the options are valued (White, 2017). Additionally, individuals may also reflect on how the alternative unmaterialised actions of others could have led to more favourable outcomes (Bagnoli, 2000), suggesting that regret may also be experienced for others (Landman, 1987).

Making a decision can be an intensely emotional experience (Bechara & Damasio, 2005). It requires careful thought about available options, consequences each option might lead to, and their likelihood of occurrence (Connolly & Zeelenberg, 2002). These cognitive processes are often accompanied by strong emotional factors such as anxiety or fear, and expectations about how one is likely to feel. After the fact, one may experience emotions that are consistent or inconsistent with how one expected. Thus, regret is a fundamental emotion in decision-making (Pieters & Zeelenberg, 2005).

Early regret research was primarily based on behavioural economics, and focused on whether people regret their actions (commissions) more than their inactions (omissions). Though, Bechara and Damasio (2005) argue the importance of the role that emotions play in decision-making, and state that emotions are necessary in formulating rational decisions. A well-known study by Kahneman and Tversky (1982) asked students to assess the regret that

would be felt by two investors; both investors lose $1,200, however, one was as a result of buying a particular stock and the other as a result of holding on to the same stock. Ninety-two percent of the students guessed that the active buyer would experience more regret than the inactive holder. Interestingly, another study that examined retrospective regret found the opposite pattern, where participants tended to report greater regrets for inactions than actions (Gilovich & Medvec, 1995). Gilovich and Medvec (1994) argue that regret has a temporal quality where regretted actions are more painful in the short-term, inactions produce more regret over time. Thus, their Temporal Theory of Regret posits that actions produce a higher frequency of regret in the short term, but that inactions produce more regret over time (Gilovich & Medvec, 1994; 1995).

Additionally, Towers et al. (2016) tested the temporal theory of regret while focusing specifically on the intensity of regretted decisions. They found that contrary to Gilovich and Medvec's (1994) claim that regrettable inactions cause more intense regret, the effect of action/inaction was small and that greater regret intensity was associated with actions (Towers et al., 2016). Additionally, Towers et al. did not find evidence that inaction regret intensity increases over time. Inconsistencies in action/inaction regret may be accounted for by the notion that deviations from a person's normal behaviour will induce feelings of regret, rather than whether the behaviour was an action or inaction (Pieters & Zeelenberg, 2005). For example, someone who would normally choose to act, will feel more regret if a bad outcome was the result of an inaction. In attempts to resolve the regret-producing debate, Zeelenberg and Connolly (2002) propose a model of regret called The Decision-Justification Theory.

Decision-Justification Theory of Regret

The Decision-Justification Theory of Regret (DJT) provides a way of understanding how multiple factors can impact on regret intensity through the justification process (Connolly & Zeelenberg, 2002). DJT considers two core components: 1) the realisation that our outcome compares poorly to another possible alternative (known as an upward counterfactual), and 2) feeling self-blame for making a poor decision. The experience of regret is a combination of these two components; regretting that the outcome is poorer than some standard, and that the decision made, in retrospect, is unjustified. Of course, most decisions that result in bad outcomes generate a mixture of these regret components; sometimes a decision that felt well justified at the time, appears unjustified later (Connolly & Zeelenberg, 2002). Research on the relationship between justification and regret has shown that stronger decision justifications may reduce levels of regret (Connolly & Reb, 2012; Zeelenberg et al., 2002).

However, Towers (2009) outlines several limitations regarding the theory's predictive utility. First, Towers acknowledges that there is little research on the relationship between emotion and subsequent decision-making which might neglect the impact of feeling-linked intuitions. Second, little is known about individual variation in justification use and what even constitutes a strong justification. Pieters and Zeelenberg (2005) aimed to understand when justifications might be particularly important and found that behaviours that deviate from a person's original intention, require greater justification to reduce the experience of regret. They argue that intention-behaviour inconsistencies are harder to justify which consequently lead to more regret (Connolly & Zeelenberg, 2002; Pieters & Zeelenberg, 2005). Despite the foregoing limitations, the decision-justification theory of regret is relevant among mental health professionals who experience client suicide. First, this theory

highlights that regret might not result from a particular decision, per se; rather, it argues that strong justifications of decisions made are necessary to attenuate the level or regret experienced. This delineation is critical for the present study due to the fact that this study is not determining whether intervention decisions made by professionals were right or wrong, nor do we want to imply that the decisions made caused the client suicide. Mental health professionals routinely evaluate their client-care decisions and often need to defend these in post-suicide enquiry; the 'justification' component of the DJT was therefore of high importance in theorising the experience of client suicide.

Additionally, the DJT includes 'self-blame' as a key component of decision-related regret. Self-blame is a cognitive process where an individual attributes the occurrence of a stressful event to oneself. The direction of blame often has implications for individuals' emotions and behaviours during and following stressful situations. For example, professionals who blamed themselves for the client suicide experienced greater distress, sleep disturbance, and had more self-doubt in their professional competencies than those did not (Chemtob et al., 1988; Dransart et al., 2014, 2015; Finlayson & Simmonds, 2018; Gulfi et al., 2010; Rothes et al., 2013). Thus, self-blame is a common reaction to client suicide among mental health professionals, especially since their position carries public, professional, and personal expectations about achieving positive client outcomes.

Finally, a study by Connolly et al. (1997) found that regret may be experienced independently to self-blame. Connolly et al. examined how students expected to feel if after changing university courses, they subsequently learned that the course they moved into was better than, worse than, or the same as the course they had left. The sample was divided where a proportion of students made their own decision to swap courses, and others were computer reassigned. It was anticipated that students who made their own decision expected

to feel more regret if the outcome was bad compared with students who were automatically reassigned. Interestingly, the reassigned students still experienced regret despite a lack of decision-responsibility. This suggests that outcome regret, irrespective of decision-regret (i.e., self-blame), may still be experienced.

Intention-Behaviour Consistency and Regret

Approximately two decades later, Pieters and Zeelenberg (2005) ran a longitudinal study evaluating the level of independence between two types of regret; decision-process and outcome regret. In addition to this, they investigated the consequences of acting against one's prior intentions and provided unique insights on the role of decision-process quality. Consequently, they developed a model that extends on the DJT by acknowledging that through intention-behaviour consistency, individuals have various intentions which may lead to regret if deviated from (Towers, 2009). Intention-behaviour inconsistency is defined as the failure to implement one's intended behaviour (Connolly & Reb, 2012; Connolly & Zeelenberg, 2002; Pieters & Zeelenberg, 2005). Greater inconsistencies are considered less justifiable and consequently amplify regret intensity (Connolly & Zeelenberg, 2002). However, intentions do not always forecast actual performed behaviours (Chandon et al., 2005) which may increase an individual's likelihood of experiencing regret.

Pieters and Zeelenberg (2005) performed a longitudinal study containing three experiments with approximately 2000 participants. Each study examined intention-behaviour consistency and various features of the decision-process and regret; the first experiment tested voting behaviours and whether different types of intention-behaviour inconsistencies can induce the experience of regret. The different types of inconsistencies relate to the action/inaction theory of regret; a person can express inconsistency at the act level (voting or not), and on the choice level (the specific party). On the act level, one is inconsistent if they

intend to vote and do not, or by intending not to vote but do. Rather than testing whether action or inaction is more regret inducing, Pieters and Zeelenberg compared these behaviours with the participants' original intent. Results indicated that intention-behaviour inconsistencies are regret inducing, especially for those who intended to vote but did not (an inconsistency associated with an inaction). At the choice level, people are inconsistent if they intend to vote for party 'x' but decided to change their vote to party 'y'. Results indicated that people who voted for a different party than originally intended had higher levels of regret than those whose behaviour was consistent with their intent (Pieters & Zeelenberg, 2005).

Generally, people tend to make decisions that are not always consistent with their original intentions but this does not mean that regret is an inevitable outcome. Pieters and Zeelenberg (2005) propose a mediating variable called 'decision-process quality'. Decision-process quality refers to the process of formulating a decision irrespective of the outcome. For example, one might gather as much information as possible and evaluate alternative resolutions before making a decision. However, uncertainties are a natural part of choice-making and a high-quality decision process may still result in a poor outcome (and vice versa) (Ratner & Herbst, 2005). Pieters and Zeelenberg found that when the decision process is judged to be of high quality, despite an intention-behaviour inconsistency, the experience of regret may be reduced. In fact, they argue that the inconsistency should lead to *less* regret, rather than more regret, when the judged decision quality is high. The presence of a strong justification(s) may influence an individual's course of intended action, and this would likely signal a high decision-process quality (Pieters & Zeelenberg, 2005). Their second and third experiments in the series test this mediation model.

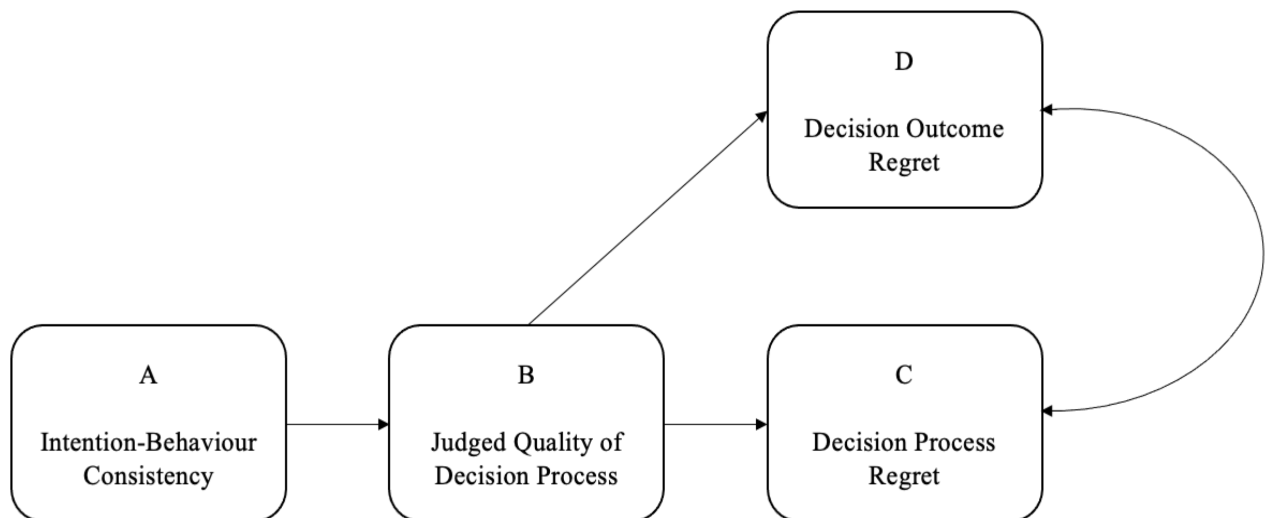
The second experiment randomly assigned participants to one of three groups relating to weak, medium, and strong justification conditions. Each group read a description involving two people (Joop and Richard) who made various purchasing decisions. The strength of justifications presented in each description was determined by the group condition it was designed for. Participants were asked to indicate whether Joop or Richard made the most sensible decision and who they expected to feel the most regret. Additionally, a justification for a decision was manipulated in one of the scenarios presented to participants which highlighted an intention-behaviour inconsistency. Results indicated that the manipulation was successful, and participants in the 'strong' justification group tended to agree that Richard (who demonstrated the intention-behaviour inconsistency in the manipulated scenario), made the most sensible decision overall. This finding suggests that that justifications for inconsistency influence the experience of regret following an unfavourable outcome via their impact on the judged quality of the decision process. The inconsistency effect was also found to be associated with the emotion of regret, and not disappointment.

Finally, Pieters and Zeelenberg (2005) tested whether regret about the decision process (decision-process regret) is independent from regret for an outcome (outcome-regret), while treating judged decision process quality as the mediator. Findings indicated that the decision process quality was higher for intention-behaviour inconsistency than for consistency, which in turn, significantly reduced decision-regret. Thus, it would seem that increased justifications for inconsistencies reduce the experience of decision-process regret better than intention-behaviour consistency (which do not depend on greater justifications). In fact, low levels of decision process quality led to greater regret irrespective of whether the behaviour was consistent or not. Additionally, decision-process quality significantly

mediated between intention-behaviour consistency and decision regret but not outcome regret. Below is Pieters and Zeelenberg's (2005) mediation model that informed two of the present study's hypotheses;

Figure 2

Path Analysis of Intention-Behaviour Consistency on Process and Outcome Regret



This model has important implications for the Temporal Theory of Regret. Pieters and Zeelenberg (2005) argue that an action or inaction may only be regretted if the choice deviates from a person's norm; however, if the deviation can be supported by a high-quality decision process, then regret levels may be attenuated. If the behaviour is not supported by a high-quality decision process, then high levels of regret may be experienced. Additionally, there may be different behavioural implications that are specific to the types of regret identified. For example, an individual that experiences outcome regret might try to reverse the negative outcomes of their decision or try to reduce the likelihood of reoccurrence through future decision-making (Pieters & Zeelenberg, 2005). Whereas an individual that

experiences decision-process regret may attempt to justify their prior decision by searching for mitigating circumstances. They may also increase decision justifiability in the future through a well-informed decision process (e.g., evaluating possible decision errors and alternative choices against anticipated regret), even if the outcome remains unchanged (Simonson, 1992).

In summary, the current literature addressing the impacts of client suicide on psychologists is largely descriptive and atheoretical. While regret theories have not yet been applied specifically to psychologist-decision making, there are several reasons why these theories may be relevant; mental health professionals must make a range of decisions relating to client assessment results, diagnoses, and treatment; including client management and administration. In the event of an unfavourable client outcome (such as a client suicide) professionals may blame themselves and wished they made different decisions (Zeelenberg et al., 2002). Thus, the intention-behaviour consistency model of regret may be important for psychologists who have experienced a client suicide, due to its focus on the decision-process (rather than the decision itself) as a factor relating to regret.

Additionally, the role of the psychologist is grounded by professional supervision and critical reflective processes. Professional supervision is a frequent developmental process that provides an opportunity for the psychologist supervisee and their supervisor to critically reflect on work practice. Reflective practice entails conscious and critical reflection in which the professional questions their comprehension of the situation and is considered a pivotal aspect of psychological therapies (Sheikh et al., 2007). Through critical reflection, supervisees are able to evaluate their work and develop through a variety of methods including teaching, training, role-play, skills development, challenge, and feedback (Carroll, 2010). Carroll and Gilbert (2005) argue that the heart of supervision is 'learning' which

increases the efficacy of client assessment and intervention. For example, through reflective practice one might decide to make adjustments to their approach to improve client outcomes. In addition to being reflective about one's practice, psychologists may be expected to defend their intervention decisions following a client suicide. Critical analysis of one's decisions might render psychologists particularly vulnerable to experiencing decision-process regret. Thus, the present study focuses on the decision-process regret component of Pieter and Zeelenberg's (2005) model.

Finally, the experience of regret has been associated with both personal and professional implications for healthcare professionals working in a range of health settings. Courvoisier et al. (2013) argues that regret is an unavoidable experience in clinical practice where decisions are frequently made. Regret may lead to loss of confidence in decision making and self-esteem which can negatively impact task performance (Courvoisier et al., 2011). Moreover, health professionals experiencing regret also report rumination, concentration difficulties, and sleep disturbance which may lead to more clinical errors, absenteeism, and high employment turnover which has financial implications at the institutional level (Courvoisier et al., 2013; Lavoie-Tremblay et al., 2008). Additionally, physicians experiencing regret felt that assessing support from close colleagues would jeopardise their professional creditability (Christensen et al., 1992). Thus, understanding regret may be an important theoretical pursuit, not only for regret's influence on future decision making (Connolly & Zeelenberg, 2002; Pieters & Zeelenberg, 2005; Zeelenberg, 1999; Zeelenbeg & Pieters, 2007), but for the personal, professional, and institutional implications that may arise from its experience (Courvoisier et al., 2011). The measurement of regret in this research will be guided by the Decision-Justification Theory of Regret, and the Decision Process component of the Intention-Behaviour Consistency model. These

models do not attempt to explain whether particular decisions are responsible for the outcomes leading to regret. Rather, they explain how the process of forming and justifying decisions can influence the experience of regret.

Research Project Rationale

The emotional and professional impacts of a client suicide on mental health professionals highlight the need for their experiences to be acknowledged in contemporary psychology (Finlayson & Simmonds, 2018). While these impacts have been investigated for approximately thirty years (Chemtob et al., 1988; Chemtob et al., 1989), literature remains scarce with most having been conducted in the United States, Northern Europe, and more recently in Australia. There is no known New Zealand literature investigating the effects of client suicide on psychologists. The present research acknowledges a gap in the literature by undertaking research on the experiences of psychologists who are bereaved by client suicide. Specifically, this study will investigate the experience of client suicide in the context of Decision-Regret; specifically the Decision-Justification Theory of Regret (Connolly & Zeelenberg, 2002), and the Intention-Behaviour Consistency Pathway model of regret (Pieters & Zeelenberg, 2005) which is a unique contribution to research on the impact of client suicide. With information derived from analyses, it may be possible to determine which factors lead to the strongest emotional responses following client suicide, and consequently target these factors to help improve recovery for psychologists.

The loss of a client suicide significantly challenges the coping resources of the mental health professional (Ellis & Patel, 2012). Empirical and anecdotal evidence suggests that clinicians, supervisors, and administrators should anticipate client suicide and prepare for its occurrence through advanced clinical training and development of appropriate policies and procedures (Ellis & Patel, 2012). While this may create internal conflict in light of the labour

to prevent suicide, such steps should be considered to improve the quality of mental health professional care.

Finally, stigma around competency and practitioner-blame compounds the experiences of mental health professionals who are affected by client suicide (Darden & Rutter, 2011). Evidence suggests that mental health professionals are typically untrained and under-supported in post-suicide processes (Finlayson & Simmonds, 2018; Sherba et al., 2018; Trimble et al., 2000). Additionally, Ross et al. (2016) argues that suicide prevention training needs to include a focus on professional self-care and stress management. Training that solely focuses on the burden of responsibility (e.g., prevention) without offering help in dealing with the emotional and professional consequences may be damaging to mental health professionals' wellbeing (Ross et al., 2016). Through exploratory and theoretical analyses, this research aims to identify important psychological factors relating to the impacts of client suicide. It is anticipated that findings will inform training and care processes that will help prepare and appropriately support the needs of our psychologists working with at-risk populations.

CHAPTER 4: Research Questions and Hypotheses

This chapter briefly describes the aims and research questions of this research project. Five exploratory questions, four hypotheses, and two qualitative questions are presented below.

Aims and research questions

The primary aim of this research is to examine the factors that lead some psychologists to experience more regret and distress than others following client suicide. The Decision-Justification Theory of regret will be tested to understand the effects of intervention justifications on regret following a client suicide. Additionally, the Intention-Behaviour Consistency pathway to Regret model will be tested to understand how judged decision quality may mediate the relationship between intention-behaviour inconsistency and experiences of decision-regret. The secondary aim is to explore relationships between regret, distress, and perceived responsibility, including how supports may help or hinder recovery following client suicide.

Exploratory questions

These are research questions that do not involve testing a specific hypothesis; variables selected have been informed by Decision-Regret theory and previous literature findings on the experience of client suicide.

Exploratory Question One

1. How much regret do psychologists feel following client suicide?

Exploratory Question Two

2. How much distress do psychologists feel following client suicide?

Exploratory Question Three

As identified by Towers (2009), little is known about regret's relationship with other emotions. While early definitions of regret include emotions such as sadness (e.g., Landman, 1987), modern regret definitions and theories tend to focus on the cognitive processes associated with regret (e.g., counterfactor thinking). Professional distress in response to client suicide has been commonly identified in the literature (Chemtob, Hamada, et al., 1988; Chemtob et al., 1989; Dransart et al., 2014; Finlayson & Simmonds, 2018; Gulfi et al., 2010), therefore, the relationship between regret and distress was measured.

3. What is the strength and the direction of the correlation between regret and distress following client suicide?

Exploratory Question Four

Like distress, self-blame is commonly reported among mental health professionals following client suicide (Dransart et al., 2015; Finlayson & Simmonds, 2018; Sherba et al., 2018). Therefore, we are interested in the relationship between regret and self-blame. While Connolly and Zeelenberg (2002) include 'self-blame' as a component in their decision-justification theory of regret, regret and self-blame may also be experienced independently. Landman (1987) argues that regret may be experienced when the outcome is out of one's control, however, self-blame is experienced when one considers the outcome their responsibility. Thus, one might experience regret without feeling self-blame. Additionally, regret can be experienced for others' unfavourable decisions, whereas self-blame is associated with one's own. Therefore, we are interested in the degree to which regret and self-blame are associated following client suicide.

4. What is the strength and the direction of the correlation between regret and self-blame following client suicide?

Exploratory Question Five

Several studies have reported that limited and/or inadequate supervisory support contributes to the distress experienced by mental health professionals following client suicide (Dransart et al., 2015; Gulfi et al., 2010). However, little is known about this impact on New Zealand psychologists. To contribute to the understanding of this relationship we will measure the association between supervisory support and distress.

5. What is the strength and the direction of the correlation between supervisory support and distress following client suicide?

Hypotheses

These hypotheses are based on Decision-Justification Theory (DJT) of Regret and the Behaviour-Intention Consistency Pathway to Regret model.

Hypothesis One

The theoretical assumption of DJT is that regret may be reduced through strong justifications (Connolly & Zeelenberg, 2002). In the context of client suicide where one is expected to evaluate and potentially defend their intervention decisions, one might experience regret for decisions made about client care. However, we expect that through strong intervention rationales, regret may be reduced.

1. Psychologists who can better justify their intervention decisions will experience less regret.

Hypothesis Two

Additionally, Pieters and Zeelenberg (2005) argue that intention-behaviour inconsistencies may also induce regret. In the context of mental health therapy, professionals are expected to devise and implement treatment plans with their clients. According to Pieters and Zeelenberg's theory, a professional might look back and feel regret in the event their actual intervention behaviours deviated from their initial plans. Thus, we expect that professionals who carried out intervention decisions that were inconsistent with their initial intervention plans will experience more regret.

2. Psychologists who performed intervention decisions that were inconsistent with their behaviour-intention will experience more regret.

Hypothesis Three

In Pieters and Zeelenberg's (2005) intention-behaviour model, 'decision-process quality' is the mediating variable between intention-behaviour consistency and regret; thus, in the context of this study we expect that professionals who judge the quality of their decision process highly will experience less regret, irrespective of whether their intervention behaviours are consistent with their initial intervention plans.

3. The relationship between intention-behaviour inconsistency and the amount of regret experienced will be mediated by the judged quality of the decision process.

Hypothesis Four

In articles addressing attitudes towards suicide prevention, it is not uncommon that mental health professionals are targets of blame when a client suicides (Pridmore et al., 2006; Walter & Pridmore, 2012a). This blame may stem from the idea that because professionals

engage clients in preventative interventions, then they must be responsible when they are not effective. Notwithstanding researcher and public bias on suicide prevention (Fawcett et al., 1990; Pridmore et al., 2006), mental health professionals may also hold these beliefs about their role to prevent death by suicide (Dransart et al., 2015; Finlayson & Simmonds, 2018). In fact, professionals who believe that suicide is preventable experience greater distress and burnout compared with those who believe that suicide is the client's choice (Darden & Rutter, 2011; Finlayson & Simmonds, 2018; Ross et al., 2016). Considering the beliefs around one's ability to influence outcomes may be necessary in ascertaining conditions under which regret manifests. While these attitudes have been investigated in the context of distress, we are interested in their impact on regret; if one believes that they are responsible for alternate possibilities not materialising, then we expect that more regret will be experienced.

4. Psychologists who believed they could have influenced the outcome of the client suicide, will experience more regret following the client suicide.

Qualitative Questions

These open questions seek to explore additional factors associated with the coping of client suicide among psychologists.

Qualitative Question One

Several studies have reported that supervisory support and training is largely insufficient (Ellis & Patel, 2012; Finlayson & Simmonds, 2018; Gulfi et al., 2010; Sherba et al., 2018) resulting in professionals feeling distressed and isolated (Gulfi et al., 2010). Thus, these questions prioritise the participants experience by providing the opportunity to share freely what was helpful and challenging following client suicide.

1. What do psychologists who have experienced client suicide identify as factors that support and/or hinder their coping?

Qualitative Question Two

This present study is structured similarly to Rothes et al. (2013) who investigated the experiences of Flemish psychiatrists who encountered client suicide. Their method included a range of survey items as well as open ended questions. Our final question took inspiration from Rothes et al. who asked psychiatrists what advice they would give to an inexperienced colleague on how to deal with a client suicide. Our question differs ever-so slightly and asks for advice to 'a colleague' irrespective of their experience level. This question is important in the sense that the participant has the opportunity to provide information about their reflections and learnings that may have developed with time.

2. What advice would psychologists who have experienced a client suicide offer to a colleague who has just experienced a client suicide?

CHAPTER 5: Methods

A retrospective cross-sectional online survey design was used to respond to this project's hypotheses and research questions. The following chapter provides a rationale for the methodology selected, a description of the method used, and examples of the study's questionnaire and structural equation models.

Brief Overview of Ontology and Epistemology

Researcher assumptions are an inevitable part of project development. Deciding that one is interested in understanding a particular experience assumes that people have these experiences (and that they can be reported). However, these assumptions are frequently taken for granted and their justifications overlooked, particularly in quantitative designs. While this current project is predominantly quantitative with the inclusion of a small supplementary content analysis, the researcher understands that these assumptions have implications for the types of analyses selected, and consequently, the findings reported (Carter & Little, 2007).

In determining this study's methodological position, the researcher's ontological and epistemological assumptions have been considered. Ontology refers to the nature and form of reality which is independent of any actual scientific knowledge. Instead, it considers what the world must be like for science to be possible (Bhaskar, 2008). Questions pertaining to ontology are concerned with the nature of world (Creswell, 2014), specifically what entities exist, what it means to exist, how entities can be structured, and how they are related to one another. On the other hand, epistemology refers to how the world can be investigated and what constitutes knowledge (Creswell, 2014). Questions pertaining to epistemology are concerned with what knowledge is, how it can be acquired, and the necessary and sufficient conditions for knowledge. While it might seem that ontology and epistemology are

concerned with different aspects of philosophy (the nature of reality and the nature of knowledge respectively), ontological assumptions about the world will either permit or dismiss different forms of knowledge as truth. Thus, the assumptions we make *about* the nature of the world, lay down assumptions about *how* we can investigate the world and objects within it. There are several epistemological stances that guide our research practices, however, this current research project is positioned by a critical realist epistemology.

Critical Realism

Critical realism is concerned with the nature of causation, agency, structure, and relations. However, unlike other meta-theoretical positions, it does not determine any particular approach of empirical investigation. Rather, it prioritises ontological reflexivity and investigative vigilance, allowing for flexible methods of explanation and interpretation. Critical realism is underpinned by ontological realism – the assertion that an external reality exists and operates independently of our own experiences. Distinguishing between the 'real' world and the 'observable' world, critical realism posits that unobservable structures can cause observable events. Many features of the world are not empirically verifiable or quantifiable, and may not answer to theory, language, numbers, or models. Thus, multiple modes of inference are permissible under this ontological position. Additionally, critical realists argue that knowledge about reality is historically, socially, and culturally situated. Therefore, the self is to be understood as a socially mediated process operating within complex systems (Ackroyd, 2005; Cruickshank, 2003). Phenomena may be suppressed within these systems and unable to manifest empirically for empirical measurement (Zachariadis et al., 2013). Thus, our ability to access varying types of knowledge ultimately depends on the sensitivity of our methods. Critical realism allows for a flexible scientific

approach under the condition that the researcher remains reflexive and critical of their practices.

Design

This research project predominantly utilises a quantitative method with a cross-sectional survey. However, the ‘compensation’ argument for mixed-methods methodologies (i.e., the weakness of one method may be supported by the use of another) lends support for a small, yet necessary, qualitative inclusion. Survey research does not capture unspecified information beyond the constructs of interest (Zachariadis et al., 2013), thus, drawing on critical realism’s position regarding multiple modes of investigation, three open-ended qualitative items were included in the survey.

Inclusion and Exclusion Criteria

A total of 338 participants completed the survey, however, 90 where excluded after after applying the pre-registered exclusion criteria. The inclusion criteria required participants to be psychologists living in New Zealand, Australia, Canada, United Kingdom, or the United States of America, who have experienced a client suicide. Please refer to the exclusion criteria below for more information;

1. Participants who answer “no” to the survey consent item will not be permitted to continue the survey.
2. Participants aged <18 will not be permitted to participate.
3. Participants who answer “no” to experiencing a client suicide will not be permitted to continue

It was important that this research project only included psychologists who had directly experienced a client suicide. The theoretical model selected refers specifically to

decisions made by the individual for their client who suicided. Consequently, those who selected "no" to this question were directed out of the survey.

4. Participants who do not select "psychologist" to the practitioner-type item will not be permitted to continue the survey.

There are many types of mental health professionals who work with at-risk clients; however, psychologists were selected based on the fact that they typically work with high-risk populations, are formally trained in risk assessment and preventative interventions, and spend longer periods of time with clients than do other types of mental health professionals. Additionally, this thesis is a psychology doctorate, therefore, the scope necessitates relevance to the field of psychology specifically. Respondents who indicated another practitioner-type were directed out of the study.

5. Participants who answer "other" to the demographic country item will not be permitted to continue the survey.

It was important to collect data from countries who have similar health systems, professional training, and were predominantly English-speaking. Thus, respondents who were not from New Zealand, Australia, Canada, United Kingdom, or United States of America were directed out of the study.

6. Participants who complete < 50% of the following items and scales will not be included in the analyses;
    i. Decision Regret Scale (5 items)
    ii. Decision-Justification Scale (2 items)
    iii. Self-Blame Scale (4 items)
    iv. Intention-Behaviour Consistency Scale (3 items)
    v. Decision Process Scale (4 items)

vi. Impact of Event Scale (22 items)

vii. Beliefs about Suicide Prevention Scale (5 items)

There was a total of 45 items across these scales where at least 23 items needed to be completed to meet the inclusion criteria (22.5 isn't a whole number). The Supervisory Support Scale (2 items) is not included in the criteria as this scale was only available to participants who had indicated that they received supervisory support.

Finally, researchers sometimes try to improve data quality by filtering out inattentive respondents by including an attention check item (Kung et al., 2018). This might include an innocuous question such as, "if you are paying attention, select strongly agree?" However, this was omitted for this study due to the fact that the sample is specific, and including an item not specifically pertaining to the experience of client suicide was considered insensitive given the focus of this study.

Recruitment Process

Psychologists were identified for recruitment via paid advertisements distributed on Facebook, LinkedIn, and by the following professional associations via email, group Facebook pages, and websites:

- The New Zealand Psychological Society
- The New Zealand College of Clinical Psychologists
- The Australian Psychological Society
- The Canadian Psychological Association

Targeting professional associations was prioritised initially due to the fact that only registered psychologists can attain association memberships. This meant that those who do

not meet the inclusion criteria (e.g., over 18 years old, psychologist), were less likely to access and engage with the survey. Additionally, most psychologists are affiliated with at least one professional association which would have increased our likelihood of meeting sample size requirements. However, each association had varying methods of research advertising which affected the study's exposure. For example, The New Zealand College of Clinical Psychology sent the survey link to an email list containing all members which consequently returned multiple responses; whereas The Australian Psychological Society advertised the research on their website resulting in the advertisement being reached only by those who interacted with that mode of communication. The paid recruitment advertisements on Facebook and LinkedIn also contained the survey link where the information sheet was provided before participants consented to participate.

Qualtrics was the online survey platform used to develop this project's survey (Qualtrics, 2020). Qualtrics was considered the most appropriate method for data collection given the fact that this methodology is predominantly quantitative, requires a large number of respondents, and reaches potential participants from a range of geographical locations. The survey information sheet contained helpline numbers and suggestions for support for participants who may have experienced discomfort completing the survey. Data collection commenced on Thursday 12th February 2020 and remained active for exactly twelve weeks. The preregistration stated that the intended data collection period would be six weeks initially, and would be extended if sample size requirements were not fulfilled. As such, the survey was closed on Thursday 7th May 2020.

Participants

In order to determine the appropriate sample size, Jackson's (2003) *N*:q rule of thumb was applied. This rule states that the minimum ratio of cases *(N)* to the number of model

parameters (q) is 10:1. This study used structural equation modelling (SEM) as the main method of analysis. Additionally, control models were used to control for carefully considered confounding variables (further information is provided in the 'Data Analysis' subsection). The control model for exploratory question three contained the most free parameters (63) to estimate. Therefore, Jackson's *N*:q rule of thumb (10 x 63, or *N* = 630) suggests that a sample of 630 participants was required to achieve statistical power.

Three hundred and thirty eight participants completed the survey, however, 90 were removed from the sample based on the exclusion criteria. This resulted in a final sample of 248 participants; just less than half of the intended target. Recruitment for this research project was difficult for several reasons. First, access to the participants was largely dependent on professional-body associations circulating the study's research advertisement. Liaising with these associations naturally took a while due to international time differences, and time spent negotiating how the advertisement would be shared. Additionally, some modes of advertising did not support the exposure necessary to reach a large number of psychologists. Data collection was extended in order to advertise the research on social media platforms such as Facebook and LinkedIn. With budgeting and time restraints, we could not extend data collected beyond twelve weeks (as documented on the pre-registration). Finally, data collection commenced in March 2020 which corresponded to the Covid-19 pandemic and first international lockdowns. It may be that this survey was not considered a priority among psychologists who were likely managing the stress of this pandemic along with supporting their clients (Feijt et al., 2020; Sampaio et al., 2021).

While the sample size was significantly less than preferred, it is considered acceptable for this study. A typical sample size is approximately 200 participants based on mean sample sizes in articles where SEM has been used (Kline, 2011). This present study's sample is still

more than the average sample size reported. Additionally, while a smaller sample will increase sampling error around regression estimates, this uncertainty is reflected in the resulting confidence intervals and p-values.

The final sample consisted of 248 psychologists, aged 18 years and over who were from New Zealand, Australia, Canada, the United Kingdom, and the United States of America. International recruitment was considered necessary for the following reasons: 1. A search investigating the suicide rates and number of registered of psychologists within New Zealand revealed that the suicide rate for 2018 was 685 deaths (Ministry of Health, 2018) and there are approximately 3713 registered psychologists in New Zealand (Rucklidge et al., 2018). Given New Zealand's small population of which only a small percentage are psychologists, recruiting hundreds of participants for this study from New Zealand alone would not be feasible; 2. Additionally, the expected low rate of responses in survey research is well-known (Fan & Yan, 2010), therefore, international recruitment was necessary. The countries selected were determined by the fact that they are predominantly English speaking, and psychologists from these locations are more likely to have undertaken similar registration training programmes. Additionally, the term 'psychologist' is legally protected among these countries which means that participants with similar practicing standards will be recruited, thus, reducing sampling error. Finally, suicide is a low frequency behaviour which means that few psychologists will actually encounter client suicide.

The socio-demographic information for participants is provided below in table 1. Overall, approximately half of the sample were from the United States of America (55.2%), and of 'White'/Caucasian ethnicities (21.0% and 24.2% respectively). Nearly two thirds of the sample identified as female (66.1%) and 2.4% preferred not to answer. The mean number of years of professional experience was 18.3 years, with nearly half spending approximately

2.1 years treating their client who suicided (104 participants, however, did not respond to this question). Additionally, the average length of time reported since the participants' client suicide was 7.9 years (23 participants did not answer this question).

Table 1

Participant Demographics and Characteristics

Variable		Total sample (n = 248)	%
Gender	Female	164	66.1
	Male	76	30.6
	Gender diverse	2	0.8
	Prefer not to answer	6	2.4
Country	New Zealand	65	26.2
	Australia	17	6.9
	Canada	12	4.8
	United States of America	137	55.2
	United Kingdom	17	6.9
Ethnicity	Māori	2	0.8
	NZ European	43	17.3
	Australian	3	1.2
	British	9	3.6
	Irish	2	0.8

	Canadian	2	0.8
	South African	1	0.4
	European	9	3.6
	Caucasian	60	24.2
	Indian	2	0.8
	Asian	1	0.4
	American	1	0.4
	African American	5	2.0
	Hispanic/Latin America	6	2.4
	Native American	1	0.4
	Other Indigenous	2	0.8
	Multiple Ethnicities	16	6.5
	Other	4	1.6
	Unidentified 'white'	52	21.0
			Mean (*M*)
Years of experience			18.3
Time spent with client (years)			2.1
Time since client suicide (years)			7.9

Open Science Practices

Preregistration is a growing practice among scientific communities. It includes openly sharing research aims, hypotheses, and analysis plans on an online repository to promote the transparency and reproducibility of research. Not only does it allow for collaboration within the scientific community, it also helps reduce publication bias, p-hacking (conducting several analyses and selectively reporting significant results), and HARKing (hypothesising after the results are known) (Gelman & Loken, 2013; Lakens, 2019; Wicherts et al., 2016; Yamada, 2018), which may increase confidence in psychological research. To support the goals of transparent and reproducible scientific practice, this study's quantitative component was preregistered at Open Science Framework (OSF: https://osf.io/psfrm/?view_only=79f4f55106d8497c977ed18b356cf670). Additionally, the raw quantitative data collected for this study including the code for analyses will be uploaded to OSF. This information was detailed on the participant's information sheet.

Ethical Considerations

This proposed research complies with the Massey University Code of Ethical Conduct for Research, Teaching, and Evaluations involving Human Participants (Revised Code; Massey University, 2017). A full application was approved by the Massey University Health Ethics Committee: Northern (MUHEC; NOR 19/58). Given the project's sample and risk of exposing particularly public client suicides, identifiability was one of the main concerns discussed in the committee meeting.

Confidentiality

Confidentiality was assured to all participants by separating their identifiable information from their survey responses. This was achieved through creating a link that directed participants to a separate survey, after indicating that they would like to receive a

summary of findings or enter the prize draw. Only the research team had access to identifiable data. A de-identified copy of the data set was made publicly available on Open Science Framework following research completion, and identifiable data was subsequently erased from the researcher's records.

Psychological Discomfort

At times, participants may experience some psychological discomfort when being asked about challenging experiences. The survey contained several items that asked about levels of distress experienced following client suicide, including any regret experienced. There may be a small possibility that participants experienced some discomfort when answering these items. The survey did not ask questions about 'what' any regrettable decisions were, or whether or not participants were deemed responsible. Clinical review involving the bereaved professional usually follows a client suicide, which includes a thorough investigation into the professional's notes, sessions, and risk assessment. The survey did not include questions of this nature, and it is highly unlikely that the survey questions caused more distress than previously experienced within clinical reviews. Nonetheless, to support participants who may have experienced any distress or discomfort, the information sheet included suggestions of familiar support people (e.g., supervisors, colleagues, psychologist board, or friends/family). These recommendations were informed by studies where bereaved professionals reported that these modes of support were particularly helpful. The information sheet also contained a list of contact details for relevant support services in each country included in the study. These contact details were provided again at the end of the survey.

Cultural Responsiveness

This project follows a mainstream research approach. As such, the design targeted a range of participants from New Zealand which include Māori, including participants from four international countries which include indigenous peoples. All research conducted under the auspices of Massey University must comply with the three principles underlying the tenets of Te Tiriti o Waitangi: partnership, participation, and protection.

The principle of partnership was ensured through the clear use of language and Te Reo greetings in advertisements that were distributed around New Zealand-based professional bodies and social media groups. Additionally, Māori specific support services were included on the information sheet. Participation of indigenous groups from other countries was also promoted by including indigenous specific support services. The principle of protection ensures that Māori participants will have access to the same benefits of this research as other participants. For example, Māori have the highest suicide rates in New Zealand (Ministry of Health, 2017), and this research may be impactful for Māori mental health professionals who may need more culturally informed support. This research seeks to understand support structures that are hindering and/or helping recovery after a client suicide and may therefore may allow us to develop more efficacious support systems for Māori mental health professionals in the future.

Reward for Participation and Summary of Findings

As a gift for participation, participants could choose to enter the prize draw to win one of 50 Amazon vouchers, valued at $20USD, and/or request a summary of research findings. Participants were directed to a separate survey to record their email address to ensure their survey responses remained anonymous. Following data collection, participants' email addresses were randomised in an Excel spreadsheet, and the first fifty participants were

selected as the winners of the Amazon voucher. These were gifted online to the participants via email in the currency of the participant's choosing approximately one month after the survey closed.

Procedure

Before data collection commenced, the survey was sent to three senior clinical psychologists, and one clinical psychology doctoral student at Massey University, to check for technological issues and item ambiguity. It was recommended that two items be modified to represent the past tense, however, no content changes were suggested. After amending the two items and publishing the preregistration, the survey was sent via an email for distribution to professional associations in each country included in the study. This method of data collection was also utilised by several authors investigating mental health professionals' experience of client suicide (Chemtob et al., 1988; Finlayson & Simmonds, 2018). After clicking the survey link, participants were directed to the study's information sheet which included a description about the aims of the research, their rights as a participant, and support recommendations and services. Participants were then asked for their consent to participate and were directed through the survey upon endorsing yes to this question. The survey asked a range of optional demographic questions, and items pertaining to measures of regret, self-blame, decision-justification, decision-process quality, intention-behaviour consistency, distress, beliefs about suicide prevention, and support satisfaction. The survey ended with three open-ended questions, including the option to enter the prize draw and/or receive a summary of the research findings.

Following data collection, the data from Qualtrics was downloaded to an Excel spreadsheet in preparation for analysis. The participants' email addresses were randomised, and the first fifty participants were selected as winners of an Amazon gift voucher. Contact

was made via email to each winner to advise them of the outcome and to ask what currency they would prefer for their voucher; they were paid approximately one month later.

Materials

The Qualtrics survey contained 58 items in total: 55 five-point Likert scale items and three open ended questions with discussion boxes. Seven measures containing the 55 Likert scale items were included in the survey: two measures were pre-validated, two were adapted, and four were developed specifically for this study.

Pre-Validated Measures

Decision-Regret Variable; Decision Regret Scale (DRS) (Brehaut et al., 1996). The Decision Regret Scale (DRS) (Brehaut et al., 1996) is a 5 item self-report scale that measures decision regret intensity for health care decisions. Measuring regret for health-care decisions specifically is an important feature of this measure, as earlier regret measures tended to focus on consumer satisfaction – limiting their purpose for this study. Developed by Brehaut et al. the DRS defines regret as the experience of remorse or distress over a decision. While the Decision-Justification theory of Regret proposes two components of decision regret: self-blame for making a bad decision, and comparative evaluation of the outcome (Connolly & Zeelenberg, 2002), Brehaut et al., (2003a) consciously avoided 'self-blame' in their scale to avoid the implication that there were right and wrong healthcare choices. This delineation was important for this study, as self-blame was measured as a separate construct in the exploratory analysis.

Brehaut et al's (2003a) validation study occurred across four studies - each study corresponding to a separate patient group (e.g., hormone replacement treatment decision; breast cancer treatment decision). The measure demonstrated good internal consistency (Cronbach's a = 0.81 to 0.92), and is comparable to Hickman et al's. (2012) validation study

(Cronbach's a = 0.86). Additionally, Brehaut et al.'s scale correlates strongly with a variety of decision satisfaction measures; decision satisfaction (r = -0.40 to -0.60), decisional conflict (r = -0.40 to -0.60), and overall rated quality of life (r = -0.25 to -0.27) indicating good construct validity. Consistent with findings from others studies (Pieters & Zeelenberg, 2005; Zeelenberg et al., 2002), regret was endorsed higher among those who changed their decisions than those who did not.

Furthermore, this scale has been included in other studies to test the relationships between decision regret and subjective distress in the context of cancer treatment decisions (Davison & Goldenberg, 2003; Sheehan et al., 2008). Therefore, this measure was considered suitable for use in this study, given that mental health professionals routinely make intervention and treatment decisions.

Respondents were asked to indicate on a 5-point Likert scale how much they agree with a set of statements (e.g., "*I would go for the same choice if I had to do it again*"). Wording of some items have been modified to fit the context of this study. For example, item 4: "*the choices did a lot of harm to me*", was changed to "*I think the choices I made were harmful*". Example items are listed below in table 2.

Table 2

Decision Regret Scale (DRS) Items

Item	Description
1	I made the right decisions
2	I regret the choices that were made
3	I would go for the same choices if I had to do it over again
4	I think the choices I made were harmful
5	The decisions I made were wise

Note. Items 1, 3, and 5 were reverse-coded.

Distress Variable; The Impact Event Scale (IES-R) (Weiss & Marmar, 1997).

The Impact of Event Scale-Revised (IES-R) (Weiss & Marmar, 1997) is a 22 item self-report scale measuring subjective distress following a traumatic event. The scale measures symptoms of intrusion, avoidance, and hyperarousal has commonly been used in studies measuring mental health practitioner distress following client suicide (e.g., (Chemtob, Hamada, et al., 1988; Chemtob et al., 1989; Finlayson & Simmonds, 2018; Rothes et al., 2013). The developers of this scale demonstrated high consistency reliability with a Cronbach's alpha score of $\boldsymbol{a}$ = .81 – .92 suggesting that this measure is suitable for measuring distress among individuals who have experienced a traumatic event (Brehaut et al., 2003b). This finding is comparable to Bienvenu et al. (2013) who identified a Cronbach's alpha of $\boldsymbol{a}$ = .96 suggesting very high internal consistency reliability. This validation study included a sample of sixty critical illness survivors who experienced post-traumatic distress disorder (PTSD) following acute lung injury. Additionally, this tool has been validated in a range of countries including Malaysia, Spain, the Netherlands, and Korea demonstrating its wide use

among people experiencing distress (Halim et al., 2020; Lim et al., 2009; Nuñez-Polo et al., 2022; Sveen et al., 2010).

In the present study, respondents were asked to refer to a client suicide/their latest client suicide and indicate on a 5-point Likert scale how much they agree with a set of statements pertaining to distress experienced (e.g., "*any reminders brought back feelings about it*"). Of note, the wording of one item was changed to past tense to match the tense of the other items in the scale, and also because the survey asks participants to "reflect on the weeks immediately following the client suicide…" Due to potential copyright concerns, example items are listed below in table 3. Please refer to the preregistration link for access to the full survey https://osf.io/psfrm/?view_only=79f4f55106d8497c977ed18b356cf670.

Table 3

The Impact of Event Scale (IES-R) Items

Item	Description
1	Any reminder brought back feelings about it
2	I had trouble staying asleep
3	I felt irritable and angry
4	I avoided letting myself get upset when I thought about it or was reminded of it
5	I stayed away from reminders of it

Adapted Measures

Beliefs about Suicide Prevention Variable; Views about Suicide Prevention Clinician Questionnaire (Ross et al., 2016). The 'Views about Suicide Prevention –

Clinician Questionnaire was developed by Ross et al. (2016). It is a 12-item scale that measures mental health professionals' beliefs about the predictability and preventability of suicide, responsibility for preventing suicide, role in suicide management and related anxiety, and any training received about suicide and suicide prevention among clinicians. The present study adapted this measure to only include the five items that relate specifically to beliefs about suicide prevention/the professional's role in prevention. Respondents were asked to rate on a 5-point Likert scale how much they agreed with the set of statements. Example statements are presented below in table 4.

Table 4

Views about Suicide Prevention Clinical Questionnaire Items

Item	Description
1	I believe there are actions I can take that will always prevent client suicide
2	I believe it should be one of the main responsibilities of my job to prevent client suicide
3	I believe that with suitable and adequate prevention training, I can **always** prevent suicide

This measure was developed in response to the limited investigation into the attitudes held about suicide among mental health professionals. Additionally, the developers of this measure focus on the experience of stress, anxiety and burnout in response to suicide beliefs in order to support professionals working with high-risk populations (Ross et al., 2016). These subscales were not included in the present study as they did not describe the variable of interest (e.g., beliefs about suicide prevention).

Self-Blame Variable. The four self-blame items in this study are informed by the Grief Cognitions Questionnaire (5-item 'self-blame' subscale). This scale is not publicly available, therefore item wording was changed to allow for open sharing in order to adhere to open science practices. The modifications also provided better consistency with the research topic. Respondents were asked to indicate on a 5-point Likert scale how much they agree with a set of statements (e.g., "*I should have prevented the client's suicide*"). The four items are listed below in table 5.

Table 5

Self-Blame Items

Item	Description
1	I should have prevented the client's suicide
2	I blame myself for the client's suicide
3	I will never be able to forgive myself for some of my client care decisions
4	If I had done things differently the client would still be alive

New Measures Created for this Study

Decision-Justification Variable. A validated measure has not yet been developed to measure this construct relating to the Decision-Justification Theory of Regret. Consequently, two items were developed to measure this variable in the context of client suicide. Pieters and Zeelenberg (2005) discussed the idea of construct stability in their theory of intention-behaviour inconsistency, and this principle was drawn upon for this construct. Therefore,

justifications at the time of the client suicide, and at the time of completing the survey were measured. The developed items ask participants to rate on a 5-point Likert scale, how justified they felt their client-care decisions were at the time, and how justified they feel their decisions are now. Participants who endorse both highly will be considered to have stronger and more stable justifications than those who endorse one or none highly. These items are listed below in table 6.

Table 6

Decision-Justification Items

Item	Description
1	At the time, I generally felt that my decisions were justified
2	I still feel that my decisions are justified

Decision-Process Quality Variable. Four items have been developed for this study to measure “decision-process quality”. This variable relates to the participants *subjective* evaluation of the quality of their decision-process and does not reflect whether or not their decisions were right or wrong. Participants were asked to rate on a 5-point Likert scale how much they agree with a set of statements relating to their decision process. The items are listed below in table 7.

Table 7

Decision-Process Quality Items

Item	Description
1	I would not change anything about my intervention actions
2	I feel I had enough time to make decisions about the client's care
3	I feel I had all available information to make decisions about the client's care
4	I am satisfied with the way I determined my intervention decisions

Intention-Behaviour Consistency Variable. A three-item measure was developed specifically for this study to measure intention-behaviour consistency. As aforementioned, previous research testing regret theories tend to use economic or consumer situations (Gilovich & Medvec, 1995), thus modifications must be made to items in order to test these theories across a range of contexts. As such, results will be interpreted with caution.

A focus for the developed items was on behaviour-deviation; behaviours that deviate from an intended plan have been shown to amplify the experience of regret (Pieters & Zeelenberg, 2005; Zeelenberg et al., 2002). Thus, the items asked participants if they carried out decisions that moved away from their original intervention plans or goals, whether or not changes were made to original intervention plans following supervisory or collegial advice (a common practice in psychology), and their tendency to carry out the suggested changes. Participants were asked to rate on a 5-point Likert scale how much they agree with the set of statements. These items are listed below in table 8.

Table 8

Intention-Behaviour Consistency Items

Item	Description
1	Throughout my client's care, my decisions tended to move away from my original intervention plans or goals
2	I made changes to my client's intervention plans after consulting supervision, team members, or collegial advice
3	I tended to carry out the intervention actions suggested to me by others

Supervisory Support Variable. Two items were developed for the exploratory analysis to measure the quality of the supervisory support received following a client suicide. These items were only presented to the participants who indicated that they received supervisory support. These participants are asked to rate on a 5-point Likert scale how much they agree with these statements; the items are listed below in table 9.

Table 9

Supervisory Support items

Item	Description
1	I feel satisfied with the quality of supervisory support I received
2	The supervisory support I received helped me

Demographic Variables. The demographic information collected in the survey served two purposes. The first purpose was to describe the people who participated in this study; this helps readers ascertain the breadth of result generalisability. The second purpose was to identify variables that may confound the results, thus, allowing us to control them. Participants were asked to indicate their gender and ethnicity, including their years of professional experience, time since client suicide, and time spent with client. A comment box was provided for the ethnicity item where participants were asked to record what ethnicities they identified as. Additionally, participants could select female, male, or gender diverse for the gender item. For items 'years of experience', 'time since client suicide', and 'time spent with client', numerical response boxes corresponding to years and months were provided. These variables (with the exception of 'ethnicity') where treated as control variables; however, all demographic variables were reported descriptively.

Data Analysis

The following section details the data analysis for the current research project. For the exploratory questions and hypotheses, data analysis was completed using R (version 1.2.5033) (R Core Team, 2019). R is an open-source software programme used for statistical computing and graphics. This process included writing code that performed a series of commands such as anonymising data, impute missing values, and run a series of analyses to produce result outputs. The analyses performed using R included: descriptive analysis and structural equation modelling. For the supplementary qualitative questions, content analysis was used as the method of analysis.

Exploratory Analysis

This study included (pre-registered) exploratory questions, to gather preliminary data on the variables of interest, and to explore relationships that are not informed by formal theory. Exploratory research questions do not involve testing a specific hypothesis. The variables selected are informed by previous exploratory studies investigating the impact of client suicide on mental health practitioners (e.g., Chemtob et al., 1989, 1988; Dransart et al., 2015; Finlayson & Simmonds, 2018; Rothes et al., 2013). This study included five exploratory questions, three of which were analysed using structural equation modelling (Q.3 – 5). Two questions pertain to univariate distributions (Q.1 & 2) and will be reported descriptively using standard deviations and means. The independent and dependent variables are listed below in table 10.

Table 10

Independent and Dependent Variables for Exploratory Questions

Exploratory Question	Independent Variable (IV)	Dependent Variable (DV)
1. How much regret do mental health practitioners feel following client suicide?		Regret
2. How much distress do mental health practitioners feel following client suicide?		Distress

3. What is the strength and the direction of the correlation between regret and distress following client suicide?	Regret	Distress
4. What is the strength and the direction of the correlation between regret and self-blame following client suicide?	Regret	Self-blame
5. What is the strength and the direction of the correlation between supervisory support and distress following client suicide?	Supervisory support	Distress

Structural Equation Modelling

Structural equation modelling (SEM) is a statistical analysis framework that was selected for this research project. This framework involves techniques which analyse the structural relationships between measured variables and latent constructs. Structural equation modelling is useful for this project as it allows us to model and account for the effects of measurement error on estimated relationships, and allows us to test complex relationships involving mediating effects (Raykov & Marcoulides, 2012). A conventional regression model by contrast, assumes that the independent variables are measured without any error (Williams et al., 2013). SEM was used to analyse exploratory questions E.3, E.4, and E.5, and each hypothesis including control models. The independent and dependent latent variables for the hypotheses are listed below in table 11.

Table 11

Independent and Dependent Latent Variables for Hypotheses

Hypothesis	Independent Variable (IV)	Dependent Variable (DV)	Mediator
1. Mental health practitioners who can better justify their intervention decisions will experience less regret.	Decision-justification	Regret	
2. Mental health practitioners who performed intervention behaviours that were inconsistent with their behaviour-intention will experience more regret.	Behaviour-intention consistency	Regret	
3. The relationship between intention-behavior inconsistency and the amount of regret experienced will be mediated by the judged quality of the decision process.	Behaviour-intention consistency	Regret	Decision-process quality
4. Mental health practitioners who believed they could have influenced the outcome of the	Beliefs about suicide prevention	Regret	

client suicide will experience
more regret following the client
suicide.

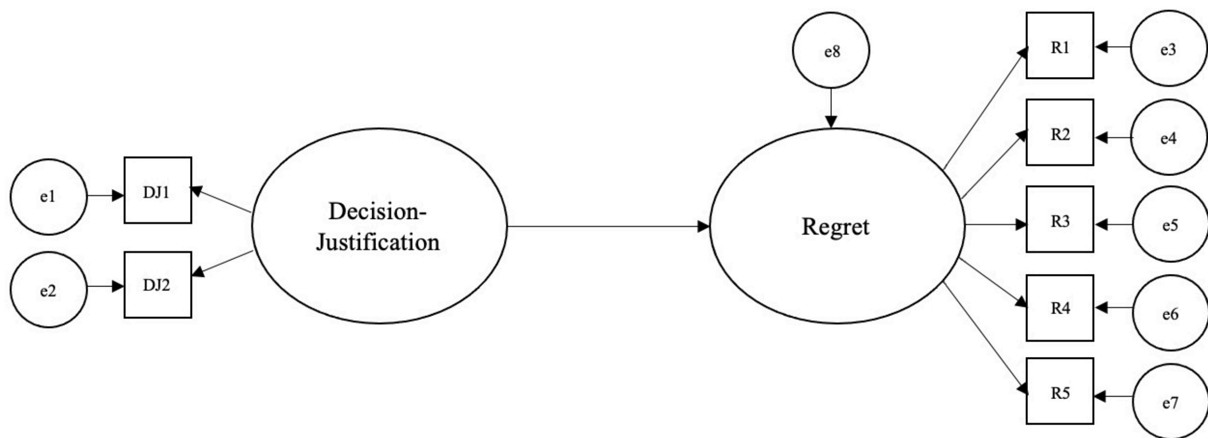
Test of Hypotheses

As mentioned above, each hypothesis was tested via SEM. As such, the following variables were treated as latent variables: regret, decision-justification, behaviour-intention consistency, decision-process quality, and beliefs about suicide prevention. Regression equations within the structural models were used describe the interrelationships among the latent variables (Weston & Gore, 2006). These analyses were conducted in a statistical software package called Lavaan in R (Rosseel, 2012). Please refer to the figures below for examples of path diagrams for each hypothesis.

Hypothesis One Model

Figure 3

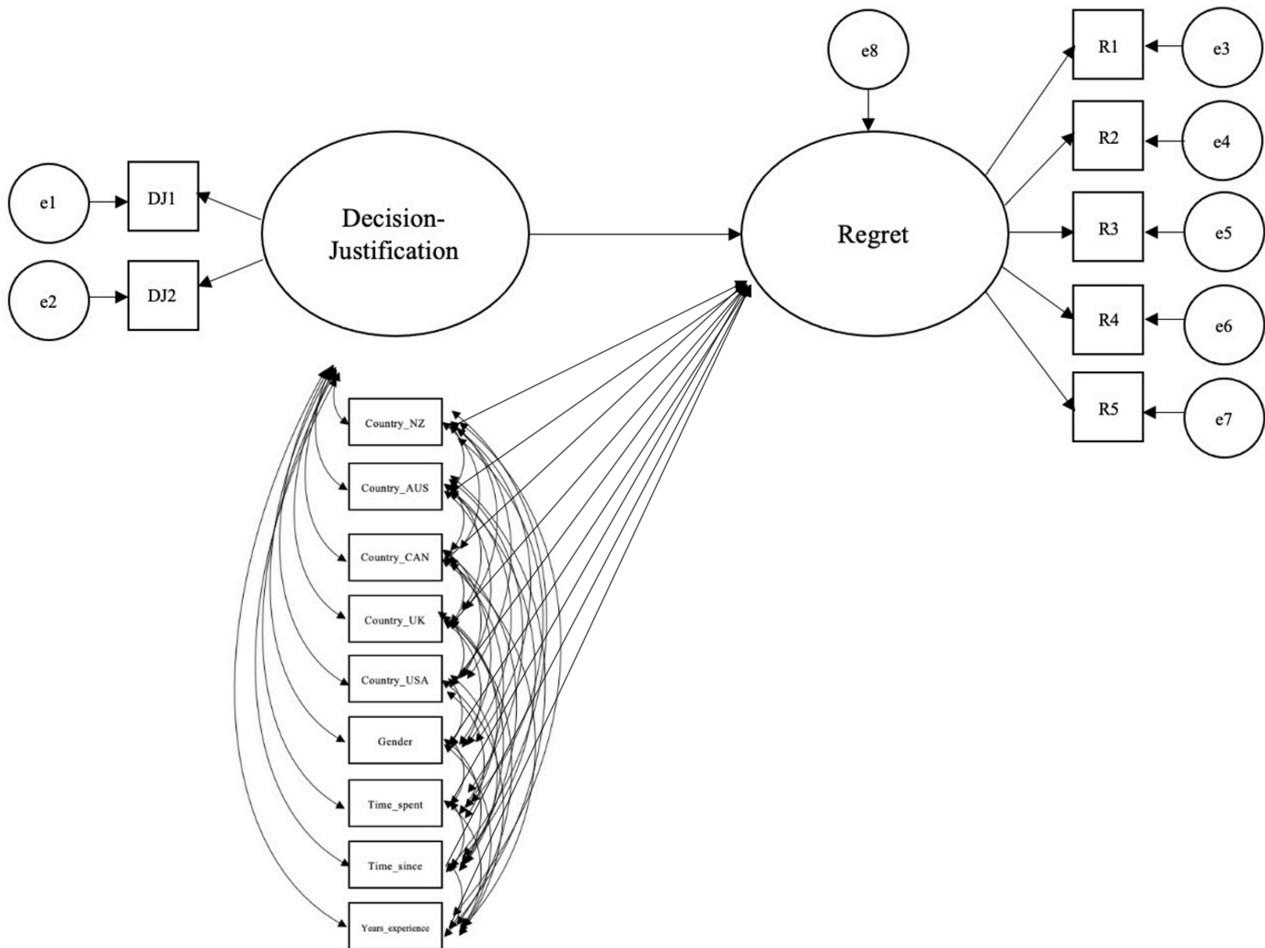
Path Diagram Describing Hypothesis One: Psychologists who can Better Justify their Intervention Decisions will Experience Less Regret



Hypothesis One Control Model

Figure 4

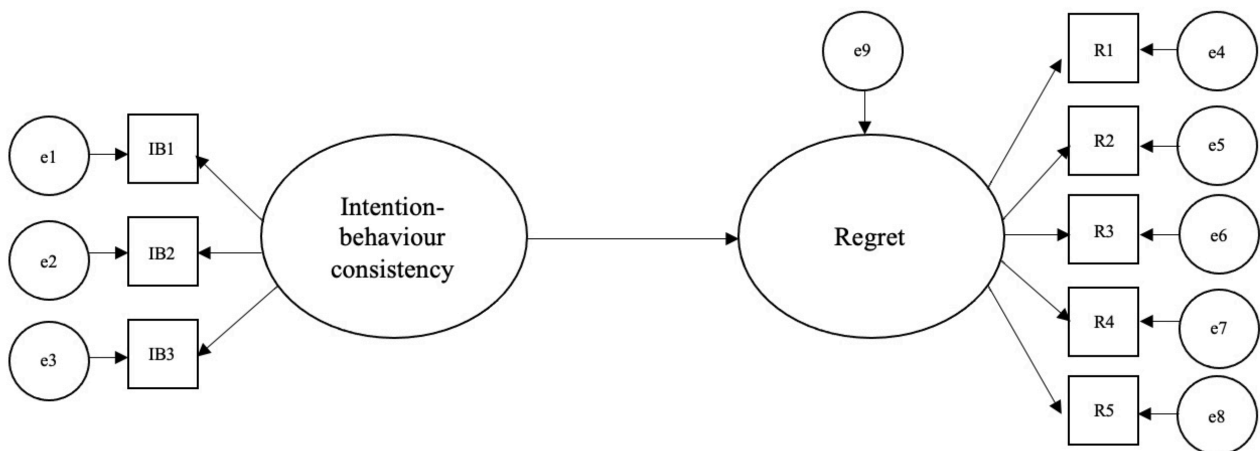
Path Diagram Describing Hypothesis One Control Model



Hypothesis Two Model

Figure 5

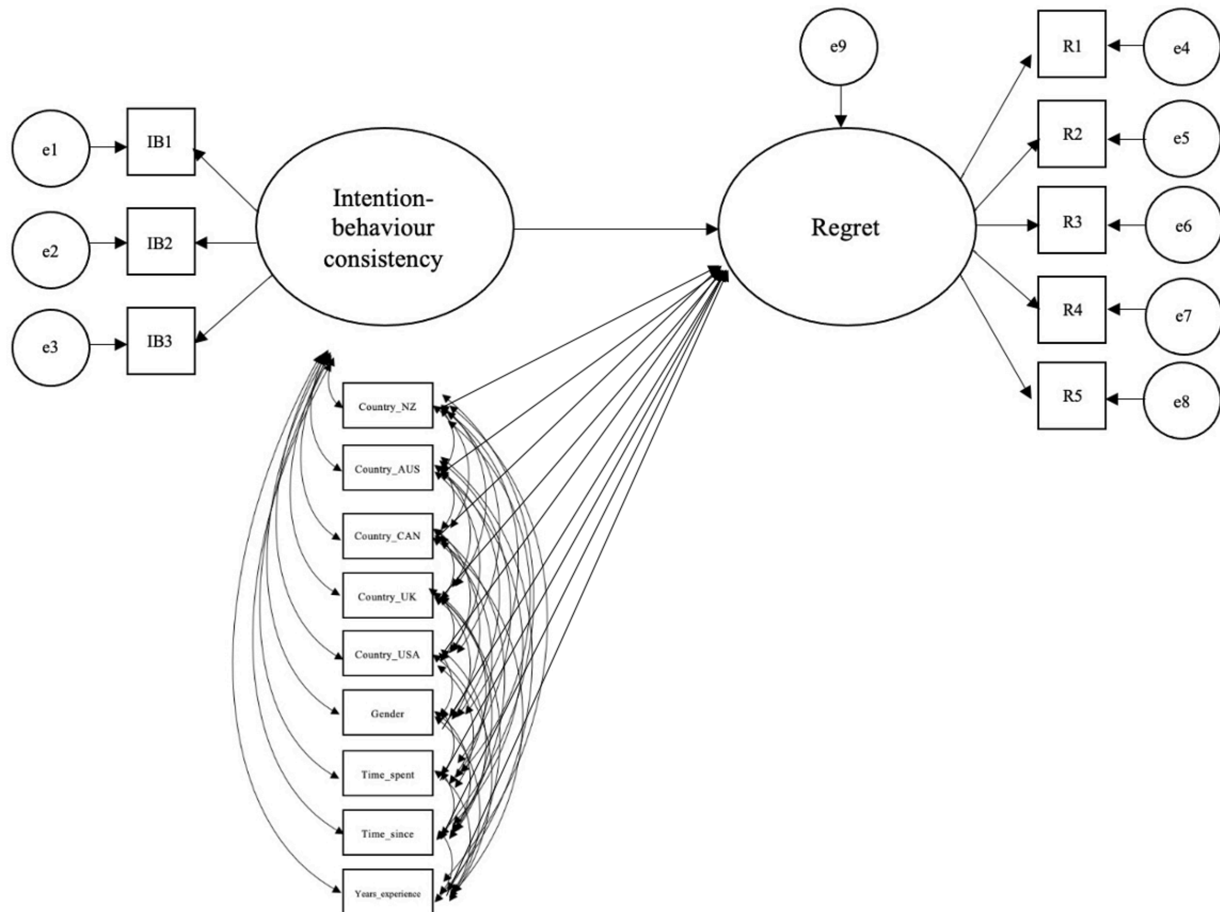
Path Diagram Describing Hypothesis Two: Psychologists who Performed Intervention Behaviours that were Inconsistent with their Behaviour-Intention will Experience More Regret



Hypothesis Two Control Model

Figure 6

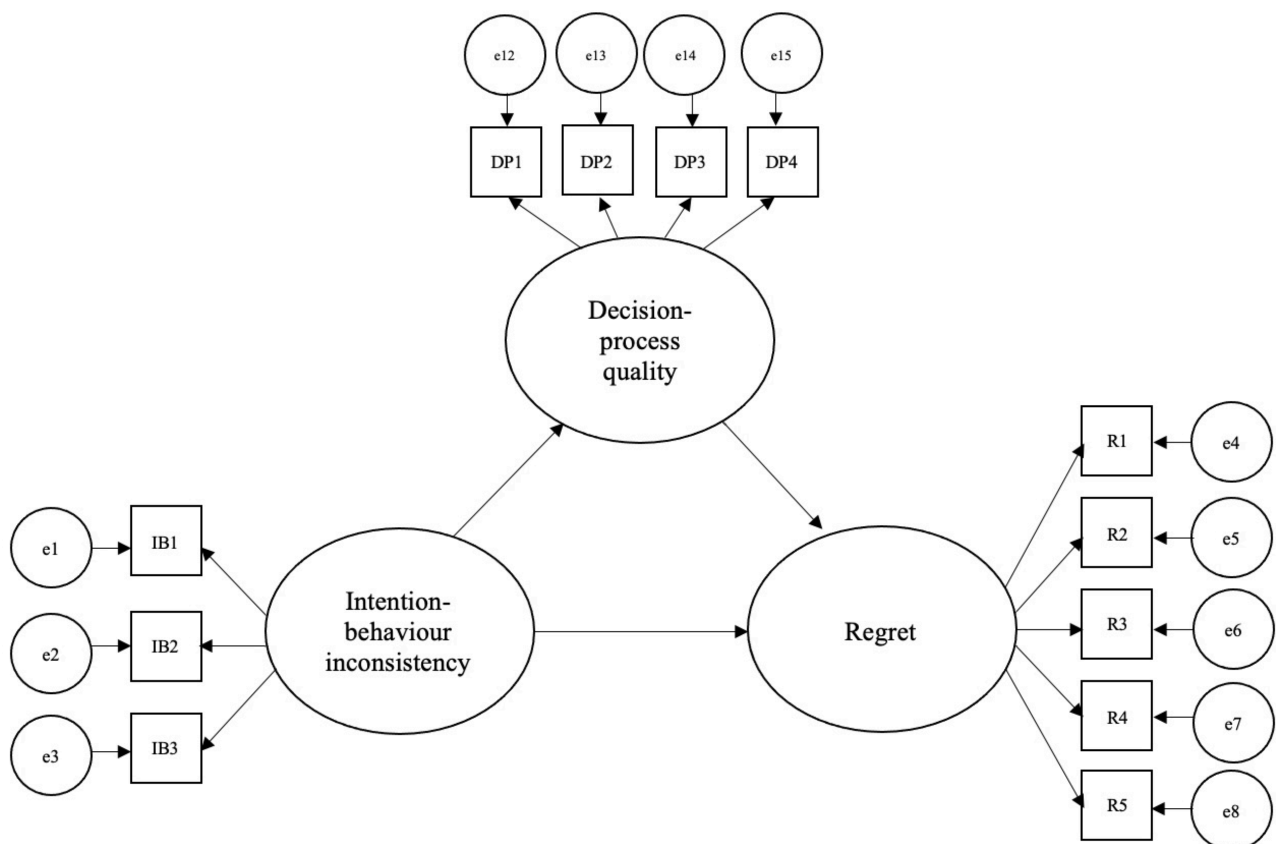
Path Diagram Describing Hypothesis Two Control Model



Hypothesis Three Model

Figure 7

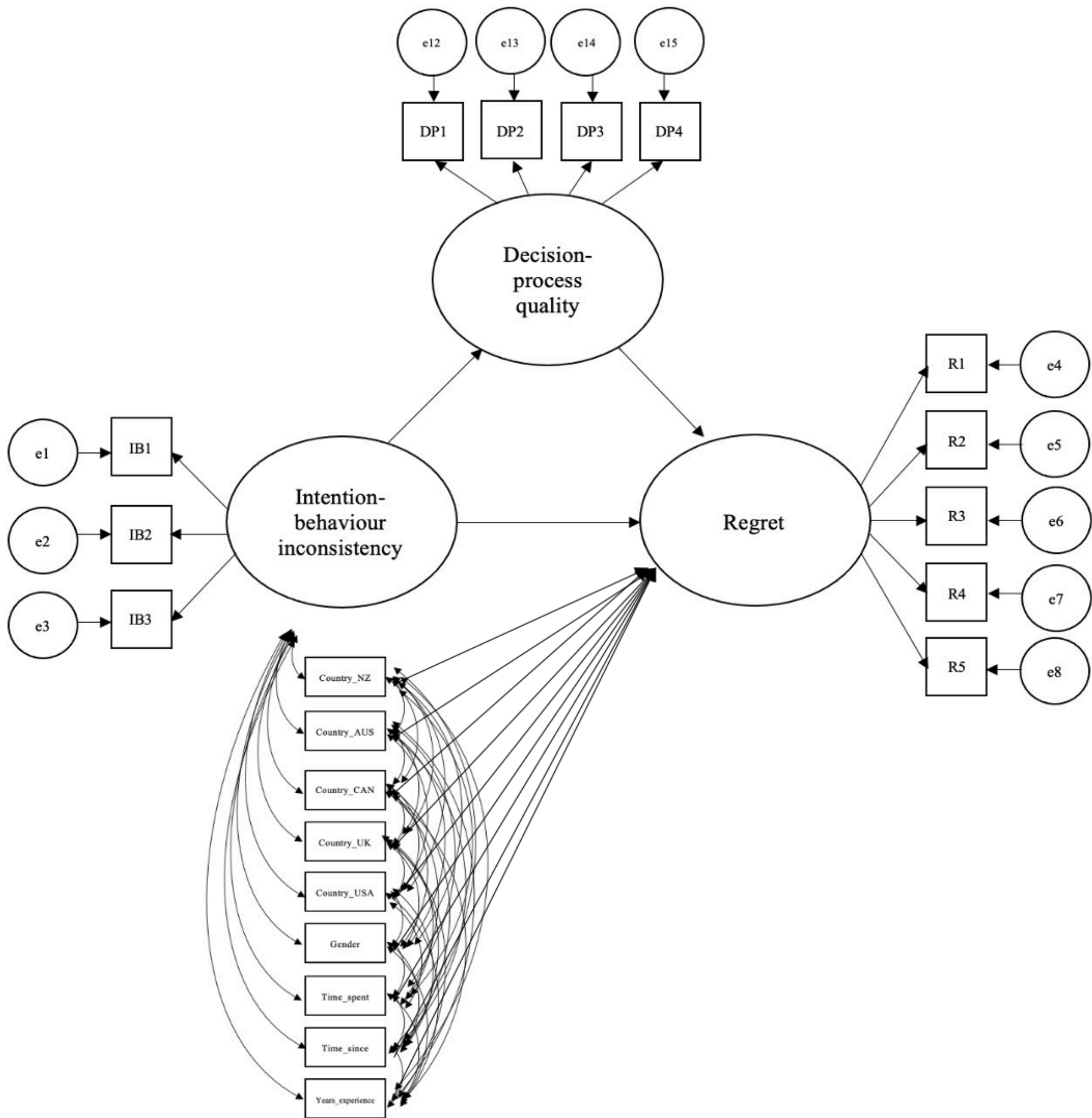
Path Diagram Describing Hypothesis Three: The Relationship Between Intention-Behaviour Inconsistency and the Amount of Regret Experienced will be Mediated by the Judged Quality of the Decision Process



Hypothesis Three Control Model

Figure 8

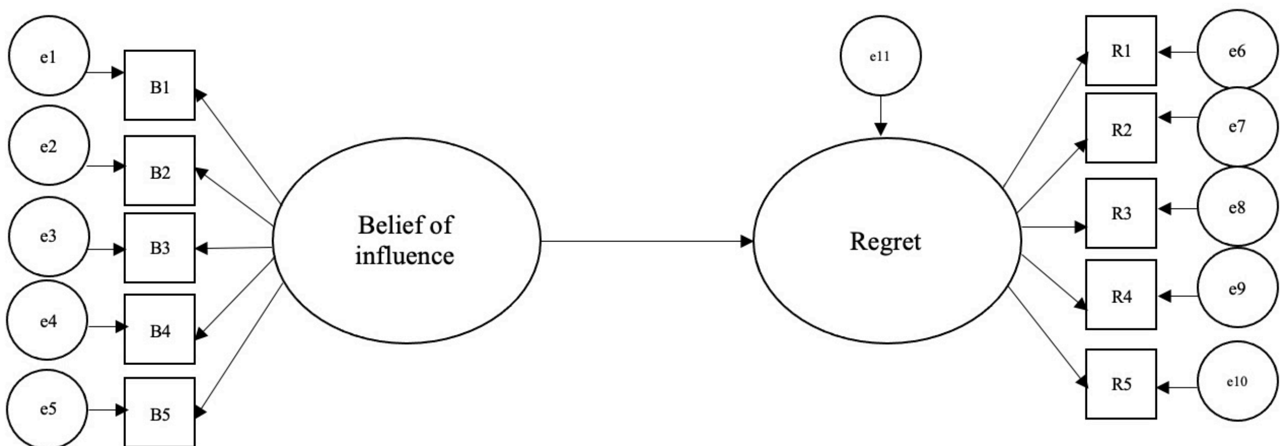
Path Diagram Describing Hypothesis Three Control Model



Hypothesis Four Model

Figure 9

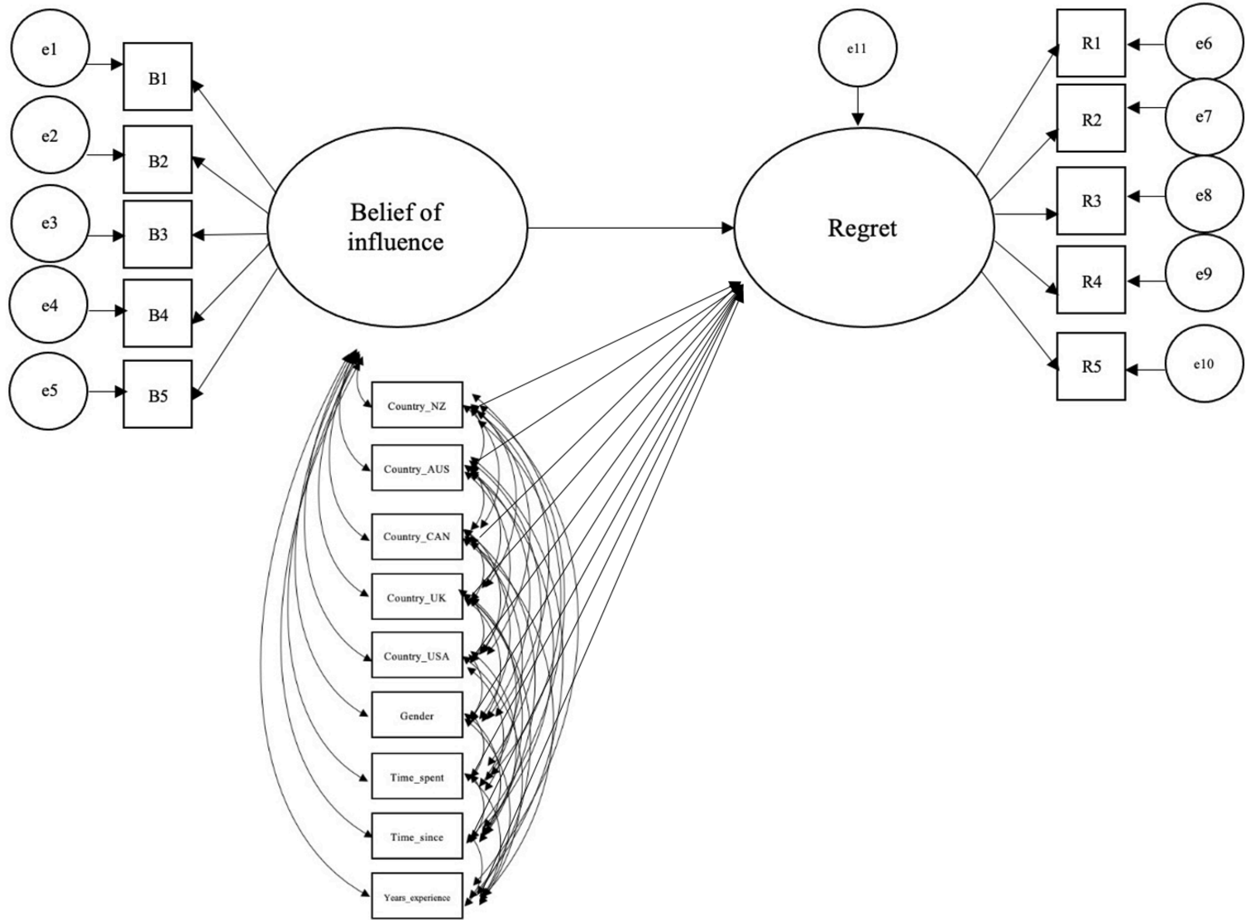
Path Diagram Describing Hypothesis Four: Psychologists who Believed they could have Influenced the Outcome of the Client Suicide will Experience More Regret Following the Client Suicide



Hypothesis Four Control Model

Figure 10

Path Diagram Describing Hypothesis Four Control Model



Estimation Method and Fit statistics

The full information maximum likelihood estimation method, specifically MLR, was used with robust (Huber-White) standard errors. This parameter estimation method was selected as it works with missing data. Additionally, the following fit statistics were reported for the MLR estimation to determine the models' goodness of fit (Hooper et al., 2008). Please refer to the measures of fit indices and cut-off values recommended by Hu and Bentler (1999) below;

1. Satorra-Bentler corrected statistic, and its degrees of freedom and p-value

The cut-off value for the Satorra-Bentler scaled chi-square test was .05. This means that if the test is significantly significant at $p < .05$ it would be interpreted as indicating that the null hypothesis of perfect fit of the model in the population can be rejected.

2. The standardised root mean square residual (SRMR)

The cut-off value for SRMR was .08. This means that if the SRMR fell below this value, it would be interpreted that the difference between the observed and model-implied correlation matrices is small, and the model indicates good fit.

3. The scaled root mean square error of approximation (scaled RMSEA)

The RMSEA cut-off value was .06. This means that if the RMSEA fell below this value, it would be interpreted that the error of approximation for the model is small, and the model indicates good fit.

It is important to note that the fit statistics reported do not determine the validity of the hypotheses. The pre-registration stated that if poor model fit is indicated, this might indicate specification issues in the relationships between indicators and latent variables. This may be due to omitting important causal variables that covary with others in the model and/or incorrectly modelling the effects of measurement error causing the direct and indirect effects

to be biased. For this study, poor model fit was interpreted as implying the presence of additional uncertainty around the estimates of the parameters.

Confounding Variables

A common issue in observational research, particularly in the social sciences, is the presence of confounding variables. A confounding variable is something that influences both dependent and independent variables (Skelly et al., 2012). When these are unaccounted for, we may over or under-estimate the impact of the independent variable on the dependent variable, which may undermine the true causal effect relationships (Skelly et al., 2012; Wysocki et al., 2022). This present study considered the potential for confounding variables, and as such, tested the hypotheses in two ways: first, original models analysed the relationships without controlling for relevant contextual factors (e.g., 'gender', 'years of experience', 'time spent with client', 'time since client suicide', and 'country of origin'). Second, controlled models analysed these same relationships with the inclusion of these contextual factors which were treated as potential confounding variables. The confounding variables were carefully selected for this analysis due to their probable impact on the independent variables. Selecting inappropriate confounding variables may affect regression coefficients and undermine true effects (Wysocki et al., 2022). The below subsection briefly describes the rationale for selecting the confounding variables included this analysis.

Rationale for Confounding Variables

'Gender' was considered an important confounding variable for this study based on previous literature identifying inconsistent associations between gender and greater emotional impacts following client suicide. For example, Dransart et al. (2015) found that gender and relationship closeness were significantly associated with higher distress levels following client suicide. Additionally, this has been reported by Wurst et al. (2013) and Gibbons et al.

(2019) who found that women were significantly more distressed than men following client suicide. However, Van der Hallen (2021) did not find support for gender being a predictor of greater distress. Given the variability between studies and with a sample containing mostly females in this present study, 'gender' was considered an important variable to control for. Additionally, 'time spent with client' was also controlled for given the reported association between relationship closeness and averse emotional impacts following client suicide (Dransart et al., 2015).

In terms of 'years of experience', there are variable findings relating to the impact that this variable has on distress outcomes. While Van der Hallen (2021) did not identify 'years of experience' as a predictor for greater distress outcomes, Chemtob et al. (1988) found a statistically significant negative relationship between years of experience and adverse impacts following client suicide. In particular, they identified that psychiatrists with more experience tended to feel less guilt compared to those with less experience. Additionally, there are inconsistent findings relating to the *number* of client suicides experienced and years of experience. For example Chemtob et al. and Finlayson and Simmonds (2018) did not find support for this relationship, however, Rothes et al. (2013) found that those with more experience tended to experience more client suicides. As mentioned in the introductory chapters, it is possible that those with more experience work with more complex clients, and are thus, more likely to experience client suicide. Given the variability reported for both impacts and frequencies of suicide, it was considered necessary to control for the effect of years of experience on distress and regret reactions.

This study asked participants to report on their most recent suicide when responding to the survey items. We did not define a specific time period for the most recent client suicide (e.g., in the last five years). This decision was based on the fact that suicide is a low

base rate behaviour and we would not have been able to recruit a sample size big enough to feasibly complete this study. However, this meant that we had great variability in the years reported since the most recent suicide occurred among our participants. To control for this potential effect on the impacts reported, we included '(number) of years since client suicide' as a control variable in our analysis. Additionally, while we recruited participants from several OECD countries that have similar registration training programmes and similar intervention responses to suicidal clients, the political and legal climates vary, therefore, it is important that the effects of 'country of origin' on responses to client suicide were controlled for.

Indices

To measure the reliability of each scale, Cronbach's alpha were reported and all items have been included regardless of their reliability outcome. Item responses for each scale were averaged to create an overall variable score with a possible range of 1 – 5.

Qualitative Analysis

Content analysis is a commonly used qualitative analysis method in social and behavioural sciences (Leung & Chung, 2019). It is a flexible method of enquiry ranging from the analysis of contextual meanings found within textual data from a variety of mediums (e.g., novels, newspapers, interviews, magazines, films, political speeches). This method of analysis was considered the most appropriate due to the fact that its less time consuming compared to other types of qualitative analysis. This study recruited over two hundred participants and contained three open discussion boxes with an indefinite character count. It was critical that this supplementary analysis could be completed within the scope of this research project. From a meta-theoretical standpoint, this form of analysis can be conducted

from a realist ontological perspective, which allows for consistency with the rest of the methodology (Leung & Chung, 2019). Additionally, Hsieh and Shannon (2005) argue that this technique is appropriate when existing theory or literature on a topic is scant, which is relevant given the scarcity of empirical investigation on psychologist bereavement.

There are three types of approaches to content analysis which include conventional, directive, or summative analyses (Hsieh & Shannon, 2005). The conventional approach includes drawing on direct text to derive coding categories; the directive approach relies on an existing theory to derive initial codes, and the summative approach involves comparing categories and interpreting underlying meanings. For this present study, a conventional content analysis approach was employed to gain a richer understanding of the data (Hsieh & Shannon, 2005). A conventional approach allowed me to delve into participants' data openly without pre-determined categories or theories, thus, entailing an inductive approach to analysis (Mayring, 2000). Definitions of categories, and code development, occurred after the researcher reconducted a manual preliminary analysis of the data. The three qualitative survey items are listed below in table 12.

Table 12

Qualitative Research Questions and Survey Items

Research Question	Survey items
1. What do psychologists who have experienced client suicide identify as factors that support and/or hinder their coping?	1. What are some things that helped you following a client suicide? 2. What are some things that made coping with client suicide challenging?
2. What advice would psychologists who have experienced a client suicide offer to a colleague who has just experienced a client suicide?	3. What advice would you offer a colleague who has just experienced a client suicide?

The following chapter presents the results for the quantitative investigation, followed by chapter seven which describes the qualitative findings. The integrated implications for both sets of findings is positioned in the discussion, chapter eight.

CHAPTER 6: Quantitative Findings

The following sections in chapter six contain the results for the pre-registered hypotheses and exploratory questions as outlined in chapter three. Descriptive statistics will be reported first, followed by the exploratory analyses. The pre-registered hypotheses and relevant analyses will then be reported. Two sets of analyses were conducted for exploratory questions (E.3 – E.5) and each hypothesis. One set included original structural models which were analysed without controlling for confounding variables; the second set included control models where gender, years of experience, time spent with client, time since client suicide, and country were treated as confounding variables. All of the variables included in the original structural analyses were treated as latent, thus, allowing for the effects of measurement error to be explicitly accounted for. These variables were also treated as latent in the control analyses, however, the additional confounding variables were observable and each measured with a single item. For clarity, each exploratory question and hypothesis will be stated ahead of their analyses and will include a single structural equation model per analysis. Additionally, several fit statistics will be reported for every structural equation model. It is important to note that the fit statistics reported do not determine the validity of the hypotheses. In this analysis and as stated on the preregistration, poor model fit will be interpreted as implying the presence of additional uncertainty around the estimates of the parameters. Finally, standardized regression coefficients were reported for the hypotheses and they are denoted by 'b'.

Descriptive Results

Table 13 describes each scale's response distribution. On average participants tended to report slightly below moderate levels of regret and distress relating to client suicide, and beliefs about suicide preventability. Alternatively, decision-justification, decision-process

quality, and supervisory support were all endorsed relatively highly suggesting that participants on average were able to better justify their client care decisions, had higher decision-processes, and experienced good supervisory support following client suicide. Participants also tended to report above moderate levels of intention-behaviour consistency suggesting that the client care behaviours carried out tended to match their intentions for treatment. Finally, on average self-blame was endorsed the lowest by participants.

Table 13

Descriptive Statistics for Scale Response Distribution

Variable (Response range 1-5)	M	SD	Min	1st quartile	Median	3rd quartile	Max	Cronbach's alpha (α)
Regret	2.18	0.70	1.00	1.80	2.0	2.60	4.00	.84
Self-Blame	1.96	0.69	1.0	1.50	2.0	2.50	4.00	.80
Distress	2.03	0.64	1.0	1.55	1.86	2.03	4.14	.93
Decision-justification	4.13	0.59	2.0	4.00	4.00	4.50	5.00	
Intention-behaviour consistency	2.82	0.71	1.00	2.33	2.83	3.33	4.67	.49
Decision-process quality	3.39	0.75	1.50	3.0	3.50	4.00	5.00	.74
Beliefs about preventability	2.32	0.60	1.00	1.80	2.40	2.80	4.60	.75
Supervisory support 1	3.87	1.19	1.00	4.00	4.00	5.00	5.00	.90
Supervisory support 2	3.89	1.08	1.00	4.00	4.00	5.00	5.00	.90

Exploratory results

Exploratory Question One

E1. How much regret to psychologists feel following client suicide?

For each of the five regret items, the possible response range was 1 – 5 (1 = strongly disagree, 2 = disagree, 3 = neither agree or disagree, 4 = agree, 5 = strongly agree). On average, psychologists disagreed with the five statements relating to regret following client suicide (M = 2.18, SD = 0.7).

Exploratory Question Two

E2. How much distress do psychologists feel following client suicide?

For each of the twenty-two distress items, the possible response range was 1 – 5 (1 = not at all, 2 = a little bit, 3 = moderately, 4 = quite a bit, 5 = extremely). On average, psychologists experienced below moderate levels of distress following client suicide (M = 2.03, SD = 0.64).

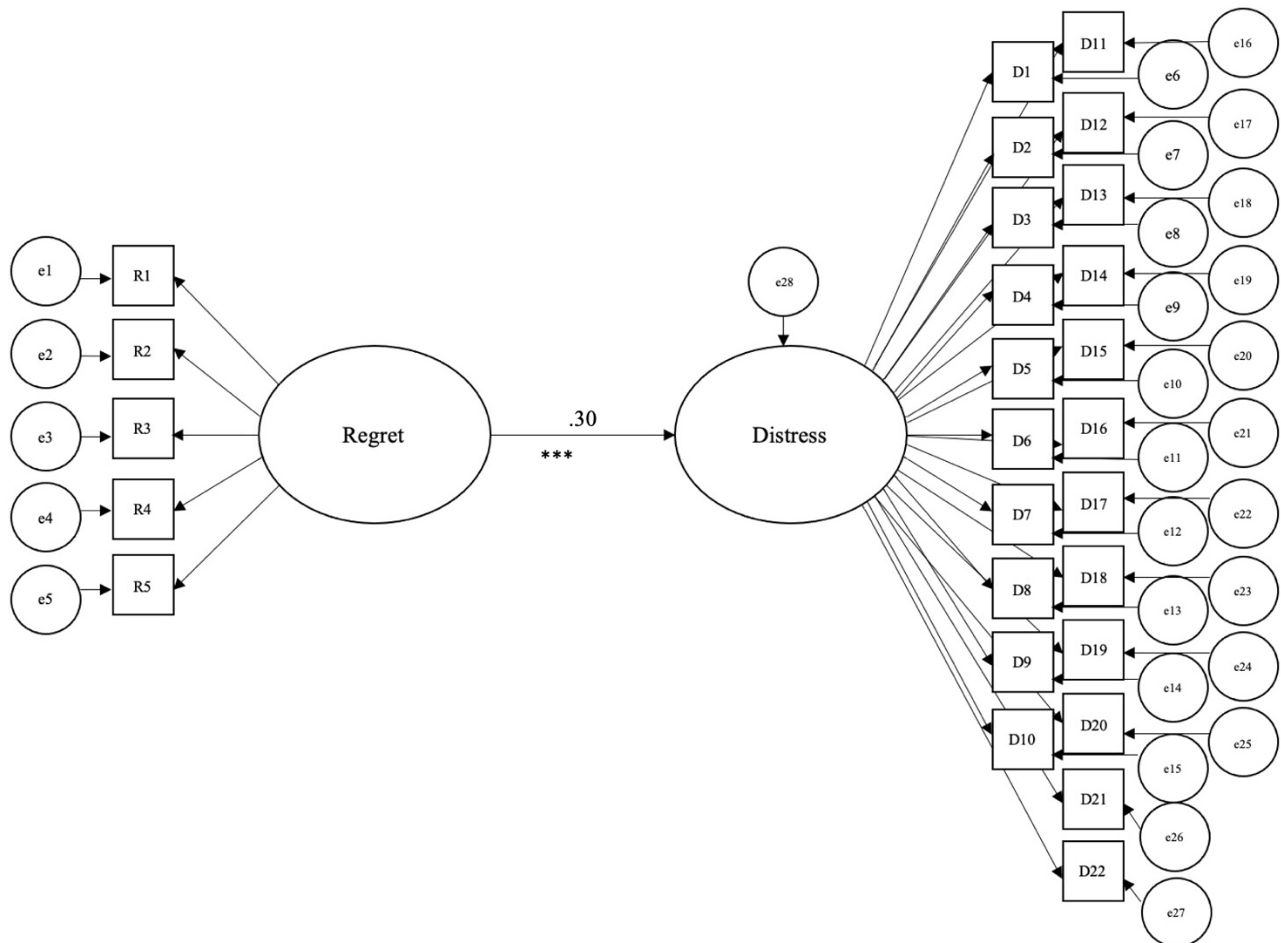
Exploratory Question Three

E3. What is the strength and the direction of the correlation between regret and distress following client suicide?

Original Model. The structural equation model indicates that there was a statistically significant, moderate positive relationship between regret and distress following client suicide ($\boldsymbol{r}$ = .30, $p < .001$, two-tailed, 95% CI [.17, .43]). This finding suggests that psychologists who experience higher levels of regret are more likely to experience higher levels of distress following client suicide than those who reported less regret.

Figure 11

Path Diagram Showing Standardised Parameter Estimates for Exploratory Question Three[1]



Note. *p < 0.5. ***p < .001.

Fit statistics. As per the pre-registration, several fit statistics were calculated. The Satorra-Bentler chi-square correlation test indicates a significant finding where $\chi^2(323)$ = 1057.82, p < .001, suggesting that the null hypothesis of "exact model fit" can be rejected. The scaled root mean square error of approximation (RMSEA) test = .10 exceeds the cut-off

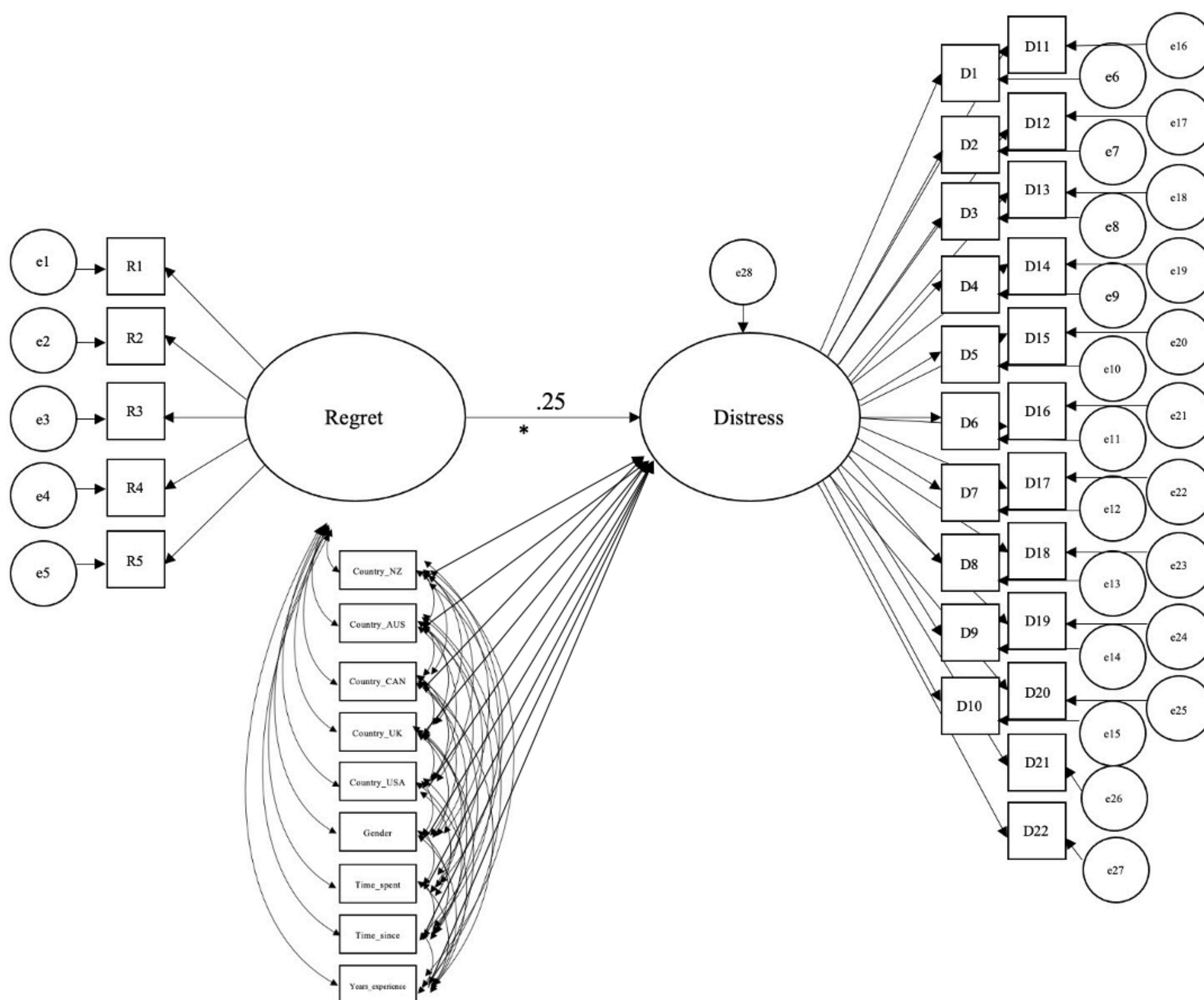
[1]Please refer to the preregistration link https://osf.io/psfrm/?view_only=79f4f55106d8497c977ed18b356cf670 containing the raw data for more information about the factor and error loadings of each model.

value of .06. This indicates that the error of approximation for the model is large and the model indicates poor fit. However, the standardised root mean square residual (SRMR) test = .08 indicates good fit (cut-off value = .08) suggesting that the difference between the observed and model-implied correlation matrices is small.

Control Model. When controlling for confounding variables, the control model indicates that there is a statistically significant, moderate positive relationship between regret and distress following client suicide (r = .25, $p < .05$, two-tailed, 95% CI [.09, .42]). This finding suggests that when accounting for the effect of confounding variables on regret, psychologists who experience higher levels regret still tend to experience more distress than those who reported less regret.

Figure 12

Path Diagram Showing Standardised Parameter Estimates and Control Variables for Exploratory Question Three



Note. **p* < 0.5. ****p* < .001.

Fit Statistics. The following fit statistics indicate that the control model fit was relatively poor: $\chi^2(531) = 1071.90$, $p < .001$, RMSEA = .09, SRMR = .08.

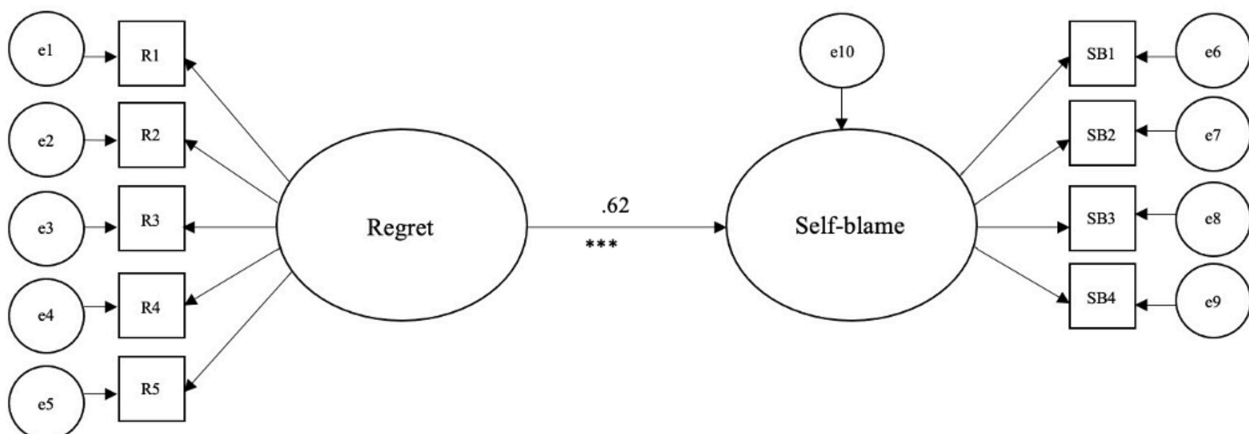
Exploratory Question Four

E4. What is the strength and the direction of the correlation between regret and self-blame following client suicide?

Original Model. The structural equation model indicates that there is a statistically significant, strong positive relationship between regret and self-blame following client suicide (***r*** = .62, $p < .001$, two-tailed, (95% CI [.52, .72]). This finding suggests that psychologists who experience higher levels of regret following client suicide, tend to experience higher levels of self-blame compared to those who reported less regret.

Figure 13

Path Diagram Showing Standardised Parameters for Exploratory Question Four



Note. *$p < 0.5$. ***$p < .001$.

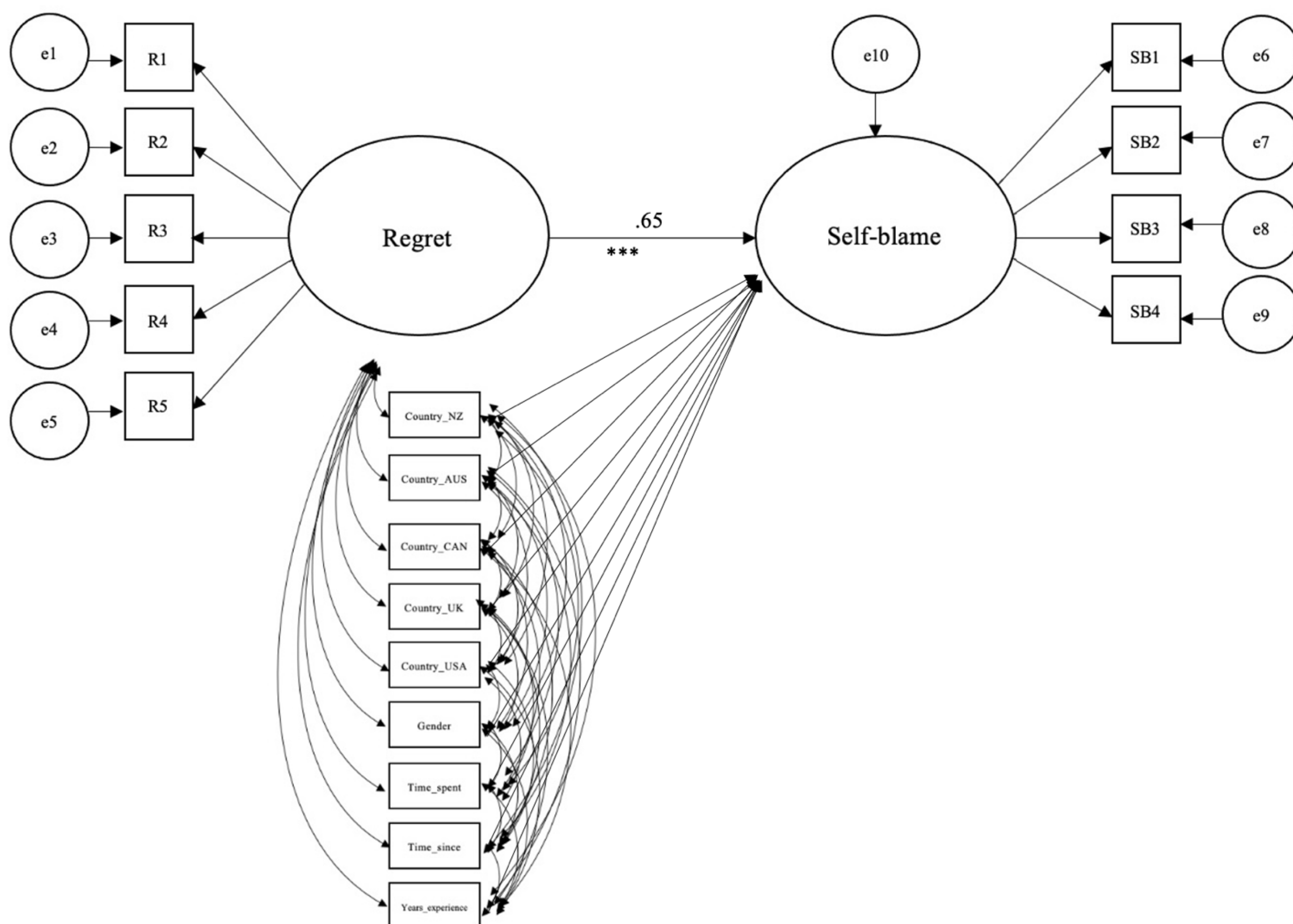
Fit Statistics. The Satorra-Bentler chi-square correlation test indicates a significant finding where $\chi^2(26) = 55.57$, p < .001, suggesting that the null hypothesis of "exact model fit" can be rejected. Additionally, the RMSEA = .07 indicates poor fit. However, the SRMR

= .05 indicates good fit, suggesting that the difference between the observed and model-implied correlation matrices is small.

Control Model. When controlling for confounding variables, the control model indicates that there is a statistically significant, strong positive relationship between regret and self-blame following client suicide (*r* = .65, *p* < .001, two-tailed, 95% CI [.51, .78]). This correlation stays similar in size after the controls are added.

Figure 14

Path Diagram Showing Standardised Parameters and Control Variables for Exploratory Question Four



Note. *p < 0.5. ***p < .001.

Fit Statistics. The following fit statistics indicate that the control model fit was relatively good compared to the original model: $\chi^2(90) = 85.94$, p $< .001$, RMSEA $< .001$, SRMR $= .05$.

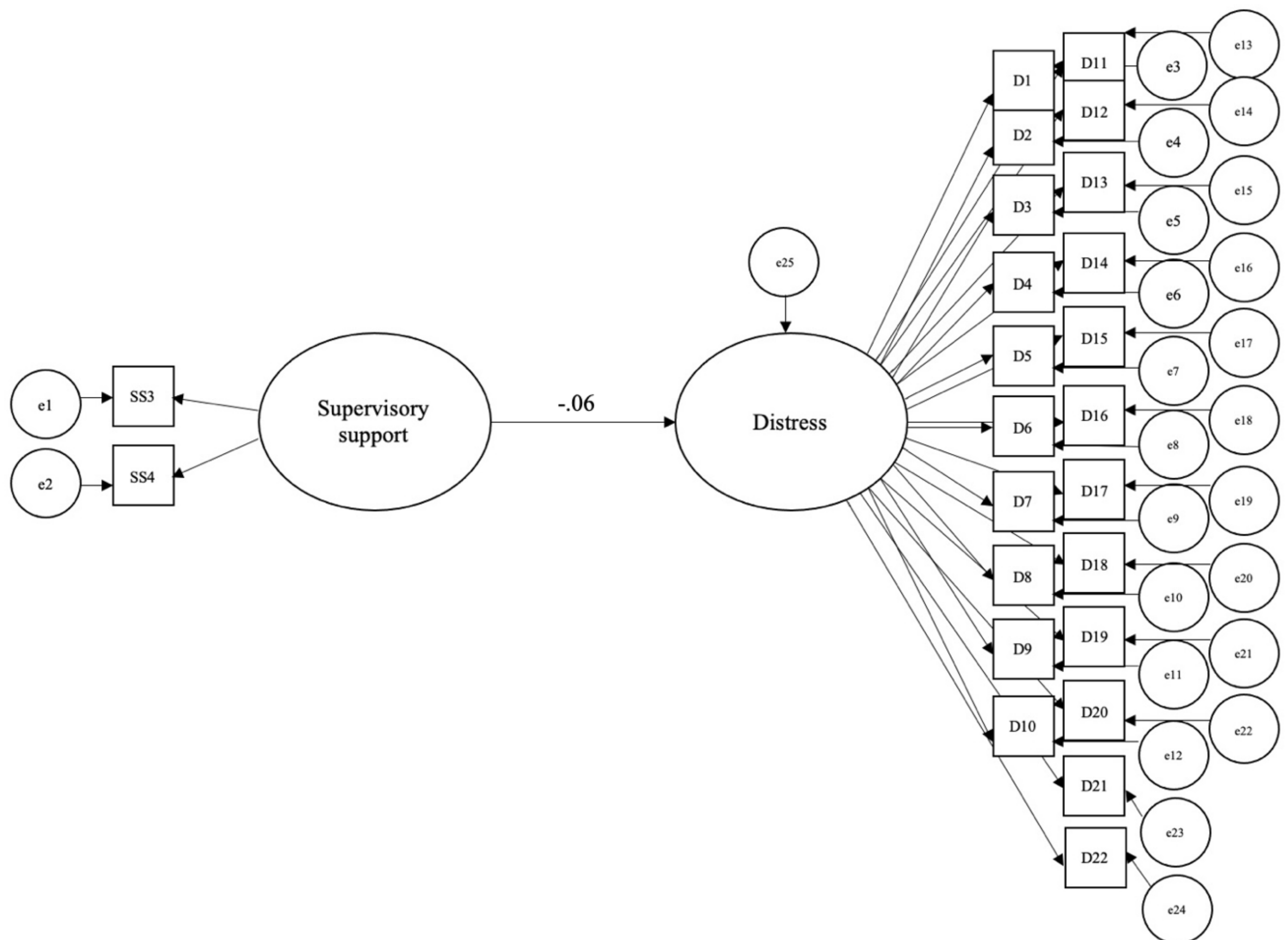
Exploratory Question Five

E5. What is the strength and the direction of the correlation between supervisory support and distress following client suicide?

Original Model. The structural equation model indicates that there is a statistically insignificant, extremely weak negative relationship between supervisory support and distress following client suicide ($\boldsymbol{r} = -.06$, $p = .60$, two-tailed, 95% CI [-.22, .09]).

Figure 15

Path Diagram Showing Standardised Parameter Estimates for Exploratory Question Five



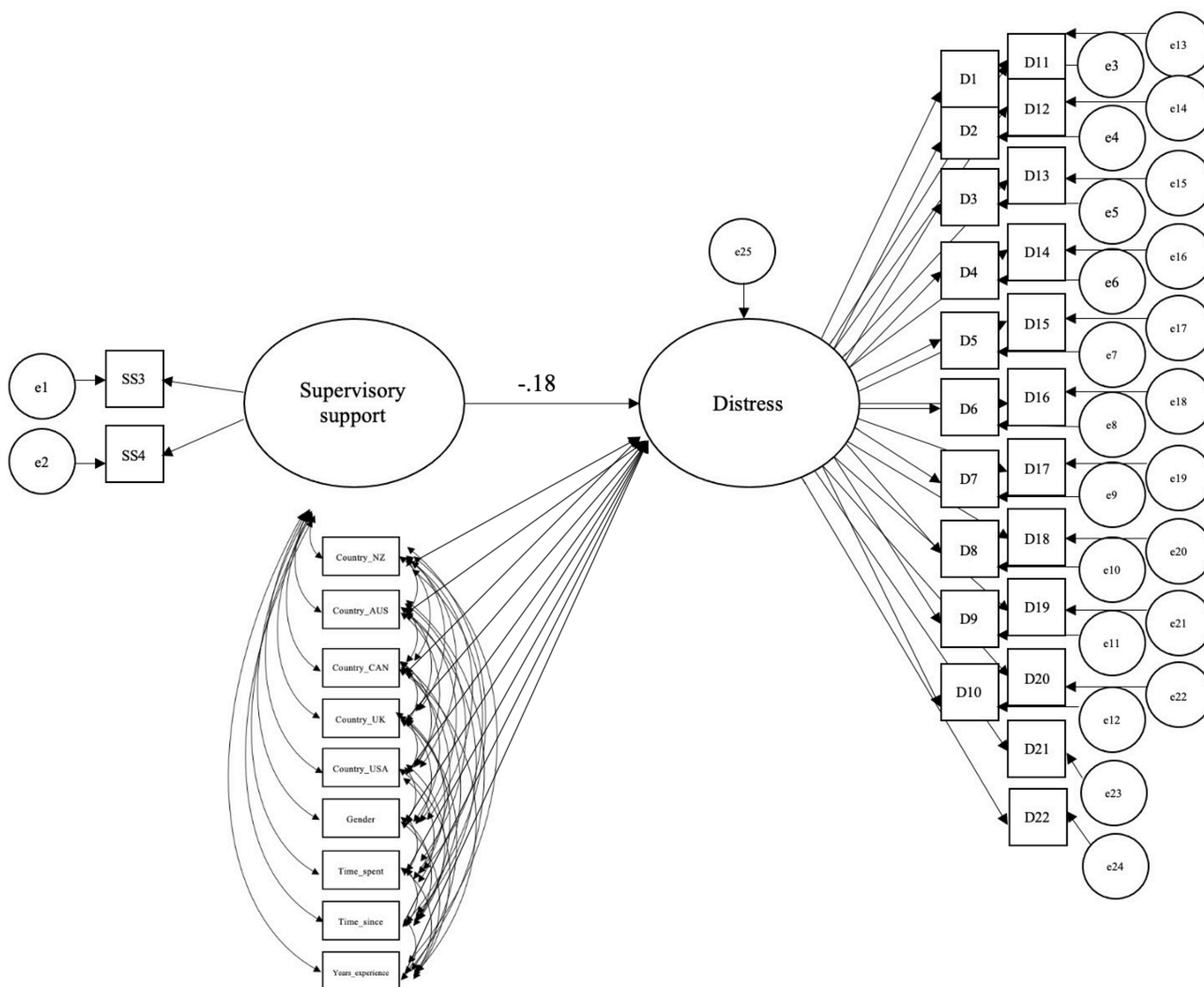
Fit Statistics. The following fit statistics indicate that model fit was relatively poor: $\chi2(251) = 93.3$, $p < .001$, RMSEA = .11, SRMR = .09.

Control Model. When controlling for confounding variables, the control model indicates that there is a statistically insignificant, very weak negative relationship between supervisory support and distress following client suicide (***r*** = -.18, *p* = .15, two-tailed, 95% CI [-.36, .00]). This finding suggests that when accounting for the effect of confounding

variables on distress, there is little association between distress and supervisory support following client suicide.

Figure 16

Path diagram showing Standardised Parameter Estimates and Control Variables for Exploratory Question Five



Fit Statistics. The following fit statistics indicate that the control model fit was relatively poor: $\chi^2(435) = 918.74$, $p < .001$, RMSEA = .10, SRMR = .09.

Test of Hypotheses

These hypotheses are based on the Decision-Justification Theory of Regret (Connolly & Zeelenberg, 2002) and the Behaviour-Intention Consistency Pathway to Regret model (Pieters & Zeelenberg, 2005).

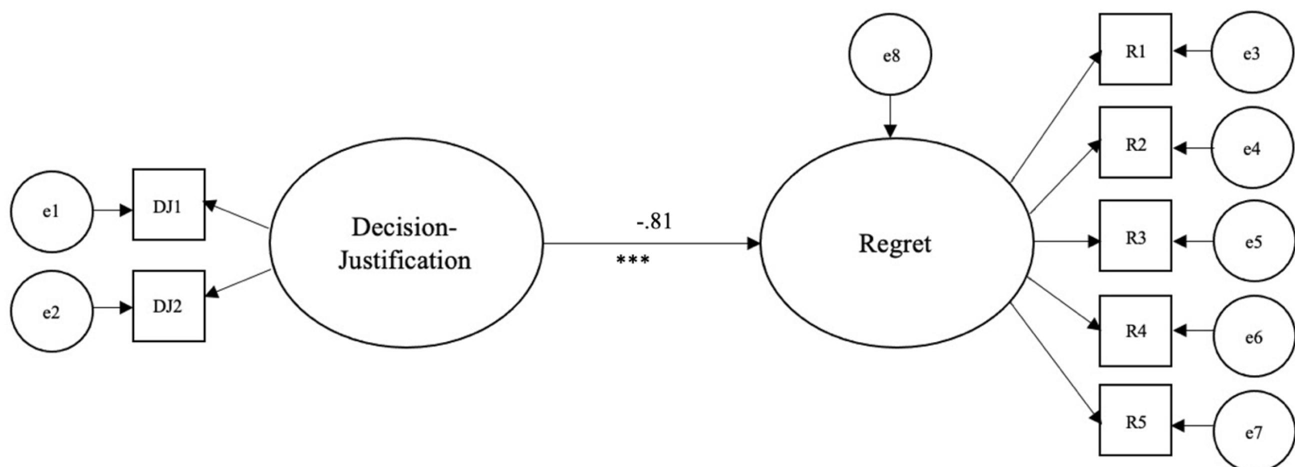
Hypothesis One

H1. Psychologists who can better justify their intervention decisions will experience less regret.

Original Model. The structural equation model indicates a statistically significant negative effect for the decision-justification latent variable on the regret latent variable (***b*** = -.81, $p < .001$, 95% CI [-.91, -.71]). This suggests that psychologists who can better justify their client care decisions tend to experience less regret following their client's suicide. As per the pre-registration, hypothesis one is considered supported by the structural equation analysis if the regression coefficient for the effect of the decision-justification latent variable on the regret latent variable, is negative and statistically significant at $p < .05$ (two-tailed). As such, hypothesis one is supported.

Figure 17

Path Diagram Showing Standardised Parameter Estimates for Hypothesis One



Note. **p* < 0.5. ****p* < .001.

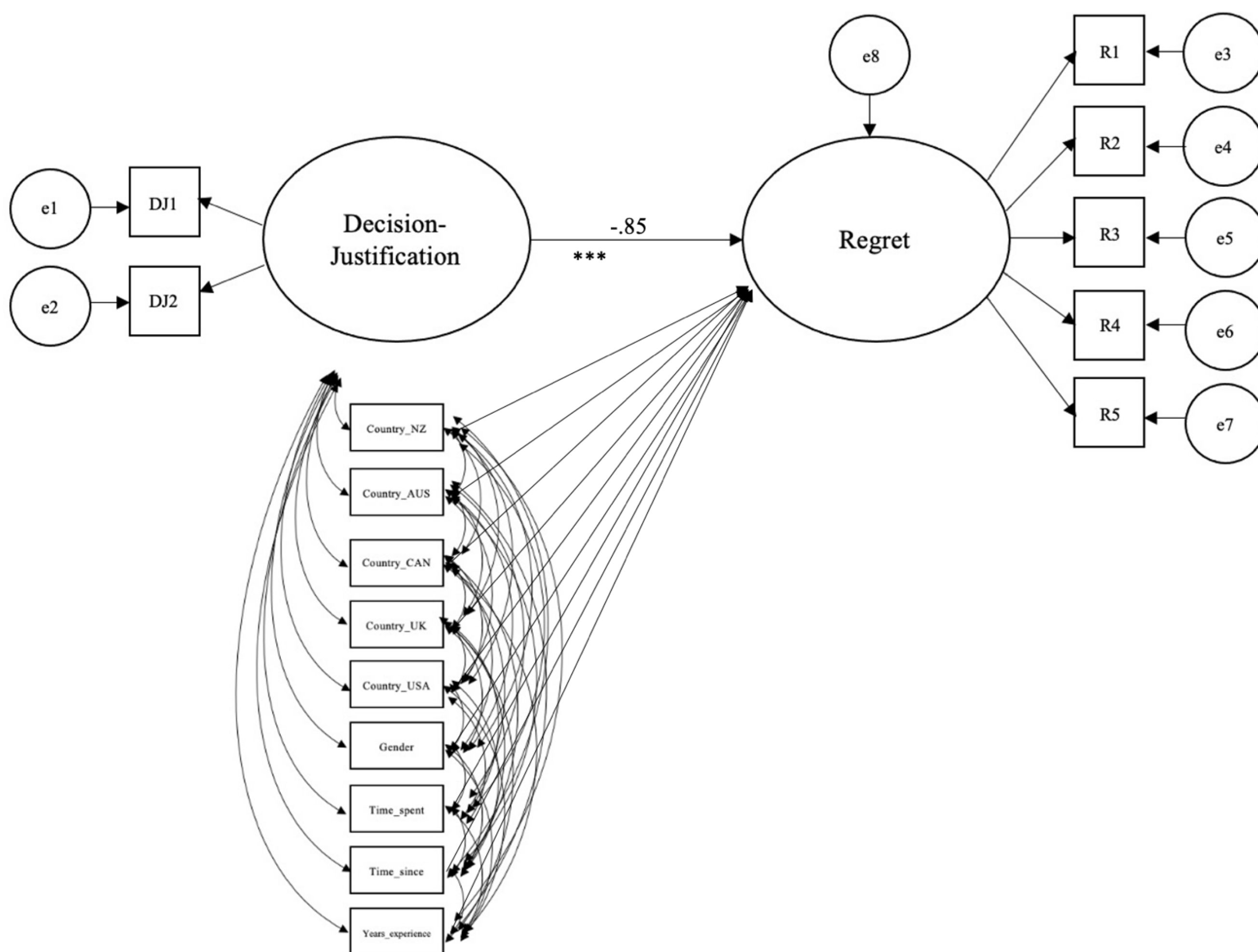
Fit Statistics. The Satorra-Bentler chi-square correlation test indicates a significant finding where $\chi^2(13) = 38.81$, $p < .001$, suggesting that the null hypothesis of "exact model fit" can be rejected. Additionally, the RMSEA = .09 indicates poor model fit. However, the SRMR = .04 indicates good fit suggesting that the difference between the observed and model-implied correlation matrices is small.

Control Model. When controlling for confounding variables, the structural model indicates a statistically significant negative effect for the decision-justification latent variable on the regret latent variable (***b*** = - .85, *p* < .001, two-tailed, 95% CI [-.99, -.71]). This suggests that while holding gender, years of experience, time spent with client, and time since client suicide constant, psychologists who can better justify their client care decisions still tend to experience less regret following their client's suicide. As per the pre-registration, hypothesis one was considered supported by the structural equation analysis if the regression

coefficient for the effect of the decision-justification latent variable on the regret latent variable, was negative and statistically significant at $p < .05$ (two-tailed). As such, our findings provide evidence to suggest that this hypothesis is still supported when accounting for confounding variables.

Figure 18

Path Diagram Showing Standardised Parameter Estimates and Control Variables for Hypothesis One



Note. *p < 0.5. ***p < .001.

Fit Statistics. The following fit statistics indicate that the control model fit was relatively good: $\chi^2(61) = 74.90$, p = .109, RMSEA = .04, SRMR = .07.

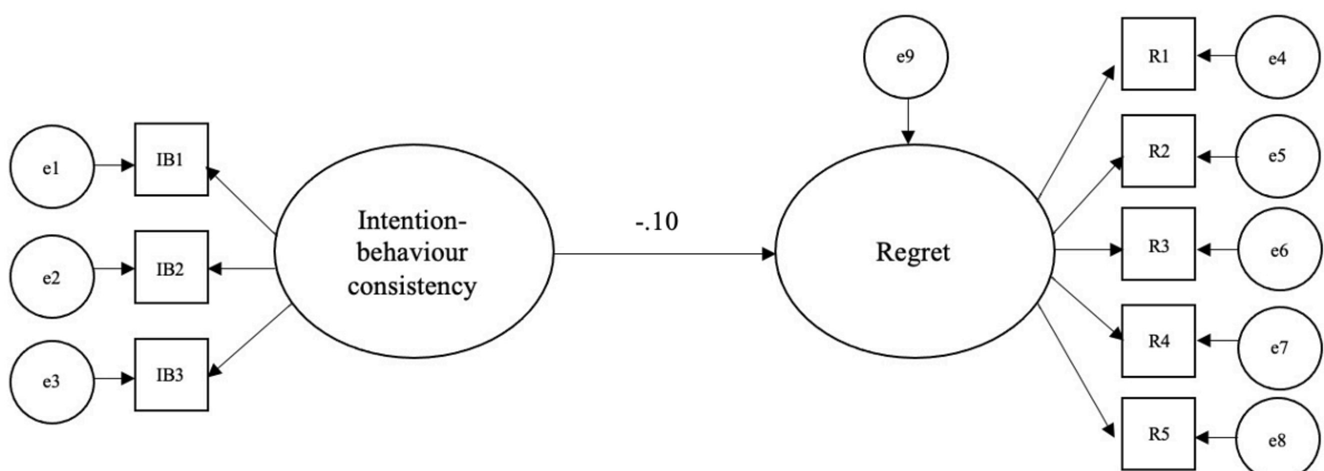
Hypothesis Two

H2. Psychologists who performed intervention behaviours that were inconsistent with their behaviour-intention will experience more regret.

Original Model. The structural equation model indicates a statistically insignificant negative effect for the intention-behaviour inconsistency latent variable on the regret latent variable ($\boldsymbol{b}$ = -.10, p = .19, two-tailed, 95% CI [-.24, -.05]). This suggests that psychologists who performed intervention behaviours that were inconsistent with their behaviour did not experience significantly more regret that those who performed consistent behaviours. As per the pre-registration, hypothesis two would be considered supported by the structural equation analysis if the regression coefficient for the effect of the intention-behaviour consistency latent variable on the regret latent variable, was negative and statistically significant at $p <$ .05 (two-tailed). As such, this hypothesis is not supported.

Figure 19

Path Diagram Showing Standardised Parameter Estimates for Hypothesis Two

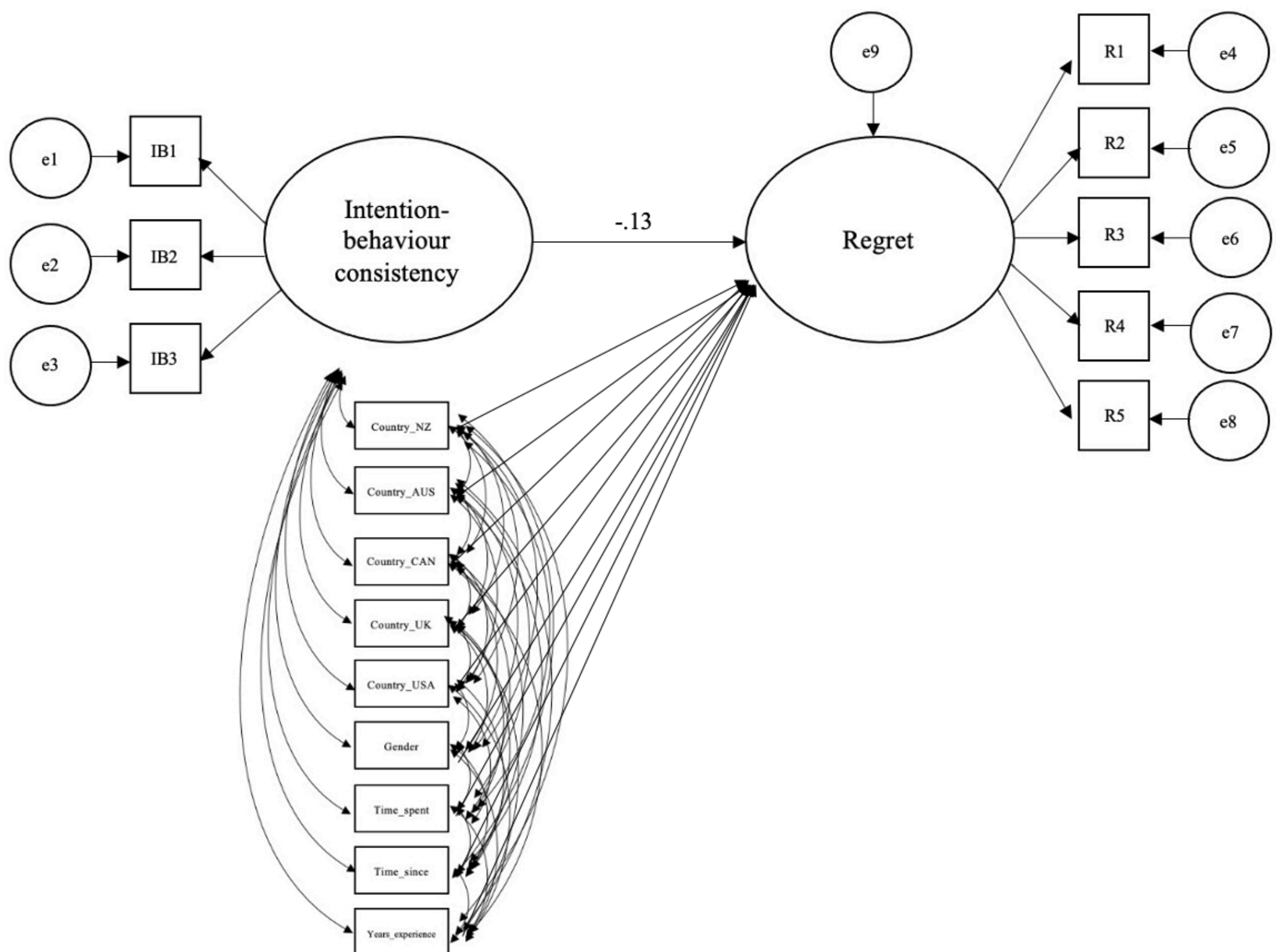


Fit Statistics. The Satorra-Bentler chi-square correlation test indicates a significant finding where $\chi^2(19) = 38.74$, $p < .05$, suggesting that the null hypothesis of "exact model fit" can be rejected. Additionally, the RMSEA = .07 indicating poor model fit. However, the SRMR = .04 indicates good fit suggesting that the difference between the observed and model-implied correlation matrices is small.

Control Model. When controlling for confounding variables, the structural model indicates a statistically insignificant negative effect for the intention-behaviour inconsistency latent variable on the regret latent variable (***b*** = - .13, *p* = .27, two-tailed, 95% CI [-.33, .08]). As per the pre-registration, hypothesis two is considered supported by the structural equation analysis if the regression coefficient for the effect of the intention-behavioural inconsistency latent variable on the regret latent variable, is negative and statistically significant at $p < .05$ (two-tailed). As such, this hypothesis is not supported.

Figure 20

Path Diagram Showing Standardised Parameter Estimates and Control Variables for Hypothesis Two



Fit Statistics. The following fit statistics indicate that the control model fit was good: $\chi^2(75) = 77.20$, $p = .408$, RMSEA = .06, SRMR = .05.

Hypothesis Three

H3. The relationship between intention-behaviour inconsistency and the amount of regret experienced will be mediated by the judged quality of the decision process.

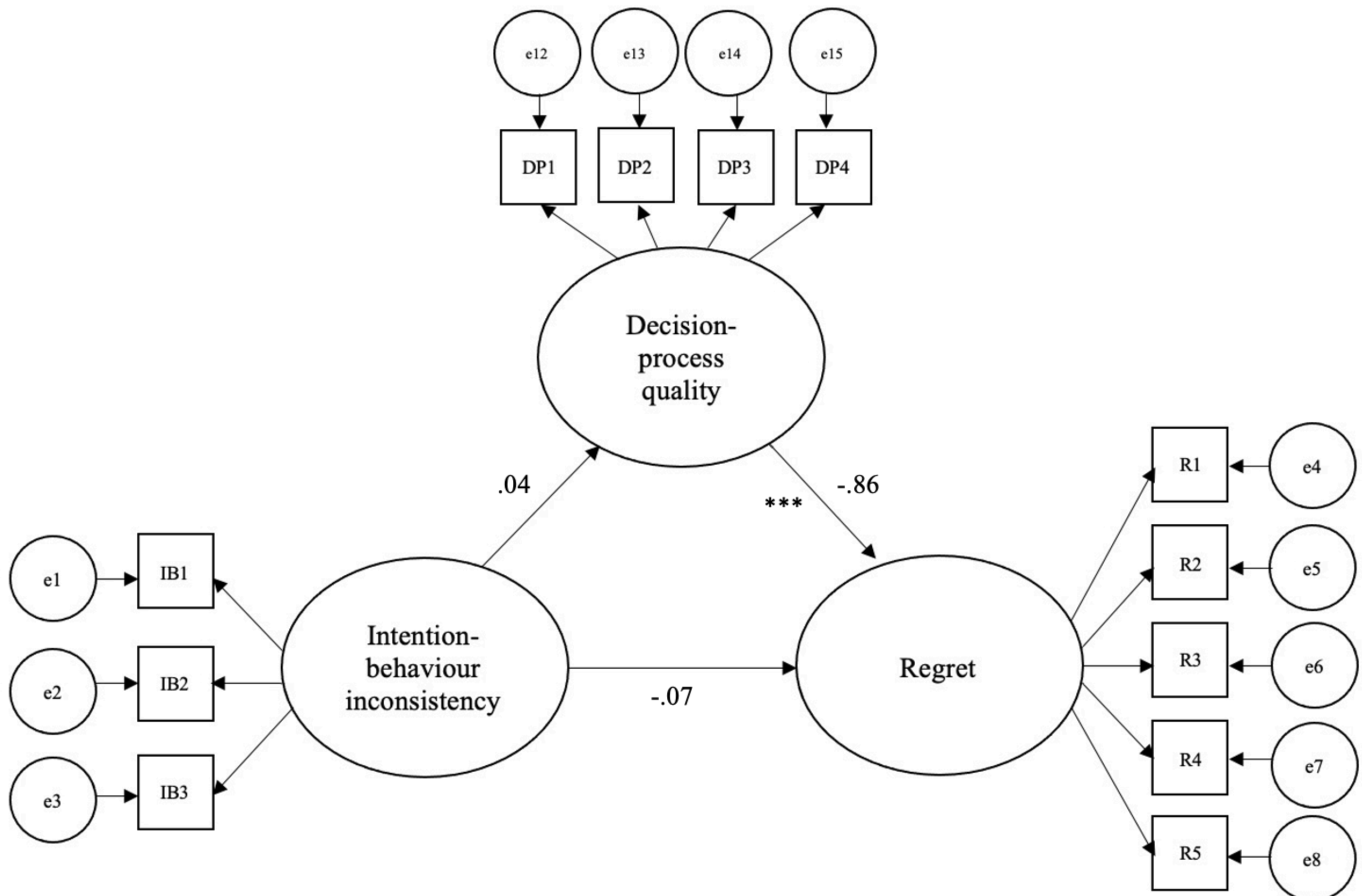
Original Model. The structural equation model indicates a statistically non-significant negative indirect effect of the latent intention-behaviour consistency variable on the latent regret variable via the judged quality of the decision process (***b*** = -.04, *p* = .57, two-tailed, 95% CI [-.16, .09)]. As per the pre-registration, hypothesis three is considered supported by the structural equation analysis if the indirect effect of intention-behaviour consistency on regret is negative and statistically significant at $p < .05$ (two-tailed). As such, our findings suggest that this hypothesis is not supported.

Interestingly, the model indicates a statistically significant strong negative effect of the decision-process quality latent variable (path b) on the regret latent variable (*b* = -.86, $p < .001$, two-tailed, 95% CI [-.93, -.79]). The regression coefficient suggests that psychologists who experience high decision-process quality tend to endure less regret following client suicide than those who experience lower decision-process quality. However, the model indicates a not statistically significant weak positive effect of the intention-behaviour consistency latent variable (path a) on the decision-process latent variable (*b* = .04, *p* = .57, two-tailed, CI [-.10, .19]). The regression coefficient suggests that high intention-behaviour consistency is weakly associated with decision-process quality, and this finding is not statistically significant.

Lastly, the model indicates a statistically insignificant weak negative direct effect of the intention-behaviour consistency latent variable (path c) on the regret latent variable (*b* = -.07, *p* = .22, two-tailed, 95% CI [-.17, .04]). The total effect as indicated by the structural model is moderately negative and not statistically significant (*b* = -.10, *p* = .17, two-tailed, 95% CI [-.25, .04]).

Figure 21

Path Diagram Showing Standardised Parameter Estimates for Hypothesis Three



Note. *p < 0.5. ***p < .001.

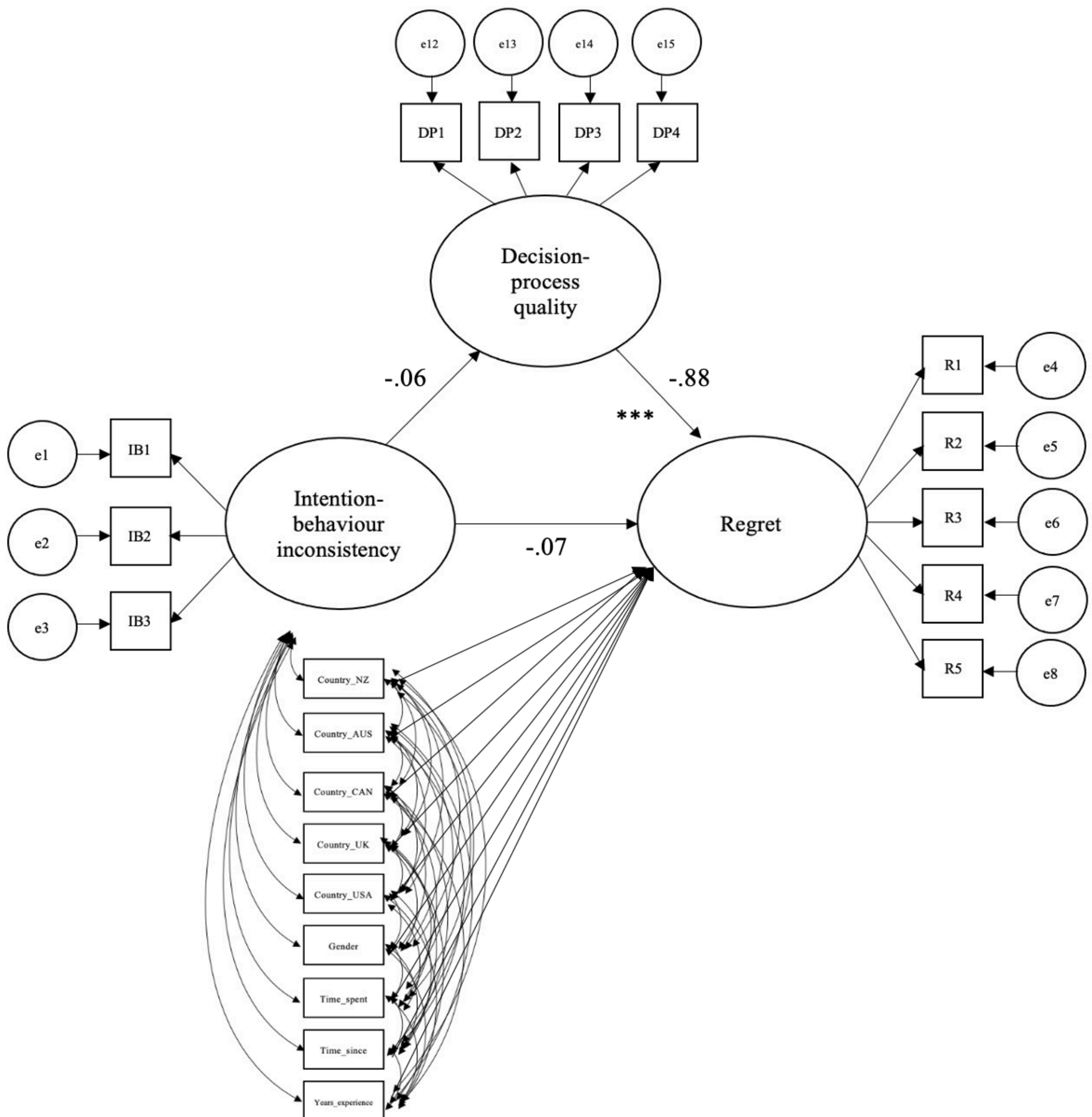
Fit Statistics. The following fit statistics indicate that the model fit was relatively good: $\chi^2(51) = 101.86$, p < .001, RMSEA = .06, SRMR = .04.

Control Model. When accounting for confounding variables, the indirect effect of the latent intention-behaviour consistency variable on the latent regret variable was not statistically significant (***b*** = -.05, *p* = .57, two-tailed, 95% CI [-.22, .12]). As per the pre-registration, hypothesis three would be considered supported by the structural equation analysis if the indirect effect of intention-behaviour consistency on regret, parameter ab, was

negative and statistically significant at $p < .05$ (two-tailed). As such, our findings suggest that this hypothesis is not supported.

Figure 22

Path Diagram Showing Standardised Parameter Estimates and Control Variables for Hypothesis Three



Note. *p < 0.5. ***p < .001.

Fit Statistics. The following fit statistics indicate that the model fit was relatively good: $\chi^2(131) = 166.56$, $p < .05$, RMSEA = .05, SRMR = .06.

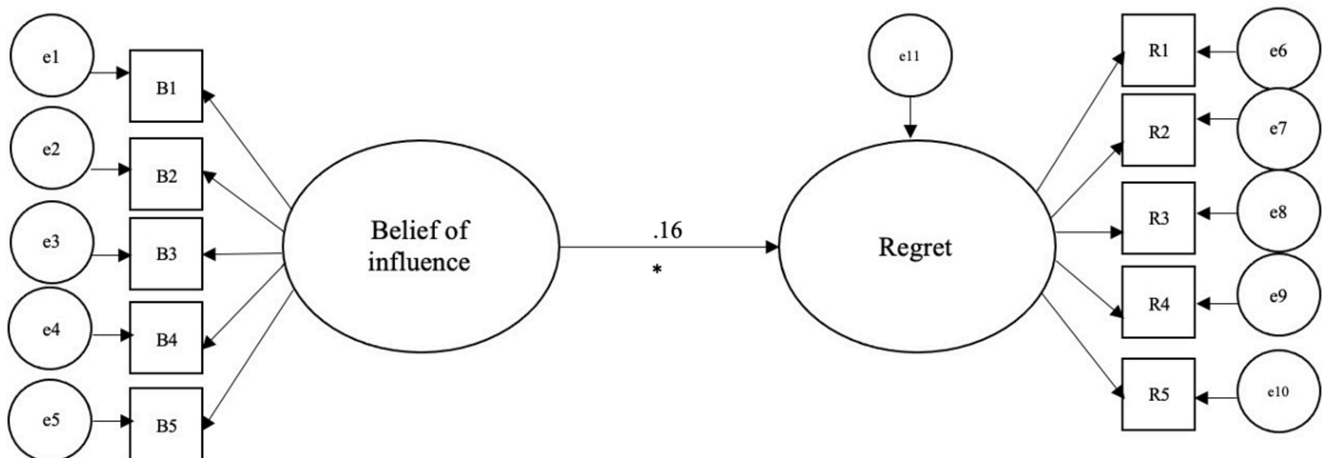
Hypothesis Four

H4. Psychologists who believed they could have influenced the outcome of the client suicide will experience more regret following the client suicide.

Original Model. The structural equation model indicates a statistically significant positive effect for the belief about suicide preventability latent variable on the regret latent variable (***b*** = .16, *p* = .04, two-tailed, 95% CI [.01, .30]). This suggests that psychologists who tend to believe that suicide is a preventable experience will experience more regret than those who tend not to believe that suicide is preventable. As per the pre-registration, hypothesis four would be considered supported by the structural equation analysis if the regression coefficient for the effect of the belief about suicide preventability latent variable on the regret latent variable, was positive and statistically significant at $p < .05$ (two-tailed). As such, our findings provide evidence to suggest that this hypothesis is supported.

Figure 23

Path Diagram Showing Standardised Parameter Estimates for Hypothesis Four



Note. *p < 0.5. ***p < .001.

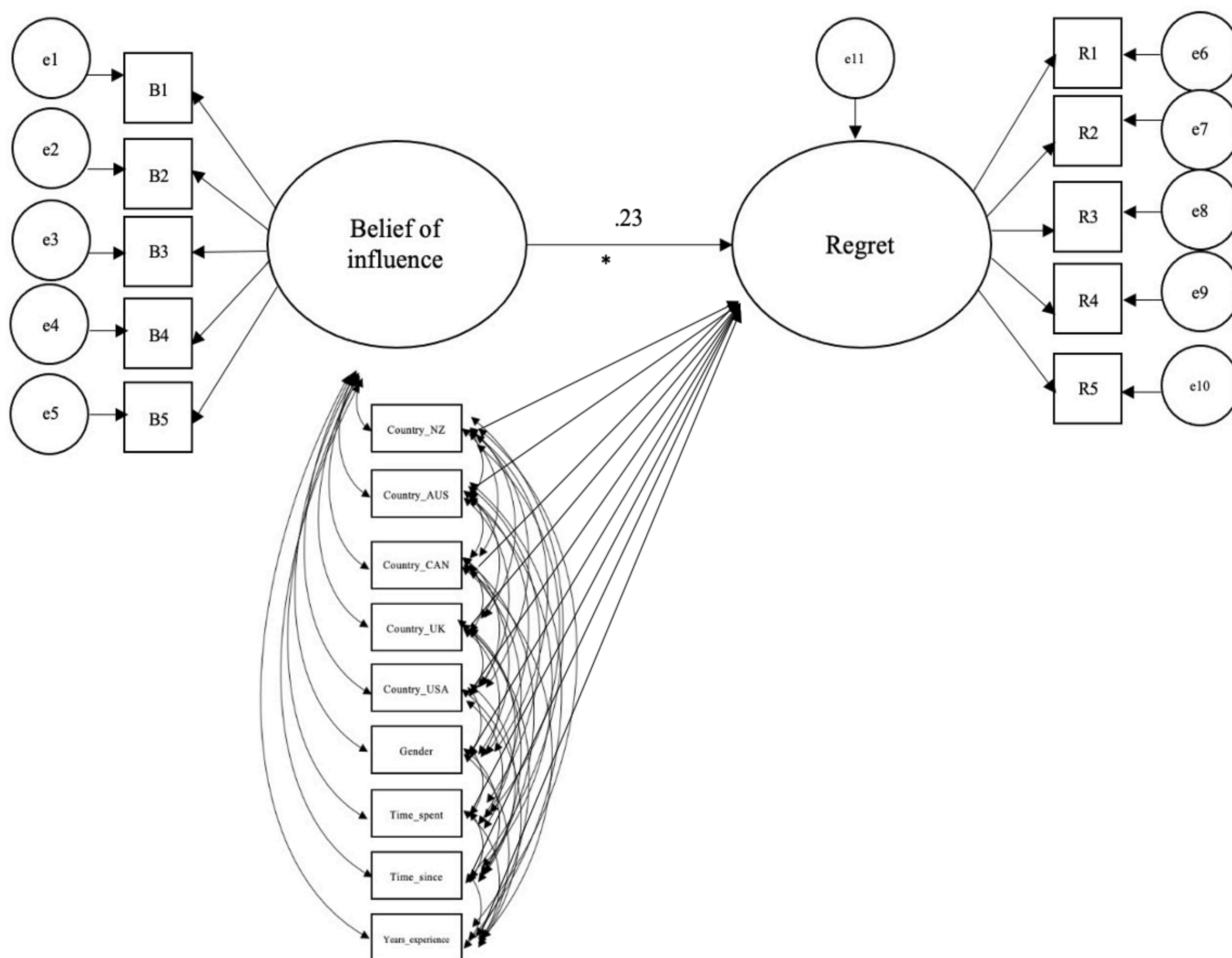
Fit Statistics. The Satorra-Bentler chi-square correlation test indicates a significant finding where $\chi^2(34) = 62.76$, p = < .05, suggesting that the null hypothesis of "exact model fit" can be rejected. Additionally, the RMSEA = .07 indicates poor model fit. However, the SRMR = .05 indicates good fit suggesting that the difference between the observed and model-implied correlation matrices is small.

Control Model. When controlling for confounding variables, the structural model indicates a statistically significant positive effect for the belief about suicide preventability latent variable on the regret latent variable (***b*** = .23, *p* = .02, two-tailed, 95% CI [.06, .41]). This suggests that while holding gender, years of experience, time spent with client, and time since client suicide constant, psychologists believe that suicide is preventable still tend to experience more regret following their client's suicide. As per the pre-registration,

hypothesis four is considered supported by the structural equation analysis if the regression coefficient for the effect of the belief about suicide preventability latent variable on the regret latent variable, is positive and statistically significant at $p < .05$ (two-tailed). As such, this hypothesis is still supported when accounting for confounding variables.

Figure 24

Path Diagram Showing Standardised Parameter Estimates and Control Variables for Hypothesis Four



Note. *$p < 0.5$. ***$p < .001$.

Fit Statistics. The following fit statistics indicate that the control model fit was relatively good: $\chi^2(131) = 136.19$, $p < .05$, RMSEA = .05, SRMR = .07.

CHAPTER 7: Qualitative Results

This chapter contains the summary of findings for the supplementary qualitative analysis. This analysis contained two research questions which are detailed below in table 14. The first research question was addressed via two survey items, and the second research question had one survey item. As such, three tables are presented in this chapter containing the codes and categories that correspond to each survey item. Of note, there are category titles that are similar for each survey item. For example, 'post-suicide process' was referenced by participants in both research questions. Each category and code is described below including a descriptive analysis of the results. Please refer to chapter eight for a wider discussion of the key findings.

Table 14

Qualitative Research Questions and Survey Items

Research Question	Survey items
1. What do psychologists who have experienced client suicide identify as factors that support and/or hinder their coping?	1. What are some things that helped you following a client suicide? 2. What are some things that made coping with client suicide challenging?
2. What advice would psychologists who have experienced a client suicide offer to a colleague who has just experienced a client suicide?	3. What advice would you offer a colleague who has just experienced a client suicide?

Conventional content analysis was the qualitative method used to analyse participant responses to the above items. Specifically, the method was informed by Hsieh and Shannon (2005). Thorough review of the textual data was undertaken followed by condensing text into smaller meaning units. From these meaning units, a coding scheme was developed, and multiple coding categories were derived. The data collected for each qualitative item was coded, categorised, and the frequencies of these are displayed in tables 15, 16, and 17 below. Of note, participant responses tended to describe several relevant factors in one extract, thus, sentences were divided up and factors were coded accordingly. As such, the total number of codes may be greater than the total number of participants. Inter-rater reliability was not estimated in this analysis due to resource constraints that impacted the scope of this project. Additionally, there are tensions around the use of inter-rater reliability within qualitative analyses in that it represents a positivistic approach to data and analysis (Braun and Clarke, 2013). However, the fundamental basis of qualitative analysis is the sensitivity to diverse and contextual interpretations of a phenomenon (O'Connor & Joffe, 2020). Nevertheless, this study undertook alternative methods to ensure robustness of results such as demonstrating all of the codes and categories for each qualitative survey item, and inclusion of several raw data extracts.

Research Question One Findings

What Factors Supported Coping Following Client Suicide? The below findings represent the factors that participants described as helpful following client suicide. While the present research mostly focuses on the negative impacts of client suicide, it was important to analyse the factors that participants perceive to be useful in order to guide relevant post-suicide recommendations. One-hundred and ninety-seven participants responded to this

survey item. The text within these responses were coded into fourteen codes which were organised into five categories as presented in table 15.

Table 15

Frequency of Codes and Categories for Qualitative Item One

Category	Codes	Frequency	Percentages (%)
Support		124	52.3
	Supervisor/colleague support	90	38.0
	Therapy	14	5.9
	Collective support	11	4.6
	Personal support	9	3.8
Psychological processing		42	17.7
	Normalising, accepting, self-compassion, validation	14	5.9
	Reflection	11	4.6
	Reassurance	9	3.8
	Learning	8	3.4

Client family		40	16.9
	Meeting family	32	13.5
	Client context	8	3.4
Post-suicide process		21	8.9
	Clinical review	16	6.8
	Legal assistance	5	2.1
Understanding limitations		11	4.7
	Treatment limitations	7	3.0
	Predictive limitations	4	1.7
Total respondents		197	
Total no. of coded items		237	

Support. The first category 'support' refers to the different types of relational support that were considered helpful following client suicide. This included the following codes: 'supervisory and collegial support', 'therapy' (which refers to participants pursuing their own therapy), 'collective support' (which refers to multi-disciplinary team support) and 'personal

supports'. As reported in table 15, 124 responses (52.3%) were associated with 'support' as being helpful following client suicide. This category entailed approximately half of all responses across categories indicating that participants tended to think that accessing support, particularly from supervisors and colleagues, was helpful in their coping with client suicide. Support from supervisors and colleagues comprised nearly two-thirds of the responses within this category, with therapy, collective support and personal support entailing comparative response frequencies. Below is a quote from one of the participants which exemplifies the usefulness of this;

> *"I immediately told the group of providers that I was in private practice with. We discussed the case at length in our weekly consultation meetings for a few weeks. My colleagues were supportive and one of them shared his own experiences of client suicide with me. I greatly respected him and so having him share this with me helped me accept the situation".*

Psychological Processing. The second category, 'psychological processing', refers to codes which include normalising, acceptance, self-compassion, validation, reflection, reassurance (that the psychologist was not to blame), and learning. While this may be addressed in supervision, and thus, might be a feature of supervisory support, it is possible that this processing can be achieved by oneself or through other methods of support. Within this category, there were 42 responses which contained the second highest number of references overall (17.7%). Participants tended to describe having their emotions normalised and validated by their supervisors and colleagues as helpful following client suicide. Additionally, several participants referenced 'learning' from the experience as a useful

process in developing their understanding of, and thus coping with, client suicide. An example of this is highlighted in the text below;

> *"My supervisor actively reaching out to me and normalising my emotional responses at various stages post the clients suicide. My own personal self-care and reflective resources (I.e. personal therapy, relevant reading, taking time off, exercise, time with supportive friends)"*

Client's Family. The third category 'client's family' refers to factors related directly to the client such as meeting their family members and considering their client's individual context. In total, 40 responses (15.1%) were coded for this category Within the 'client's family' code, 32 participants referred to involvement with their client's family as being helpful in their coping following client suicide, and eight participants referred to understanding their client's context as helpful. The following excerpts exemplify this;

> *"I was informed of the suicide in person by the client's wife and his father. They came and let me know in person and thanked me for the care I had provided the client. They let me know that I had been a great source of comfort to him and that they did not blame me and would not be suing me".*

Another participant wrote;

"At the court I was able to meet the clients mother and partner who I was concerned would blame me. In fact the opposite happened, they were just so relieved to know he had been talking to someone and getting help".

Most participants who referred to the client's family in their responses noted that their experience was comforting and helpful following client suicide. While this was not true for all participants in the study, the participants who responded to this particular item tended to report that meeting their client's family abated their concerns of legal repercussions and blame. Additionally, some participants described that they were able to provide comfort to the family which helped process their own grief. As highlighted in the quotes above, meeting the client's family afforded the participants some reassurance for the care they provided which was considered helpful following client suicide.

Post Suicide. The 'post-suicide' category refers to important managerial processes that occur following a client suicide such as clinical review, and access to legal assistance. As highlighted in table 15, 6.8% of references are related to this category. In particular, 'clinical review' refers to the process of reviewing one's client notes, judgements, and decisions – usually within a supervision environment. This was considered useful following client suicide as it appeared to offer participants reassurance and reflection regarding their clinical decision-making. This is evidenced in the quotes below;

"Support from my supervisor who was a Clinical Psychologist, not just reassurance but review of my clinical practice to reflect on my clinical judgement and decision making and other factors outside of my control that contributed to the suicide."

"Peer review, clinical review, team support, talking with friends, supervision, independent review, being reassured that all decisions and actions were valid"

'Legal assistance' refers to consulting with a lawyer or indemnity insurance provider (usually for precautionary purposes) following client suicide. Five participants described seeking 'legal assistance' as helpful due to the support and information offered around potential liability and other legal processes.

Understanding Limitations. Finally, the 'understanding limitations' category refers to the importance of understanding the clinical and statistical limitations in suicide prediction and treatment. A handful of participants (4.7%) stated that this awareness is helpful when coping with feelings of responsibility following a client suicide. This is described in the quote below;

"Knowing that client suicide is not always preventable no matter my interventions, therapeutic goals, or any other such factor. When you, as the treating professional have considered the salient factors, conducted an assessment of client's suicidality, and enlisted appropriate client support, you have likely done all that you can do. Assessing harmfulness is "at that time", and even if predictors may be there, the probability changes accordingly, BUT there is absolutely no way to make an absolute/definitive statement about another's suicidality once they leave you."

What Made Coping with Client Suicide Challenging? The second item asked participants what made coping with client suicide challenging. This was an important part of

the research question as it highlighted factors that are largely unavoidable in the post-suicide process. This demonstrates that coping with client suicide will continue to be challenging for mental health professionals. Table 16 includes the frequencies and percentages of codes and categories for this item. One-hundred and ninety participants responded to this survey item. The responses were coded into 24 codes which were organised into nine categories.

Table 16

Frequency of Codes and Categories for Qualitative Item Two

Categories	Codes	Frequency	Percentages %
Judgement		30	18.0
	Blame and responsibility	15	9.0
	Questioning self	9	5.4
	Stigma	4	2.4
	Public exposure	2	1.2
Clinical limitations		29	17.4
	Confidentiality limitations	10	6.0
	Prevention	10	6.0
	Contradiction	6	3.6
	Lack of information	3	1.8
Cognitive emotions		27	16.2

	Counterfactual thinking	13	7.8
	Moral emotions (regret, guilt, shame)	6	3.6
	Triggers	6	3.6
	Self-blame	2	1.2
Post-suicide processes		18	10.8
	Coronial process	13	7.8
	Clinical review	5	3.0
Support		15	9.0
	Supervisory support	9	5.4
	Collegial support	6	3.6
Client factors		15	9.0
	Client family	6	3.6
	Relationship with client	4	2.4
	Nature of suicide	3	1.8
	Client features	2	1.2
Clinical practice		13	7.8

	High risk clients	13	7.8
System		13	7.8
	Systemic issues	8	4.8
	Organisational concerns	5	3.0
Bereavement		6	3.6
	Personal losses	6	3.6
Total respondents		190	
Total no. of coded items		166	

Judgement. The first category 'judgement' refers to attitudes expressed towards the psychologist about suicide liability Additionally, this category includes participants own judgements about the degree of responsibility for the suicide. This category contains the highest number of responses within this item (18.0%), and includes the following codes: blame and responsibility, questioning self, stigma, and public exposure. 'Blame and responsibility' refers to participants' experience of blame for their client's suicide by colleagues and supervisors, and the client's family. 'Questioning self' refers to the doubt experienced by participants about their client care decisions, and 'stigma' refers to the assumption that psychologists should be blamed for being unable to prevent suicide. Finally, public exposure was referenced by two participants which refers to the suicide being reported in the public domain. Please refer to the extracts below which help illustrate this category;

"Judgements from Psychologist management. Essentially blame from management for both myself and the treating psychiatrist. I think really this comes from their fears and insecurity, but it then over shadowed my own sense of sadness about loss, instead making me have to be defensive."

"Initial theories that foul play may have occurred - felt like we were waiting to find out what happened. Gave a sense to some team members of waiting to find out if they were in trouble, therefore additional complication in supporting colleagues."

These examples highlight that participants experiencing judgement about liability, particularly from those in senior positions, feel less supported following client suicide which might complicate and extend the grieving process. Additionally, compounding these experiences is the possibility that the client's suicide might be presented in the public domain. The following text describes the impact that that this has had on one participant in particular;

"My name was published and comments I had made in my coroner's report cherry-picked to make me seem at fault when I wasn't. My name ended up on forums. I was never asked for a comment by a journalist. I am left with the feeling that the family blames me (as that was the narrative) when I only saw the young woman three times the previous year and she was not suicidal at that time. The news article is still online 12 years later. I hate that it's there, this article implying that I was in some way at fault".

Clinical Limitations. Clinical limitations is the second most referenced category (17.4%) and includes codes such as 'confidentiality limitations', 'prevention', 'contradiction', and 'lack of information'. 'Confidentiality limitations' was referenced by 10 participants and refers to the confidentiality restrictions that prohibit the sharing of information about clients to family and friends. Psychologists reported that this restriction curtailed their dependence on personal supports for comfort, which was considered difficult following client suicide. 'Prevention' refers to the limitations related to preventing suicide (which was discussed in chapter one), and 'contradiction' refers to the outcome (suicide) contradicting the risk assessment. Finally, 'lack of information' refers to risk information that was not available at the time of the assessment but became known following the client suicide. For example, participants described learning about additional client's risk factors which could have influenced their client care decisions as challenging. Below is a quote highlighting the perceived impact of clinical limitations on psychologists coping with client suicide;

> *"It was such a significant and heart-breaking event that I had to mainly manage alone. The nature of our work is confidential which means that my grief in many ways was confidential. Supervision and peer consultation was helpful but grief does not contain itself to that one hour a week or a few hours a month. It hits when it hits."*

This extract highlights that client suicide was a significant and isolating event for the participant, especially since the only forum available for clinical support is restricted. This participant described experiencing a confidential grief that appears unsupported, and thus, makes coping with client suicide challenging.

Cognitive Emotions. The third category, 'cognitive emotions' contained 27 responses (16.2%) and refers to cognitive emotional processes such as 'counter-factual thinking', 'moral emotions', 'triggers', and 'self-blame'. 'Counter-factual thinking' contained nearly half of the responses within this category compared to other codes with 'self-blame' containing the least. The remaining codes were referred to comparably. 'Counterfactual thinking' refers to 'what-if' thinking relating to client care decisions. Thirteen participants referred to counterfactual thinking and several felt they could have made different decisions in retrospect. 'Moral emotions' refers to the experience of regret, guilt, and shame which was reported by six participants as difficult following client suicide. These codes are highlighted in the quote presented below;

> *"I also reflected quite a bit on how poorly we are prepared for suicide of a client from a training perspective. I felt shame that I was not good enough to have prevented this - that good clinicians don't have clients who suicide. The reality is none of us are immune to client suicide and it would be good if universities normalised this more. Of course there is always the thoughts of could I have prevented this."*

Additionally, 'triggers' refers to reminders about the client which caused emotional reactions such as seeing news items or working with other clients with a similar presenting issue. Finally, 'self-blame' refers to participants feeling responsible for the client suicide. Participants described self-blame in the context of failing, and feeling like one should have 'known' that their client was suicidal.

***Post-Suicide Processes*.** The fourth category, 'post-suicide processes' was referenced by 18 participants (10.8%) and refers to the clinical and legal management of client suicide. These processes are characterised by lengthy reviews and investigations which shine a spotlight on psychologists' intervention decisions. It is interesting that this category is also referenced in table 15 as processes that are considered helpful. It is likely that these processes have the potential to either assist or impact on coping following client suicide. The codes included in this category are 'coronial process' and 'clinical review'. 'Coronial process' was described by thirteen participants as stressful following client suicide. This code refers to attending (or fear of attending) coroners court, awaiting coroner findings, and general uncertainty around the legal process following client suicide. Participants tended to describe this process as lengthy and expressed that the long-term anticipation of the coronial outcome caused additional stress. The below quote highlights these difficulties;

> "*The protracted nature of external investigations is very difficult for practitioners, as is the way some of these investigations are carried out. The team in which I work had another suicide in 2013 and, now in 2020, this is yet to go to Coroner's Court".*

Finally, 'clinical review' was referenced by five participants who described this as unhelpful when attributions of blame were made towards them. Clinical reviews are usually undertaken by supervisors and managers, and most of the participants who referred to this code expressed feeling inadequate following review of their practice. This category highlights the various processes psychologists confront following client suicide. Psychologists must display defensible client-care decisions to a variety of stakeholders (e.g., supervisors, managers, coroner) which are thoroughly reviewed and challenged. These

organisational, clinical, and legal demands were described as challenging by participants, especially while managing their own emotional responses to the loss of their client.

Support. 'Support' was referenced by 16 participants and refers to the supervisory and collegial support available following client suicide. While these forms of support were considered helpful by majority of the participants (as mentioned earlier in the chapter), nine participants were disappointed by the amount or type of support they received from their supervisors, and six participants described feeling misunderstood or minimised by colleagues. The below quote reflects this;

> *"Lack of support, or even interest, from my supervisor and other psychologists on staff. My supervisor even gave the client's case notes to the parents without consulting me or letting me speak with them. The parents threatened to sue me but never followed through."*

This participant describes that both a lack of support and interest from their supervisor and colleagues hindered their coping with client suicide. Here, they provided an example of an action their supervisor took which appears to distress the client's parents and the bereaved psychologist. Other participants also drew on examples of supervisor actions which they believed caused increased stress following client suicide.

Client Factors. 'Client factors' was referenced by 15 participants (9.0%) which includes the following codes: 'family grief', 'relationship with client', 'nature of suicide', and 'client age'. This category refers to factors that are specific to the client which participants have described as impacting on their coping following client suicide. For example, 'family grief' refers to the emotions that participants felt for their clients' family members

experiencing loss; ‘relationship with client’ refers to the closeness of the therapeutic relationship between the psychologist and their client; ‘nature of suicide’ refers to the method of suicide undertaken, and ‘client age’ refers to the age of the client when they suicided. The following extract represents the client factors described by participants as contributing to ongoing stress following client suicide;

> *“More distressing when suicide was of a young person/teenager. Also that the friends and family were experiencing the pain of loss BECAUSE I had failed to do my job.”*

This category represents factors that are unavoidable when working with clients (e.g., developing a therapeutic relationship, working alongside family members, working with young people), and thus, will likely continue to be challenging for psychologists experiencing client suicide.

Clinical Practice. ‘Clinical practice’ refers to the ongoing treatment with other suicidal clients. Thirteen participants (7.8%) reported that this impacted on their coping following client suicide. For example, one participant reported that they had a lower threshold for managing suicide-related risk factors and experienced increased anxiety;

> *“Continuing to work with a high-risk population, other clients disclosing suicidal ideation/intent and having a lower threshold for hearing that, increased anxiety about client suicide/attempts, hearing the impact during assessments of client's who had lost someone to suicide.”*

Several participants described the difficulty in processing their grief while simultaneously working with suicidal clients on their case load. In particular, one participant stated that the fear of another suicide occurring caused them to resign from their community mental health position.

System. The category 'system' was also referenced by thirteen participants (7.8%) and this includes two codes, 'system issues' and 'organisational concerns'. 'System issues' refers to the concerns relating to institutional care such as resource allocation and stakeholder involvement. Eight participants reported that they believed other stakeholders could have been more responsive or that risk assessments by other practitioners were not adequately conducted. 'Organisational concerns' relates to poor organisational processes and input following client suicide. Five participants reported that they felt unsupported at the management level which they believed contributed to further isolation and grief.

The final category, 'bereavement' refers to compounding grief as a result of earlier experiences of suicide bereavement encountered by participants. Six participants described that previous exposure to suicide negatively impacted on their coping with their current client suicide and this is referenced in the quote below;

> *"The fact that my aunt had suicided in the same place and the same way a few years earlier. The fact that I have personally known quite a few people who have taken their own lives."*

Research Question Two Findings

What Advice Would you Offer a Colleague who has Just Experienced a Client Suicide? The third item responds to the second research question about what advice bereaved

psychologists would give those who have experienced a client suicide. This item allowed participants who have reflected on their client suicide experiences to share insights about what was effective or what they would change, to help make improvements to the post-suicide process for mental health practitioners. Table 17 represents the frequencies and percentages of codes and categories for this item. One-hundred and ninety-three participants responded to this survey item. The text within these responses were coded into 22 codes which were organised into six categories. The following section describes each category and their respective codes in relation to research question two.

Table 17

Frequency of Codes and Categories for Qualitative Item Three

Categories	Codes	Frequency	Percentages (%)
Support		149	42.3
	Seek supervisor/collegial support	68	19.3
	Seek support (non-specific)	37	10.5
	Supervision	23	6.5
	Therapy	17	4.9
	Seek personal support	4	1.1
Compassion		70	19.9
	Avoid self-blame	21	6.0

	Self-compassion	16	4.5
	Acceptance	14	4.0
	Humanise	11	3.1
	Understanding grief	6	1.7
	Reassurance	2	0.6
Personal coping		62	17.6
	Time to grieve	24	6.8
	Self-care	21	6.0
	Time off work	17	4.8
Post-suicide processes		42	11.9
	Review practice	18	5.1
	Reflection	13	3.7
	Learning	5	1.4
	Self-advocacy	4	1.1
	Legal support	2	0.6
Clinical limitations		19	5.4
	Predictive limitations	17	4.8
	Not omnipotent	2	0.6

Emotions		10	2.8
	Express emotions	10	2.8
Total responses		193	
Total no. of coded items		352	

Support. Of this category, 149 responses (42.3%) were associated with a range of support avenues which have been organised into the following codes: 'seek supervisor/collegial support', 'seek support (non-specific)', 'supervision', 'therapy', and 'seek personal support'. This category contained nearly half of the participant responses and is consistent with the item one relating to what participants found helpful following client suicide. Interestingly, 17 participants suggested that seeking therapy is useful following suicide in order to help process grief reactions. Few participants referred to 'personal support' (1.1%) which might indicate the confidentiality issues surrounding information sharing. It is likely that professional supports were heeded due to these constraints which is reflected in the below quote;

"Get supervision. Seek out some personal therapy of you're not already participating in it. I would suggest they seek psychotherapy to process it, and that they recognize that their role as the person's therapist does not make them responsible for everything that happens."

This participant suggests both supervisory support and therapy as being helpful following suicide. They suggest that engaging in therapy might be useful in challenging one's beliefs about their role and degree of responsibility as a psychologist.

Compassion. The second category 'compassion' was referenced by 70 participants and includes the following codes: 'avoid self-blame', 'self-compassion', 'acceptance', 'humanise', 'understanding grief', and 'reassurance'. This category refers to the various ways that compassion may be afforded to psychologists experiencing the aftermath of client suicide. This is highlighted in the quote below;

> *"Be as kind to yourself as possible. Give yourself time and space to allow whatever emotions show up for you. Observe judgements compassionately and practice a kind radical acceptance of your client's decision within the context they found themselves in."*

'Avoid self-blame' was the highest referenced code followed by 'self-compassion' and 'acceptance' within this category. The code 'humanise' refers to practicing empathy and showing validation for any grief experienced, and 'understanding grief' refers to learning more about the grief process to increase insight around the emotions experienced. Finally, 'reassurance' refers to receiving confirmation from supervisors or colleagues that intervention decisions were appropriate, and this was suggested by two participants as being useful.

Personal Coping. This category was referenced by 62 participants and relates to three personal methods of coping such as 'time to grieve', 'self-care', and 'time off work'. These codes reflect psychologist-lead coping strategies which were recommended following client

suicide. 'Time to grieve' contains the highest number of responses and refers to the importance of acknowledging one's grief and making time to process it. 'Self-care' was reported by 21 participants, and 'time off work' was recommended by 17 participants.

Post-Suicide Processes. This category has appeared across all survey items and was referenced by 42 participants. Post-suicide processes are the managerial or clinical responsibilities that one has to perform following client suicide. For this category, it has been recognised as five codes which include: 'review practice', 'reflection', 'learning', 'self-advocacy', and 'legal support'. Eighteen participants recommended a review of practice as being useful following client suicide. The below quotes touch on several categories across this research question which highlight key ideas relating to the experience of client suicide. The first demonstrates three codes that are relevant to the 'post-suicide process' such as the necessity of review, reflection, and learning. The second quote refers specifically to the potential consequences of extended practice reviews and rumination. These quotes are important to share as both participants warn that thorough review processes, while helpful, might contribute to feelings of regret, self-blame, and grief which need to be managed appropriately. Consequently, these quotes demonstrate that what is necessary following client suicide (i.e., review processes) may not initially improve coping following client suicide.

> *"It is important to understand what is and is not within your power as a therapist. Some lives will be lost even when the therapist does everything appropriately. Learn what you might have done differently and forgive yourself for the mistakes you may have made. Then take care of any grief or regret by treating yourself as if you are*

healing from an illness or trauma. Sometimes therapists consider leaving the field after a client suicide. Wait a year or so before making decisions about your career."

"I would say that self-examination and review is a healthy and normal process but it's a col du sac. It's a place to go into for a little while and then come out of as it won't take you anywhere. Self-review is essential but self-blame becomes destructive if emersed in for too long."

Finally, 'self-advocacy' refers to self-management around one's needs following client suicide (e.g., requesting time off work, reducing caseloads), and 'legal support' refers to consultation with insurance/legal providers for advice around legal processes. These codes were referred to the least within this category.

Clinical Limitations. Nineteen participants recommended considering 'clinical limitations' when coping with the impacts of client suicide. Of this category, two codes were referenced which include 'predictive limitations' and 'not omnipotent'. 'Predictive limitations' refers to the limitations inherent in risk assessment, and seventeen participants reported that understanding these will be useful in managing expectations about one's influence. Additionally, two participants suggested that psychologists should be realistic about their role as a psychologist which is represented by the 'not omnipotent' code. These ideas are expressed in the extract presented below;

"I would remind them of the research showing that our current risk assessment tools are fallible - we cannot always predict risk accurately and even if we admit a person

at 'high risk' we cannot always prevent a suicide attempt. Allowing the experience to deepen your understanding of clients' free will and that psychologists are not omnipotent, continue to strengthen your suicide prevention skills while being realistic about your role and limitations."

Emotions. The final category 'emotions' refers to the importance of expressing one's grief following client suicide. Ten participants recommended this as being helpful in the context of supervision, among colleagues, with family members, or independently. Several participants noted the importance of being in contact with one's grief and this is highlighted by one participant below;

"Let yourself experience the grief. Tell your close loved ones so they are aware what you are experiencing."

In summary, results from this qualitative analysis highlight that factors such as supervisory support, contact with client family, and clinical review with supportive supervisors and colleagues was considered helpful following client suicide. Additionally, participants identified that the experience of judgment, moral emotions, and clinical limitations made coping with client suicide difficult. Interestingly, participants also acknowledged that limitations such as confidentiality restrictions prevented them from consulting personal supports, which rendered their grief silent. Advice that was recommended by participants to colleagues experiencing the aftermath of client suicide included seeking support, practising compassion, and prioritising personal coping methods

such as taking time to grieve. A deeper discussion on these findings and their implications are presented in the chapter below.

CHAPTER 8: Discussion

This study investigated regret and distress among psychologists impacted by client suicide. It drew upon two theories to focus the analysis of the experience of client suicide: the Decision-Justification Theory of Regret and the Intention-Behaviour Consistency Pathway Model of Regret. The measurement of decision-regret, a key variable in these models, has recently appeared in the medical literature relating specifically to intervention decisions made by patients and medical professionals (Sheehan et al., 2008; Sim et al., 2020; Wollersheim et al., 2020). Furthermore, previous literature investigating complicated grief in the context of suicide bereavement and other loss has detailed the impact of 'counterfactual thinking' on emotions among bereaved loved-ones (Eisma et al., 2021; Neimeyer et al., 2021). Counterfactual thinking, also known as 'what-if' thinking, is a key component of the regret construct. A second component is self-blame – a cognitive process where an individual attributes responsibility to self for an unfortunate event (Pieters & Zeelenberg, 2005; Zeelenberg et al., 2002) In healthcare roles where professionals are expected to make intervention decisions for their patients, we anticipated that regret would be a common experience in the event of an unwanted patient outcome.

Majority of the previous studies on the impacts of suicide have utilised an exploratory approach, predominantly focusing on distress as the outcome variable (Chemtob et al., 1989; Chemtob et al., 1988; Dransart et al., 2014; Finlayson & Simmonds, 2018; Rothes et al., 2013). Few qualitative investigations have also been conducted which have offered insights concerning individual impacts of client suicide on different types of mental health professionals (Darden & Rutter, 2011; Sherba et al., 2018; Ting et al., 2006). In contrast to the above, this study has detailed a distinctive approach to evaluating psychologists' responses to client suicide. First, it is one of the few known studies within the area of

psychologist bereavement to utilise hypothesis testing as its predominant method of analysis; second, this study focused on the experience of regret in particular where previous studies had mostly focused on overall distress; and finally, a supplementary qualitative analysis was included in this study so as to derive contextualised accounts of the factors that were conducive to coping with client suicide. Through using structural equation modelling (SEM), this study's unique approach allowed for a more comprehensive analysis of the experience of client suicide, with the added benefit of accounting for the effects of measurement error. Additionally, the analysis included controlling for confounding variables identified in previous literature that were found to influence this experience.

This chapter will begin with a discussion of the key quantitative findings including how they relate to relevant literature, followed by a discussion of the clinical implications. Finally, the chapter will close with a review of the study's limitations and recommendations for future research directions.

Key Quantitative Findings

Exploratory Question One

1. How much regret do psychologists feel following client suicide?

Results from this question indicated that mental health practitioners tended to experience low levels of regret. In particular, most participants at the time of the survey tended to disagree with item four, 'I think the choices I made were harmful', and most agreed that they would make the same choices again should the same situation arise. The Decision-Justification Theory of Regret (DJT) argues that two key components contribute to the experience of regret. These include: 1) upward counterfactual thinking, and 2) feeling self-blame for making a poor decision. The present study's results indicated that majority of

psychologists were not engaging in upward counterfactual thinking patterns and most considered their client-care decisions appropriate, which is likely reflected in the low regret levels. Upward counterfactual thinking (i.e., imagining a better outcome) is considered likely when the antecedent event can be mentally undone, and when the outcome is considered within the realm of personal control (Maitner & Summerville, 2022). Thus, it may be that the participants of this present study mostly experienced low levels of regret due to perceiving little control over the client suicide. This study's qualitative component also identified that some participants considered predicting and preventing suicide a near impossible task, which enabled them to better accept their client's suicide. Limitations to predicting and preventing suicide are also supported in the literature as a result of low base-rates and poorly understand risk factors (Fortune & Hetrick, 2022; Large, 2018; Large & Ryan, 2014; Whiting & Fazel, 2019). Additionally, other participants attributed the responsibility of the suicide to their client, which likely reduced feelings of culpability and regret. Trimble et al. (2000) also identified that psychologists who coped better with client suicide, were able to recognise that it is their client who is responsible for their actions which was also evidenced in the present's study qualitative analysis.

Another possible explanation for the low levels of regret could be that the experience of regret might have been influenced by post-suicide processes, (such as supervision and coronial enquiry) that likely occurred between the event and this study. For example, psychologists participate in frequent supervision to critically evaluate their clinical work with the support of a more experienced clinician (Lilienfeld & Basterfield, 2020). Through supervision, client-care decisions are carefully re-evaluated which might encourage a psychologist to either determine what they might have done differently (Cooper, 2005; Hess, 2011; Lilienfeld & Basterfield, 2020), or obtain confirmation that their decisions were, in

fact, favourable. A psychologist's decisions might be further supported following the coronial inquiry or through engaging in discussions with other colleagues, leading to reduced counterfactual thinking, and thus, influencing regret outcomes. This study's qualitative findings also indicated that psychologists tended to feel less regret and engaged in less counterfactual thinking when the clinical review and coronial inquiry supported their client-care decisions.

Exploratory Question Two

2. How much distress is experienced by psychologists following client suicide?

Exploratory question two was addressed by using the IES-R scale to measure how much distress is experienced by psychologists following client suicide. Findings indicated that psychologists on average experience below moderate levels of distress. This result is inconsistent to earlier studies who also used the IES-R scale to measure the impacts of client suicide. For example, Chemtob et al. (1988) measured psychiatrists' responses to client suicide and found that most were significantly impacted by the experience. Additionally, 57% reported experiencing post-traumatic symptoms that were similar to those representing clinical norms. These findings illustrated responses in the weeks directly following client suicide, however, most psychiatrists were not considered clinically distressed six months following the suicide. Chemtob et al. highlight the degree of the initial distress among psychiatrists directly after the event. While the present study directed participants to evaluate their distress symptoms in the two weeks following the client suicide, these accounts might be impacted by recall bias due to the length of time passed at the time of the present survey.

Findings comparable to the present study were illustrated by Dransart et al. (2014), who also used the IES-R to measure mental health professional responses following client

suicide. They found that most mental health professionals experienced low distress in the month following the event which contrasts with Chemtob et al.'s (1988) findings. Finlayson and Simmonds (2018) also reported similar findings among psychologists approximately one to three months following client suicide, while a very small number of psychologists continued to experience distress six months following the event.

Feelings most commonly reported by both studies include shock, sadness, and helplessness, including elevated hyperarousal symptoms among those who felt responsible for the client suicide. Factors such as type of mental health professional, time since client contact, and the professional's gender did not significantly influence distress responses (Dransart et al., 2014). Interestingly, Dransart et al. is one of the few studies measuring the impacts of client suicide where mental health professionals reported receiving sufficient support following the event. They argue that this factor might have reduced distress responses following client suicide. Other factors suspected to influence distress include the number of years of professional experience, encountering multiple client suicides, and cultural and contextual differences such as working within teams (Dransart et al., 2014). Most of these factors have been included as control variables within the present study which are detailed in the hypotheses sub-section.

Exploratory Question Three

3. What is the strength and direction between regret and distress following client suicide?

Building on this, exploratory question three investigated the strength and direction between regret and distress following client suicide using structural equation modelling (SEM) with controls for plausible confounding variables. As previously illustrated, the

relationship between regret and distress is documented across the decision-making and bereavement literature (Lichtenthal et al., 2020; Roese et al., 2009; Sheehan et al., 2008; Sim et al., 2020; Wollersheim et al., 2020); however, less is known about this relationship in the context of psychologist bereavement. Findings indicated a moderate positive significant relationship between these variables, suggesting that higher regret levels may be somewhat associated with higher distress levels. This is in interesting finding as this highlights the plausibility of the idea that regret might be a driver of distress for psychologists who experience client suicide.

Exploratory Question Four

4. What is the strength and direction of the correlation between regret and self-blame following client suicide?

Exploratory question four was also investigated using a SEM, and findings indicate a strong positive relationship between regret and self-blame. That is, psychologists who experience high levels of regret, may engage in high levels of self-blame following client suicide. Self-blame has been commonly reported among mental health professionals who have experienced a client suicide (Dransart et al., 2015; Finlayson & Simmonds, 2018; Sherba et al., 2018), however, modern regret theory argues that self-blame is a component of regret (Connolly & Zeelenberg, 2002). This study attempted to delineate these constructs by using a regret scale that avoided accidentally measuring self-blame simultaneously for the regret variable. Thus, we can be confident that this finding reflects a genuine relationship, rather, than representing a conflated result of the same construct. This has implications for the regret literature within the context of client suicide. For example, while regret may be experienced independently to self-blame (Landman, 1987), psychologists who experience

regret will likely experience self-blame. Self-blame has been linked to a range of adverse outcomes for the mental health professional such as increased feelings of responsibility and distress, and fear of litigation (Hendin et al., 2000). While often treated as an outcome variable, the present study's findings highlight the affect that regret has on self-blame following client suicide.

Exploratory Question Five

5. What is the strength and direction of the correlation between supervisory support and distress following client suicide?

Interestingly, exploratory question five indicated a non-significant finding with a very small negative relationship between supervisory support and distress. This is inconsistent with earlier studies who identified the importance of supervisory support in influencing distress levels following client suicide (Dransart et al., 2014; Finlayson & Simmonds, 2018; Knox et al., 2006; Sherba et al., 2018) . In the present study, the mean response to the quality and usefulness of supervision was slightly below 'agree', indicating that on average most participants considered supervision neither helpful or unhelpful in coping with client suicide. This finding also appears inconsistent to the qualitative findings collected in this study where 90 participants referred to 'supervisory support' as being helpful following client suicide, and only nine participants referenced 'poor supervisory support' as being related to poor coping.

We posit two reasons relating to measurement error for why our findings do not reflect prior literature. First, as aforementioned, earlier studies collected distress responses data in the weeks following client suicide whereas our study collected data years following the event. While our measures directed participants to consider their experience in the weeks following client suicide, it is likely that responses were still influenced by recall bias which

may have influenced the reliability of results. Second, the 'supervisory support' variable was measured by two items that were developed specifically for this study; therefore, it is possible that the variable was not captured adequately. Despite these methodological explanations, it may be possible that psychologists do *believe* supervisory support was helpful following client suicide (which is reflected in the qualitative analyses), but in reality, it does not substantially reduce distress following client suicide.

Hypothesis One

1. Psychologists who can better justify their intervention decisions will experience less regret.

This hypothesis was tested using a SEM, and a statistically significant negative relationship between decision-justification and regret was found. This hypothesis was informed by the Decision-Justification Theory (DJT) of Regret which argues that regret may be reduced through strong decision justifications (Connolly & Zeelenberg, 2002). This study's findings are consistent with this theory, and thus, illustrate how the experience of regret may be influenced and managed through the strength of one's justifications. Additionally, this relationship was found to be statistically significant when controlling for confounding variables.

Positioning these findings within the literature is challenging as the impact of client suicide on mental health professionals has not yet been theorised or tested. Thus, this finding cannot be explicitly compared to other studies on psychologist bereavement. However, these findings were similar to Towers et al. (2016) who tested the relationship between both explicit (decision-carefulness) (Connolly & Zeelenberg, 2002) and implicit (inconsistency with one's life rules) justifications and regret using the DJT. They found a negative

relationship, albeit small, between higher levels of explicit decision-justification and lower regret intensity. Furthermore, Towers et al. found that regretted decisions that were consistent with one's personal life rules (implicit justifications) produced lower levels of regret than explicitly justified decisions. These findings suggest that both decision-carefulness and intention-consistencies are important factors in attenuating regret intensity.

Interestingly, van de Calseyde et al. (2018) used the DJT to investigate the relationship between pre- and post-decision doubt and regret. Across six studies, they consistently found support for a positive relationship between post-decision doubt and regret, and no relationship between pre-decision doubt and regret. While van de Calseyde et al. did not directly measure the relationship between decision-justification and regret, they suggested that pre-decisional doubt may contribute to decision-carefulness which may reduce regret intensity. As aforementioned, Towers et al. (2016) also identified that greater decision-carefulness was related to lower regret intensity. Thus, it is evident that decision-justification is an important mechanism in attenuating regret levels, especially since deviation from one's life rule is associated with regret (even when the outcome is good) (Connolly & Zeelenberg, 2002; Pieters & Zeelenberg, 2005; Reb & Connolly, 2010; Towers et al., 2016; Zeelenberg & Pieters, 2007). In considering earlier studies that have tested the DJT, the present findings are comparable with studies that have evidenced support for a causal negative relationship between decision-justification and regret. Finally, findings across both original and control models are consistent with the proposition that better decision-justifications reduces regret levels.

A noteworthy limitation is that this present model did not measure the influence of different types of justifications (i.e., implicit or explicit) on regret, nor did it measure what constitutes a strong justification (Towers, 2009). However, the following models (hypotheses

two and three) attempted to address the first limitation through using the Intention-Behaviour Consistency Pathway Model of Regret.

Hypothesis Two

2. Psychologists who performed intervention decisions that were inconsistent with their behaviour-intention will experience more regret.

Hypothesis two was unsupported across both original and control models. This hypothesis was tested using a SEM, and a non-significant negative relationship between intention-behaviour consistency and regret was found. This hypothesis was informed by the Intention-Behaviour Consistency Pathway Model of Regret which argues that an individual will experience more regret when their behaviours are inconsistent with their intentions (Pieters & Zeelenberg, 2005). Within the context of this study, 'intervention decision' relates to psychologists' actioned intervention plans, and behaviour-intention' relates to psychologists' intended intervention plans. We expected that inconsistencies between these would result in higher regret levels.

While it may be possible that the hypothesis itself was incorrect, there are two key considerations relating to measurement error that might account for this unsupported finding. First, while Pieters and Zeelenberg (2005) ran several studies that returned support for their new multi-factor model, the regrettable behaviours tested still necessitated 'choice of option' – which is also reflected in that of earlier studies which concern mostly voting, gambling or investing options (Reb, 2008). Choice of option refers to a series of discrete options that individuals must select in order to measure decision-regret, decision-justifications, and intention-behaviour inconsistencies. When specific options are available, the aforementioned variables are better measured. In the present study, 'intervention decisions' as a variable was

not well-defined due to an array of intervention options that rely solely on the therapeutic context (e.g., risk concerns, hospital versus outpatient setting, private care versus multi-disciplinary care, and various techniques specific to various client presentations and treatment modalities). Thus, a series of observable intervention 'options' was not provided. Instead, the survey asked participants generally about their tendency to move away from their intended interventions. Additionally, items were developed specifically for this construct which might not have adequately captured the same construct that was represented in Pieters and Zeelenberg's studies.

Second, a behaviour-intention inconsistency might not be directly associated with regret within this context. For example, psychologists are expected to seek supervision and consult colleagues about client-care decisions, especially in the presence of risk of harm to self or others. During treatment, intervention decisions may deviate from a psychologist's intended plans in light of new information and increasing risk of harm, or after seeking supervision from more experienced professionals. Thus, deviations from initial intentions may reflect a more robust decision-making process and result in more strongly justified decisions; in turn, reducing the intensity of regret. Earlier in this chapter, decision-process was identified as a key mechanism in regret attenuation. Fortunately, this variable was also treated as a mediating variable in this present study, to test the effects this has on the relationship between intention-behaviour consistency and regret. Results from this analysis are presented below.

Hypothesis Three

3. The relationship between intention-behaviour inconsistency and the amount of regret experienced will be mediated by the judged quality of the decision process.

Hypothesis three was unsupported across both original and control models. This hypothesis was informed by the Intention-Behaviour Consistency Pathway Model of regret, and thus, we expected that professionals who judged the quality of their decision process highly will experience less regret, irrespective of whether their intervention behaviours were consistent with their initial intervention plans. This hypothesis was tested using a SEM, and the indirect effect of intention-behaviour consistency on regret evidenced a weak negative relationship and did not produce a statistically significant result. This finding is unsurprising given that hypothesis two did not produce a statistically significant result when intention-behaviour consistency was regressed on regret. Additionally, the total effect of intention-behaviour consistency on regret, mediated by decision-process quality, evidenced a moderate negative relationship and did not produce a statistically significant result. Interestingly, a strong and significant negative relationship between decision-process quality and regret was found, and this finding is also evidenced in previous literature investigating regret theory (Pieters & Zeelenberg, 2005; Reb, 2008; Towers et al., 2016; van de Calseyde et al., 2018). Finally, while the overall mediation model was unsupported, further investigation involving adjustments to methods might help increase precision of variable measurement and analysis. Thus, this finding does not indicate *the absence of* a relationship between intention-behaviour inconsistency and regret, via decision-process quality. Reducing measurement error may help increase certainty of the relationships between these variables.

Hypothesis Four

1. Psychologists who believed they could have influenced the outcome of the client suicide will experience more regret following the client suicide.

Hypothesis four was supported across both original and control models. This hypothesis was tested using a SEM, and a significant positive relationship between suicide preventability beliefs and regret was evidenced. This hypothesis was informed by earlier studies that found that mental health practitioners who believed that suicide was preventable, experienced greater distress and burnout compared to those who believed that suicide was not preventable (Darden & Rutter, 2011; Finlayson & Simmonds, 2018; Ross et al., 2016). A recent study by Pisnoli and Van der Hallen (2022) measured this relationship using structural equation modelling. Their findings demonstrated that the belief that suicide was considered preventable (and should be prevented), was related to greater distress following client suicide. Conversely, they also demonstrated that professionals who believed that suicide was the client's choice, experienced less distress following client suicide.

Our finding is interesting when compared with the results of our qualitative analysis. The content analysis demonstrated that psychologists perceived considering the limitations in risk assessment and prevention as helpful in coping with client suicide, and many described the importance of understanding that one could not have influenced the outcome. Yet this finding indicates that regret will likely be experienced as a result of the belief that one could have prevented the suicide. The belief that suicide is preventable in this present study might reflect an individual's personal sense of responsibility, even if they can understand that generally, suicide is difficult to predict and prevent. It may be possible that one considers perceived personal limitations as well as statistical limitations as contributing to a lack of prevention. Additionally, this finding highlights the conditions for which regret is likely to arise among psychologists bereaved by suicide. Our finding offers important contributions to the growing body of literature investigating the impact of suicide beliefs on a range of affective experiences following client suicide.

Key Qualitative Findings

The below section entails an analysis of the textual data that was collected for two qualitative research questions. Several key categories and codes relating to factors that impact coping with client suicide are detailed for each research question.

Research Question One

1. What do psychologists who have experienced client suicide identify as factors that support and/or hinder their coping?

Factors that helped

Support. As identified in chapter six, 'supervisory support' within the 'support' category was referred to by ninety participants as a factor conducive to coping with client suicide. This is comparable across the literature who identified that the quality of supervision offered likely influences distress responses (Dransart et al., 2015; Finlayson & Simmonds, 2018; Gulfi et al., 2010). The extract presented in chapter seven highlighted that having a shared experience of client suicide with another colleague was helpful in accepting one's own situation. In fact, Worthen and McNeil (1996) found that self-disclosure by supervisors was an effective tool in normalising the difficulties experienced by their supervisees. Additionally, they argue that supervisor support facilitates feelings of safety for their supervisees and consequently increases the supervisees sense of trust in them. This was also identified by Clohessy (2008) who argue that the core relational qualities that strengthen the supervisory relationship include interpersonal connection and emotional tone, including the degree of trust, openness, and honesty.

Additionally, the extract also demonstrated that the immediacy of supervisory support is important for psychologists following client suicide. Feelings of distress, shock, and grief

have been extensively reported in the literature following client suicide (2008), therefore, it is understandable that mental health professionals may seek immediate support from their supervisors; especially since the limits of confidentiality prohibit one's ability to freely share the circumstances with their personal supports. Efstation et al. (1990) state that supporting the supervisee is one of the supervisor's main responsibilities. Another participant highlighted the importance of supervision and described it as being helpful in shifting feelings of self-blame; a commonly reported feeling by mental health practitioners following client suicide (Chemtob et al., 1988; Finlayson & Simmonds, 2018; Ting et al., 2006; Trimble et al., 2000). Taken with these earlier findings, our study also recognises that a safe and supportive therapeutic relationship contributes to effective supervision. Overall, this finding is inconsistent to the quantitative analysis which evidenced that psychologists did not find supervisory support either helpful or unhelpful following client suicide. It is possible that participants responding to the scale item did not perceive supervisory support to be generally very useful but reported discrete moments of utility when prompted to record an answer in the discussion box.

Client Family. Participants tended to describe the contact they had with their client's family as a helpful experience in coping with client suicide. This is an important finding, especially because professionals reported that they were afraid of being blamed or sued. Additionally, this fear is reported by mental health professionals who experience both personal (Finlayson & Simmonds, 2018; Sherba et al., 2018; Ting et al., 2006) and professional blame from others following client suicide (Dransart et al., 2014; Horn, 1994; Walter & Pridmore, 2012b) which may reinforce expectations of blame from others. Though, a handful of participants did report blame and threats of legal action from family members, 32 participants described family contact as a reassuring process following client suicide.

Additionally, several participants reported that meeting the client's family allowed them to learn more about their client's context, which abated their own self-blame following client suicide.

Understanding Limitations. This code refers to the limitations inherent in suicide risk assessment and treatment as discussed in chapter one. While only a handful of participants referred to this in the study, it does not imply less importance; especially since the belief around suicide prevention had a significant positive relationship with psychologist distress following suicide as evidenced in hypothesis four. This is an important finding, as studies argue that when the suicide of a client contradicts the assessment of suicide being predictable and preventable, this may give rise to unjustified blame towards the therapist and may contribute to their distress (Eagles et al., 2001; Rothes et al., 2013; Walter, 2012). Taking into account the limitations inherent in risk assessment for low-base rate behaviours may be important in managing self-blame and distress responses following client suicide.

Factors that Hindered

Cognitive Emotions. Within this category, the code 'counterfactual thinking' was referenced by thirteen participants. This is of particular interest within this study, given the theoretical framework selected for the quantitative analysis. As described in chapter three, Roese (1999) argues that decisions followed by negative consequences normally evokes counterfactual thoughts. In particular, these thoughts are centred on alternative decisions foregone. Given that psychologists make a series of client care decisions, it is unsurprising that this concept was referred to by participants of this present study. Statements relating to 'doing more', 'doing things differently', and 'what if' thinking typically characterise upward counterfactual thoughts, and these were commonly identified within this data set.

An important part of developing greater self-awareness as a clinical psychologist, is to frequently engage in reflective practice. Reflective practice is a core competency outlined by the New Zealand Psychologists Board (2018), and includes "critical and constructive self-reflection and seeking external review of one's practice (including supervision)" (pg. 12). Examples of the skills identified include accurately reflecting on and evaluating one's own practice, and managing the impact of one's own characteristics on their professional activities. This type of self-assessment, especially in the context of client suicide, might result in the clinician over-evaluating their client-care decisions and engaging in counter-factual thinking. Spellman and Mandel (1999) state that engaging in upward counterfactual thinking patterns may exaggerate one's causal attributions, resulting in increased feelings of regret, distress, self-blame, shame, and guilt. Interestingly, these emotions were also frequently acknowledged by the participants of this study as factors that made coping with client suicide difficult. Furthermore, relationships between counterfactual thinking and a range of psychological and behavioural outcomes including self-blame, responsibility, regret, mood disorders, and poor coping with the unwanted outcome are evidenced in the literature (Alicke et al., 2008; Gilovich & Medvec, 1995; Markman & Miller, 2006; Roese, 1999; Roese & Olson, 1997).

In particular, Markman and Miller (2006) conducted a study investigating the relationship between negative affect and counterfactual thinking. They identified that individuals experiencing severe depression tended to generate more uncontrollable and unreasonable counterfactual thoughts compared with those experiencing moderate depression. Thus, for psychologists who might be experiencing low mood states following client suicide, greater causal attributions and unreasonable counterfactual thoughts may be experienced. Finally, participants tended to describe counterfactual thinking as a self-review

process involving either reflection or formal clinical and/or coronial enquiry. These ideas were coded and categorised as 'post-suicide process' which is discussed below.

Post-Suicide Processes. Post-suicide processes was a category in this analysis characterised by processes such as coronial inquiry and clinical review. These processes involve lengthy reviews and investigations which evaluate clinical psychologists' intervention decisions. Not only is the affected clinician participating in clinical review with their supervisors, but coronial inquiries are also a typical part of this process. Compounding these experiences is the possibility that the clinician may be accused of malpractice and the suicide is published in the public domain. Coronial enquiry was referenced the most within this category with some variation in experiences. For example, one participant described feeling blamed by the coroner and others described not having access to the coroner's report as factors that hindered coping. As mentioned in chapter one, coronial inquiries can take years to complete inquiry which may interfere with recovering from client suicide.

Additionally, a recent study by Pisnoli and van der Hallen (2022) investigated the short and long-term impacts of client suicide on mental health professionals. The short-term impacts identified include partial and full PTSD symptomatology in the week following suicide, with intrusion symptoms being endorsed the most. This is supported by previous studies investigating the impacts of client suicide (Chemtob et al., 1988; Dransart et al., 2014; Ellis & Patel, 2012; Finlayson & Simmonds, 2018; Ting et al., 2006). With regards to long-term impacts, the authors identified that professionals continued to experience anxiety and guilt, with increased need for consultation with colleagues, heightened diligence around suicide risk and note-keeping, and attentiveness to legal matters. Interestingly, these long-term factors may reflect consequential features that are part of the post-suicide process identified in the present study (e.g., clinical review of notes following client suicide = long-

term heightened diligence in note-keeping). Taken together with previous literature, the present findings suggest some post-suicide processes may hinder recovery from client suicide, and place greater demands on supervisors and colleagues to adequately support the bereaved clinician. However, poor supervisory support was another factor identified in the present study as having deleterious effects on coping with client suicide.

Support. Daloz (1986) conceptualises the role of the supervisor as the provider of encouragement, recognition, and approval within an empathetic and safe environment. These qualities were identified in participants who found supervision helpful following client suicide which reflects the critical role of the supervisor in shaping the professional (and personal) wellbeing of their supervisees. While the majority of participants referred to supervisory support as helpful following suicide, nine identified that their supervisory support was insufficient. Interestingly, the majority of these participants described a 'lack of' support, rather than 'poor quality' support, indicating that the issue may relate to unavailability.

Further compounding this are confidentiality restrictions which participants identified as being challenging following client suicide. Ten participants described feeling isolated in their experience due to the ethical guidelines around client confidentiality. Participants stated that the limitations in sharing client information prevented them from being able to seek adequate personal support following client suicide. This may mean that psychologists need to depend on their colleagues and supervisors more to process aspects about the client suicide that cannot be otherwise divulged. The need for additional professional support may thus place greater demands on their supervisors and colleagues who might not be aware or prepared for to support their needs. As a result, supervisors may not provide the level or type of support suitable, especially in the context of their own caseloads and responsibilities.

Finally, supervisors might also experience a degree of responsibility for their supervisee which might impact the way they manage post-suicide processes and their own emotions pertaining to the client suicide.

Research Question Two

2. What advice would psychologists who have experienced a client suicide offer to a colleague who has just experienced a client suicide?

This research question was inspired by Rothes et al. (2013) who investigated the impact of client suicide on a sample of psychiatrists. In their study, they asked participants what advice they would give a less experienced colleague that experienced a client suicide. In the present study, participants were asked what advice they would give a colleague (irrespective of experience level). The aim of this research question was to understand what support and processes are necessary for professionals following client suicide. Therefore, this question invited participants who have reflected on their client suicide experiences to share insights about what was effective. Consistent with what was helpful following client, 'support' from supervisors and colleagues was acknowledged by nearly half of the participants. This finding is also supported by Rothes et al. who found that 87% of psychiatrists recommended consulting collegial supports. Interestingly, this study's quantitative analysis indicated that participants on average felt that supervisory support was not that helpful. This finding might indicate that the items used to measure the quality of supervisory support were not sensitive enough to capture to the full breadth of the experience. Part of the 'support' category for this research question included both supervisory and collegial support as a single code, whereas collegial support was not measured exclusively in the quantitative analysis.

Another important finding includes the utility of 'compassion' in coping with client suicide. The compassion category included codes such as avoiding self-blame, self-compassion, acceptance, humanise, understanding grief, and reassurance. While these codes each reflect aspects of self-compassion, it was considered more appropriate to use the term 'compassion'. Strauss et al. (2016) argues that compassion includes five key components: 1. recognising suffering; 2. understanding the universality of human suffering; 3. feeling for the person suffering; 4. tolerating uncomfortable feelings, 5. and motivation to act/acting to alleviate suffering. Thus, compassion necessitates relatedness to another person. In the present study, processes such as understanding grief, and normalising and humanising may also include feedback from others. On the other hand, while there are variations in the definitions of self-compassion, it typically focuses on a negotiation with one's self. For example, Neff (2003) defines self-compassion as; self-kindness (e.g., showing kindness and understanding to oneself), common humanity (experiences are shared by others), and mindfulness (acknowledging painful thoughts and feeling with balanced awareness). Interestingly, investigation into the relationship between self-compassion and stress among psychologists is scant and there is no dominant model that accounts for this negative relationship (Finlay-Jones et al., 2015).

Finlay-Jones et al., (2015) tested an explanatory model of self-compassion, drawing on factors from previous research illustrating the link between self-compassion and difficulties with emotional regulation. A mediation model was developed to understand the link between self-compassion and poor mental health outcomes, via emotional regulation difficulties among a sample of Australian psychologists. Results indicated that self-compassion significantly negatively predicted emotion regulation difficulties and stress. Additionally, preliminary support for a mediating role of emotional regulation within this

relationship was evidenced. Other studies also evidence the relationship between self-compassion, stress, and adaptive coping (Bluth et al., 2015; Chishima et al., 2018; Ewert et al., 2021) Thus, in conjunction with the present findings, it may be argued that emphasising compassion and self-compassion following client suicide may reduce stress and promote adaptive coping.

Finally, this might be an important tool since participants of the present study also suggested that reviewing one's practice is an important process following client suicide. Participants tended to acknowledge that regret and self-blame are part of this review process and highlight that this is a normal part of the grief process. Other studies also evidence a relationship between grief and self-blame following bereavement (Camacho et al., 2020; Stroebe et al., 2014). In fact, Camacho et al. found that the relationship between grief and guilt was stronger for individuals who were bereaved by suicide compared with those bereaved by death caused by a natural causes, a medical event, or an accident. The authors argue that the increased guilt for loss to suicide might reflect the stigma which tends to entail blame towards those close to the individual – an experience reported by four participants within this present study.

In summary, this section presented a series of factors relating to coping with client suicide. Factors that participants perceived to be helpful in coping with client suicide include supervisory support, contact with client family, and understanding limitations in suicide risk assessment and prevention. Factors considered to hinder coping include counterfactual thinking, post-suicide processes such as coronial inquiry, and absent supervisory support. Advice shared by participants to assist others experiencing suicide bereavement include seeking supervisory and collegial support, exercising self-compassion, and engaging in balanced self-review. The below section presents the (integrative) implications for both the

quantitative and qualitative findings, which is followed by a review of the study's limitations. Finally, future research directions are offered along with a concluding statement.

Implications

The current findings have implications for psychologists experiencing client suicide, and for those working in mental health practice more broadly. While we aim to prevent all suicides from occurring, it is unlikely that a zero-suicide level will be reached (Van der Hallen, 2021). Thus, the following section describes the implications of the present findings and details ways that might reduce the impact of client suicide among psychologists.

Overall, the exploratory results indicated that psychologists reported feeling low levels of regret following client suicide. This was the first study to the author's knowledge that explicitly investigated regret in the context of suicide bereavement among psychologists, therefore, this finding is difficult to position within the literature. However, this finding may suggest that psychologists tend to feel comfortable with their intervention decisions and tend not to develop deep feelings of regret following client suicide. At the time of data collection, the mean number of years since client suicide was eight, therefore, it is possible that the findings reflect the level of long-term regret experienced. It may be worthwhile to measure the experience of regret in the week directly following client suicide to understand the intensity of regret experienced in the short-term. Additionally, exploratory results indicated that psychologists generally felt low levels of distress following client suicide. These findings contrast with several earlier studies on the impact of client suicide among mental health professionals who identified moderate to strong reactions (Chemtob et al., 1988; Dransart et al., 2014; Ellis & Patel, 2012; Ting et al., 2006; Van der Hallen, 2021). However, a significant moderate relationship was identified between regret and distress, suggesting that psychologists are likely to experience some distress if higher levels of regret are present.

Regret has been typically investigated as an outcome variable; however, it was treated as a predictor in this SEM. Future research should investigate the relationship between regret and other emotions to identify other kinds of supports that psychologists may need in coping with client suicide.

The literature on the impact of client suicide is limited. This study offers new findings in the context of regret theory which necessitate unique considerations for post-suicide support. The key findings presented below highlights this and may afford explanations for why low levels of regret and distress were reported.

Relating to the Decision-Justification Theory of Regret, one of the significant findings identified in this study was the effect that decision-justification had on regret. Our findings indicate that psychologists who can better justify their intervention decisions, will likely experience less regret following client suicide. This study did not investigate different types of decision justifications, thus, future research should consider this to determine what decisions require stronger justifications. However, it did measure the impact of decision-process quality, which has been identified in other studies as a type of decision-justification capable of reducing regret levels (Reb & Connolly, 2010; van de Calseyde et al., 2018). Interestingly, this finding was significant in the present study indicating that psychologists who consider that their decision-processes were of high quality, will likely experience less regret following client suicide. If this relationship is, in fact, causal, it will be important for psychologists to engage in robust decision-making processes to ensure that they make decisions that they are able to live with in the long-term. Increasing supervisory and collegial engagement during decision-making processes could be one way to strengthen the quality of the decision process. Heath and Gonzalez (1995) found that decision makers who interacted with others prior to reaching a decision felt more certain about the correctness of their

decision than those who were unable to consult with others. Additionally, frequently drawing from the scientific literature to inform decision-making will likely increase decision-process quality and increase decision robustness, and possibly reduce the experience of regret.

Finally, it would be important to investigate the factors that may prevent someone from engaging in a robust decision-process. For example, challenges such as time pressure, limited available information, unmeasurable uncertainties, and multiple appropriate options are some of the limitations faced by healthcare professionals in decision-making (Galanter & Patel, 2005). Moreover, differences in decision making and reasoning have been cited among those with various clinical experience (Galanter & Patel, 2005). Galanter and Patel argue that those with more experience may draw on clinical experience to make decisions rather than overtly depend on scientific resources. Additionally, those who have less experience are more likely to depend on scientific evidence but may be less flexible and less responsive to individual client factors (Patel et al., 2000). This highlights that there may be both strengths and difficulties across different levels and this should be considered regardless of experience. As such, psychologists working with at-risk clients overtly consult scientific resources and supervision to ensure robust decision-making processes. Additionally, psychologists working in hierarchical decision-making environments (such as a multi-disciplinary team), may encounter greater challenges implementing interventions that they are comfortable with. This might be due to the competing demands between other professionals, or limitations in resource allocation (Falzer & Garman, 2009). Challenges of these environments should be acknowledged within supervision to manage psychologists' self-blame following client suicide.

Despite not being highly endorsed on the scale, self-blame (and fear of blame) was referred to frequently in the qualitative analysis. Participants tended to refer to blame in the

context of meeting the client's family. However, participants described feeling that, contrary to their fear, most families did not blame them for the outcome, and many felt comforted by the support the psychologist had provided. Additionally, participants described that their self-blame was abated following meeting the client's family, which might reflect the low self-blame score in this analysis. While it is likely that psychologists will form relationships with their client's family and other relevant supports throughout the treatment process, this may not always be achievable. Our findings suggest that engagement with these supports following client suicide can be beneficial to both parties. Additionally, engaging with the client's family may also develop the family's insight into the role of the psychologist which might reduce any blame towards the psychologist following suicide.

Another inconsistent finding between the quantitative and qualitative analyses relates to supervisory support following client suicide. While supervisory support was endorsed slightly above 'neither helpful nor unhelpful' on the supervisory satisfaction scale, the qualitative findings demonstrated that supervisory support was considered helpful following client suicide. This was reflected in both the content of the participants descriptions, and the number of times supervisory support was referenced. Among participants who reported unsupportive supervisory relationships, their responses tended to reflect an approach to client suicide that was uncompassionate, blaming, administrative, and unsupportive. Thus, it is important for supervisors to remain compassionate and nonjudgmental, even while attending to the logistical aspects of the post-suicide process.

In accordance with previous recommendations (Finlayson & Simmonds, 2018; Knox et al., 2006), our findings indicate that training for supervisors on supporting supervisees experiencing client suicide may be useful. In particular, it was detailed that the confidentiality limitations prohibited participants from accessing quality personal support.

Thus, it is likely that psychologists are depending more on their supervisors and colleagues for support following client suicide. It is important that special attention is given to the role of the supervisor in supporting an individual experiencing client suicide. One way this might be addressed is by developing training for supervisors on supporting suicide bereavement. The training framework should be informed by the present findings and earlier studies on the impact of client suicide. For example, encouraging supervisors to normalise the experience of client suicide and relate to their supervisees experience (if able) will likely reduce feelings of self-blame. Additionally, supporting the supervisee by acknowledging the limitations inherent in predicting and preventing suicide may challenge their beliefs about suicide preventability, and encourage a healthier relationship with perceived responsibility for the outcome. Finally, assisting supervisees in rationalising their intervention decisions and decision-processes may help reduce the experience of regret.

The key findings addressed above illustrate the need for attention to be given to developing a process that enables supervisors to better support their supervisees experiencing client suicide. Additionally, these findings highlight the importance of decision-justifications and decision-processes in attenuating regret levels. It is important that psychologists are aware of their own competencies, and make decisions that are robust and defensible. Finally, the exploratory analysis indicated that, generally, psychologists do not tend to experience severe regret and distress which illustrates that coping with client suicide is possible. If our findings are causal, then being able to justify one's intervention decisions, engaging in a robust decision-making process, and receiving good quality supervision are paramount in reducing regret and distress following client suicide. As such, further research into how support is offered during decision-making processes and following client suicide is needed to determine how psychologists can be better supported before and following client suicide.

Limitations

Like many studies, the current research project has several limitations that must be considered. First, issues relating to sample size, cross-sectional designs, and self-report methods are detailed. Concerns relating to the use of non-validated scales and self-selection bias are subsequently highlighted, followed by a brief argument of the use of incentivisation.

An obvious limitation of this research is the sample size. Kline (2011) reported that a typical sample size in SEM is approximately 200 participants. However, the preferred sample size for this research was based on Jackson's (2003 as cited in Kline, 2011) '*N*:q' rule which suggested that 630 participants were required to achieve less sampling error and more statistical power. This study ended up recruiting 248 psychologists which likely increased the risk of Type-II error. While a larger sample size would have been preferrable, further data collection would have increased the cost of the study which we did not have the resources to accommodate.

Another important consideration is the fact that this this study used a cross-sectional design. In these types of studies, the independent and dependent variables are presented to participants simultaneously, and temporal relationships are not assessed. While it is commonly taught that these types of designs precludes the research from drawing causal inferences, Grosz et al. (2020) argues that these assumptions are problematic. Many nonexperimental research designs are planned with implicit assumptions about causal inference, yet researchers will indicate that their designs are purely correlational. Further adding to the disconnect is that researchers will continue to express underlying assumptions about cause-and-effect relationships within their recommendations. The present study aimed to tentatively test propositions about causal effects and several approaches were implemented to improve the reliability of our causal inferences. For example, the constructs of interest

were theoretically underpinned and measured using structural equation modelling (SEM). The theories used have been tested in earlier experimental study designs where dependent variables and unidirectional relationships were identified. Additionally, SEM coefficients set to zero necessitates that a nonzero effect implies a causal relationship (Bollen & Pearl, 2013). While relationships within structural equation models may reflect simple correlations and bidirectional relationships, they also allow for more complicated analyses (Bollen & Pearl, 2013; Madhanagopal & Amrhein, 2019). As such, the present study estimated the effect of one variable on another (including indirect effects), and statistically controlled for plausible confounding variables to support tentative inferences about causal relationships. Importantly, however, the data was not collected across various time points resulting in limited understanding about the pattern of regret and distress following client suicide over time. It is worth considering the temporal role of regret in the context of suicide bereavement, including the processes that may interact with and influence the experience of regret and distress (such as coronial enquiry, clinical review) following client suicide.

Another limitation worth mentioning is the fact that this study relied on a self-report method which means that the causal inferences drawn from our results come with substantial uncertainty attached. While this method can be valuable when measuring constructs that are perceptual in nature (Haeffel & Howard, 2010), another outstanding concern with self-report in this present study relates to recall bias. Recall bias specifically, refers to the inconsistency between the emotions experienced during an event, and the emotions reported later, when prompted by an associated memory (Colombo et al., 2020). Since the mean number of years following client suicide was almost eight, it is probable that memories of participants for this time period are very error prone. For example, while the Impact of Event Scale (Revised) (IES-R) encouraged participants to evaluate their reactions in the two weeks directly

following the occurrence, it is likely that participants may have forgotten or inaccurately recalled particular experiences of that time period. Including psychologists with varying time spans since their most recent client suicide was necessary due to the narrow population of psychologists who have experienced client suicide. We prioritised a larger sample size, and as a result, set a relatively broad inclusion criterion. Despite this limitation, the use of the self-report method offered participants the opportunity to share their experiences of client suicide anonymously which may have enabled a clearer representation of their experiences.

Additionally, there may be concern relating to a number of scales developed specifically for this study. The Impact of Event Scale (IES-R) (Weiss & Marmar, 1997) and Decision Regret Scale (DRS) (Brehaut et al., 1996) have been pre-validated and are commonly used in bereavement and decision-making research. However, the remaining measures were either adapted or developed for the purposes of this study, and are therefore, not validated. Given that this was the first study to theorise the experience of client suicide, measures had to be developed to ensure relevance to the participants' experience. As a result, items may not have been sensitive enough to capture the complexity of this phenomenon. For example, the supervisory support scale contained two items asking about its usefulness following client suicide. On average, participants indicated that it was neither helpful or unhelpful, however, supervisory support was consistency referred to in the qualitative analysis as being conducive to coping. Thus, caution is recommended when interpreting these findings as the constructs of interest may not be adequately captured.

In terms of sample characteristics, while the sample included twice as many females compared to males (with very few participants identifying as gender diverse), this gender split is representative of the psychology workforce of the countries that this study sampled from (Statista, 2022). Additionally, more than half of the sample included participants from

the Unites States of America. This is likely reflected by the higher number of licensed psychologists in the United States compared to the other countries included. It is noteworthy that the United States is recognised as a very litigious society compared to other countries included in this study. As a result, healthcare providers from the United States may be greatly conscious of malpractice liability, and thus, make client-care decisions that reflect excessive caution and fear (Kessler, 2011). In the context of client suicide and managing the fear associated with the prospect of being sued, participant responses of this present study might have biased the results and therefore not accurately reflect the population sampled from.

Finally, many mental health professionals work with clients who display suicidal behaviours, however, only psychologists were included in the study. This was due to the fact that other disciplines have varied training pathways and roles with clients compared to psychologists, and this would have been difficult to measure. However, including multi-level analysis would have allowed for measurement of variance between the different substructures within the sample (Hox & Hoijtink, 2005; van den Eeden & Hox, 1996). Another limitation relates to the fact that this was a self-selected sample, which means that the sample may not accurately describe the true population it was drawn from (Heckman, 1990). For example, perhaps those who chose not to participate had recent or difficult experiences following client suicide. The data was collected from those who self-selected; thus, their experiences may not accurately describe these individuals.

Despite these foregoing limitations, this study still offers valuable contributions to the literature relating to the impact of client suicide on psychologists. First, this study was the first to formulate the impacts of suicide using a theoretical framework and hypothesis testing; second, it was the first study to acknowledge New Zealand psychologists' experiences of client suicide which promotes representation of the impact of psychologists; especially given

the proportionately higher suicide rates across OECD countries, and third, it contributes to the regret literature by demonstrating how regret models may be applied and understood beyond discrete economic and consumer-choice dilemmas. Additionally, the Behaviour-Intention Consistency Pathway to Regret (Pieters & Zeelenberg, 2005) is a relatively new model of regret that has not been tested beyond the studies that contributed to its development. Thus, the present study offers insight into its utility to describe phenomena relating to health care decisions.

Future Research Directions

In considering ways to strengthen the current findings and build upon decision-related emotions in the context of client suicide, the following recommendations are presented. Longitudinal research is yet to be conducted examining the impact of client suicide on psychologists, and mental health professionals more broadly. Thus, it is recommended that prospective studies are conducted to enable causal inferences to be made about the impact of client suicide on mental health professionals. This is an important pursuit since it is likely that mental health professionals will be increasingly exposed to client suicide and suicidal behaviours due to the growing rate of suicide. Additionally, our sample included psychologists only, however, several types of mental health professionals and front-line workers are exposed to client suicide. It would be worth drawing on regret theory to measure the impacts of client suicide on a more diverse sample

Earlier research investigating the impacts of client suicide identified grief responses among mental health professionals (Chemtob et al., 1988; Dransart et al., 2014; Finlayson & Simmonds, 2018; Gulfi et al., 2010; Rothes et al., 2013) and other studies have reported its relationship to moral emotions such as guilt and self-blame (Camacho et al., 2020; Stroebe & Schut, 1999). The present study evidenced mechanisms that influence regret levels, such as

distress and decision-process quality, however, little is known about how the stages of grief might influence these relationships. Thus, longitudinal studies investigating the impacts of the grief process on the intensity of regrets would be a worthwhile pursuit to understand the kinds of short-term and long-term supports needed among psychologist bereaved by suicide.

Another consideration includes the additional measurement of contextual factors which may influence bereavement following client suicide. For example, the psychologist's own experience of suicidal ideation, the personal loss of loved ones to suicide, and client demographics (such as their age and gender). Differences relating to legislation and media reporting rules between countries may also impact on psychologists, therefore, a focus on between country comparisons should be prioritised.

Additionally, psychology registration boards tend to have processes about what to do in the event of a client suicide. The suggested first step is to manage the administrative and logistical tasks such as notifying supervisors and clinical leaders, plan multi-disciplinary meetings, inform family, engage in case review, and address unpaid accounts (Sung, 2016). The subsequent steps include managing emotions, engage in formal case review, and acknowledge learning and professional growth. However, the literature reports shock and distress reactions among mental health professionals directly following client suicide, thus, focusing on administrative tasks instead of attending to one's immediate emotional needs does not appear conducive to coping. Moreover, psychologists working in private practice may not have the same administrative and support structures in place to assist them in the aftermath of client suicide. An investigation into the utility of existing post-suicide plans across both institutional and private care settings might be useful in evaluating what is helpful and what needs modifying or developing.

Conclusion

The impact of client suicide on psychologists is a diverse and complicated phenomenon. Through generating structural equation models informed by key regret theories, the present study demonstrates support for two complex factors which appear to influence regret levels: decision-justification and decision-process quality. Additionally, the present study also evidenced regret as a moderate predictor of distress relating to client suicide; highlighting the role that regret may play in influencing a range of affective states among psychologists following client suicide. Another key finding was the relationship between beliefs about suicide preventability and regret; psychologists who considered suicide preventable are more likely to experience regret than those who do not. These findings also remained significant when controlling for a range of confounding variables. The qualitative analysis entailed several codes and categories which highlights the complexity and scope of the experience of client suicide. In particular, supervisory support and meeting with the client's family were perceived as helpful following client suicide. Conversely, an absence of/poor supervisory support were reported as hindering coping with client suicide.

The findings of the present study highlight the need for the development of relevant training programmes acknowledging the impact of client suicide, including reminding psychologists about the limitations in suicide risk assessment and prevention. Additionally, systemising the post-suicide process (e.g., consulting supervisors, clinical review, contacting family members) should be prioritised so that psychologists are aware of their support avenues and administrative responsibilities. Finally, training developed specifically for supervisors in supporting supervisees experiencing the aftermath of client suicide is recommended. Within supervision, a focus on decision-process quality to promote defensible

decision making (as standard practice) may attenuate regret levels among psychologists should they experience client suicide.

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Appendices

The appendices presented below include the pre-registration link to the information sheet and participant survey (Appendix A), the recruitment letter to professional organisations (Appendix B), and the research case study (Appendix C).

Appendix A: Information Sheet and Survey

Please refer to this preregistration link to view the information sheet and survey https://osf.io/psfrm/?view_only=79f4f55106d8497c977ed18b356cf670

Appendix B: Recruitment Letter to Professional Organisations

Dear XXX

(The contact's name and organisation was addressed here e.g., "Dear XXX American Psychological Association").

My name is Shoni Marshall-Edwards, and I am undertaking a research project as part of my Doctor of Clinical Psychology programme at Massey University, Auckland.

I am researching the experiences of psychologists who are affected by client suicide. The literature reports that clinicians are profoundly affected by this occurrence, however, training programmes and support structures largely overlook the impact this has on clinicians. With information gathered, it may be possible to determine which factors lead to the strongest emotional responses following client suicide, and consequently target these factors to help improve recovery for mental health practitioners following the occurrence.

The sample will include psychologists that have experienced a client suicide (whether personally or within a team), from New Zealand, Australia, Canada, USA, and UK.

I am wondering if your professional body would distribute an email containing the survey link to members of this society. I will provide the email containing the link to be circulated upon agreement.

Requests made by researchers of your organisation for research participants must be a common practice and I understand not all requests can be satisfied. This research is important as practitioners may be vulnerable to the stress of working with at-risk clients, including significant emotional and professional impacts following a client suicide. Additionally, those with more years' experience are susceptible to greater distress, as they are more likely to experience multiple client suicides.

I have attached the information sheet below which contains further detail; feel free to contact me if you have any questions about the nature of this research.

Thank you for considering this inquiry, and I look forward to hearing from you.

Kind regards,

Shoni Marshall-Edwards

BSc, BScHons, DClinPsych candidate

Appendix C: Research Case Study

Please note: This research case study was a requirement for the completion of the Doctor of Clinical Psychology programme at Massey University (DClinPsych Part C: 175.993). It has already been graded by the examiners and achieved a pass grade in December 2021. It is a programme requirement that it is included as an appendix.

Research Case Study

The Scientist-Practitioner Framework: A model and a mindset

Abstract

This research reflection contains a series of thoughts that I have developed since starting the Doctor of Clinical Psychology training programme. I am passionate about the empirical process, and in particular, methodological positions. My ardour for meta-theory and clinical realism is presented in this reflection, including how this also translates to the 'practitioner' part of the scientist- practitioner dyad. We tend to take for granted the methods that we use in our clinical work and I have pondered over the assumptions that we accept about knowledge through using such methods. When I am choosing to complete a thorough clinical interview without administering the Beck's Depression Inventory, what is the assumption I am making about the type of knowledge the client has? Will a psychometric measure be sensitive enough to elicit unmanifested depressive qualities? These are the kinds of questions we also reflect on when developing research projects. There is an important partnership between the 'science' and the 'practice' – a framework that guides me empirically in my practice and in decision making. This reflection begins with comparing the research process to clinical practice, including how critical realist assumptions that support research development are also relevant to client work. Finally, reflections about the scientist-practitioner framework are provided.

The Scientist-Practitioner Framework: A model and a mindset

When thinking about undertaking a research project, I need to think critically about my research questions, my sample, and the various ways that I can collect information. When I think about developing research questions and selecting methods, I am making assumptions about the types of knowledge I think exists. For example, I am incredibly invested in the experience of moral emotions, especially in the context of suicide bereavement. My thesis includes prominent theories of regret in attempts to formulate the experience that psychologists experience following client suicide. I have selected quantitative methods and hypothesis testing to make sense of the systems of experience that have been previously theorised. It is clear that the assumptions I hold indicate that regret is a phenomenon that can be accessed by way of measurement, and that the qualities that are specific to the experience of regret can too be accessed. I have also used qualitative techniques to explore factors that may not have already been identified in theory or accessible by measures.

This might suggest that there are shortcomings to measurement – a frequent critique of the quantitative approach. However, I think that critique is a simplified and fatigued rationale in the quantitative verse qualitative argument. When we think about something having a 'limitation', I think it's important to evaluate that limitation in reference to the respective assumption. The aim of quantitative research is to derive information from numerical data that indicates trends, differences between groups, and test hypotheses. It does not aim to collect data 'rich' in context or understand unique and individualised experiences. That is the assumption behind qualitative investigations. When we talk about 'limitations', it is important to compare it to the assumption that is relevant for that metatheoretical position. How well does quantitative methods allow us to generalise information? How well does it measure constructs? How can we improve our analyses? There will always be limitations in

both approaches, but our critiques need to be in reference to their purpose. Through this understanding I am able to recognise what both approaches have to offer without invalidating the efforts and contributions of one in favour of the other. This has assisted my clinical practice in thinking about my approaches in carrying out assessments and collecting client information.

Critical realism is a philosophical paradigm that attempts to resolve opposing assumptions relating to both the forms of positivism, and post-modern methodologies concerned with interpretivism (Patomaki & Wight, 2000). It is the methodological position carrying my doctoral thesis. Critical realism is not united by a unitary framework or a set of beliefs (Cruickshank, 2003). Rather, it is reflexive commitment to formulating philosophically informed, post-positivistic empirical decisions. Critical realism is underpinned by ontological realism – the assertion that much of reality exists and operates independently of our own experiences. Distinguishing between the 'real' world and the 'observable' world, critical realism posits that unobservable structures can cause observable events. The world may be understood if people can access the structures that generate observable events, however, critical realism does not assume that people have immediate access to these underlying structures (Zachariadis et al., 2013).

Many determinant features of the world are not empirically verifiable or quantifiable, and may not answer to theory, language, numbers, or models, thus, multiple modes of inference are permissible under this ontological position. This meta-theoretical position has not only informed my research's methodology, it has provided me with a fundamental philosophy that informs my clinical work: clients, like the world, do not always answer to theory, language, numbers, or models. Therefore, multiple modes of inference are not only permissible, but necessary, in the work that we do as clinicians. For example, we are guided

by the bio-psycho-socio-cultural model of mental health. As a profession we have migrated from disease-based theories and now consider unique and complex factors in the development of a person's problem. As we learn more about the factors that contribute to the development of mental health disorders and distress, our methods of assessment and treatment adapt. Clinical psychology may be a harmonious fit with critical realism in this way. It depends on the philosophy of investigative vigilance, flexible methods of explanation and interpretation, and acknowledgement of the changing social world. It considers knowledge to be temporal and contextual. In clinical practice we often rely on different modes of investigation to strengthen the hypotheses we hold about a person's presenting issue. We use clinical interview, pre-validated measures, other file information, and we talk to family members. We use multi-method, multi-measure approaches to verify our judgements. We know that psychometrics alone does not offer the nuance necessary to understand an experience completely. We also know that clinical interview alone can lack precision due to the limitations inherent in self-report, and does not offer specific and measurable information about someone's cognitive difficulties and changes in functioning.

Critical realism acknowledges that what is available about the world is communicated by descriptions and discourse (Patomaki & Wight, 2000). However, we are unable to move past these qualities to compare such claims with the reality they are trying to depict. Comparing this to clinical assessment which depends largely on self-report, it is important that we understand the responsivity barriers to eliciting information from clients such as complex presentations, cognitive impairment, and language and cultural differences. Bhaskar (1978) argues that there is no perfect correspondence between discursive claims and reality. Thus, our theories will only be as informed as our methods of acquisition. To highlight these points, I am going to draw on neuropsychology and the implications of cognitive assessment

for the profession. Recently, there has been a push towards using psychometricians to complete neurocognitive batteries, and clinical psychologists would later interpret the data and complete the assessment report. This is hugely problematic for several reasons. First, the data collected in testing demonstrates what a person *can* do in a particular testing environment, however, it does not reflect what a person *does* do when they have access to their compensatory strategies and supports. The absence of clinical interview renders a person's cognitive functioning based on psychometric data, to be interpreted in a relatively pessimistic light – especially when scores are aggregated to reflect an overall scale score. A second criticism refers to the fact that we understand that social phenomena interacts within systems, and thus, requires contextually bound explanations under critical realism. This philosophy applies to the knowledge that we gather from clients. Not only is the cognitive information we gather from clients contextually relevant, so are the tools that we are using. How do we ensure that both contexts are harmonious to render the information meaningful? This dilemma is probably best understood culturally in the absence of relevant norms. Thus, it is important that as clinical psychologists, we are sensitive to the language that clients use to describe their life, and that we are being reflexive of the models we select to formulate their experiences. According to critical realists, knowledge about reality is historically, socially, and culturally situated. Cruickshank (2003) argues that the self is neither an asocial or fixed entity separated from its socio-historic region, nor a contingent epiphenomenon that is reduced to the norms with which it resides. Therefore, the self is to be understood as a socially mediated process – capable of accessing knowledge of a reality that is separate from its own representations of it (Ackroyd, 2005; Cruickshank, 2003). I have spent time reflecting on Cruickshanks points and think that they represent not only the responsibility of the clinician to understand that people are moulded by complex social systems, but that due to

their ability to access knowledge separate from their own reality, they are able curate new and healthier realities.

As highlighted, critical realism allows for a flexible scientific approach under the condition that the researcher remains reflexive and critical of their practices. I think this statement reflects the meaning of the scientist-practitioner model. Though, I have reflected over this model in the past months and wondered if we, as a profession, are fulfilling its responsibility sufficiently.

I have a palpable fondness for research. Through conducting research, I am able to find my identity as a budding clinician. Throughout my placements last year, I came to see the role tensions that exist between different types of mental health professionals. Occupational therapists and mental health nurses were able to offer group therapy sessions and conduct cognitive-behavioural therapy, and I often felt voiceless in multi-disciplinary meetings. Additionally, science may not be valued equally among other professionals which causes invariable standards in mental health care (Rupp & Beal, 2007). Conducting and consuming research offers me the opportunity to investigate and identify important issues, develop reliable and robust methods, answer questions, and ultimately solve problems. Each step requires reflexive and critical decision making. The empirical process parallels with our clinical practices, and I have come to understand that the scientist-practitioner framework is what separates our profession from other mental health professionals.

Developers of the scientist-practitioner argued that psychology should be viewed as dynamic and experimental (Baker & Benjamin, 2000). The principle goal of the scientist-practitioner model is to train practitioners to utilise psychological theory and knowledge in the work with clients. Further, Jones and Mehr (2007) state that it also offers the "ability to move the field forward and generate fresh knowledge in the form of empirical findings, new

theories, and new treatment programmes" (p. 767). Jones and Mehr recognise that another goal of the model is to bridge the gap between science and professional practice. As I reflect on the way I focus my scientist-practitioner lens, it is clear to me that a strong focus has been how the I can 'use' of research to inform my practice. For example, I had to collect a series of articles comparing the effectiveness of group versus individual treatment for people with complex needs. This was to contribute to an evaluation of a pilot study entailing group treatment for sex offenders with complex needs. As I was perusing the literature base, I noticed there were several seemingly relevant articles, however, the samples were not reflective of the sample we had recruited and the comorbidities were not complex enough. In the past, I would have likely used these articles because they looked 'about right'. However, I realise now the implications that using irrelevant literature carries, especially when relying on these findings to inform changes in future treatment protocols. As I was completing this literature review, I was critiquing qualities of the study such as measures used, and the environment that the research took place to ensure that the findings were reflective of our population. While this seems like an obvious component of a literature review, realising that this literature actually contributed to tangible changes in a person's care highlighted the importance of the work that we do under the scientist-practitioner framework.

An area of this framework which requires attention refers to the creation of research and the empirical contributions that we have the ability to achieve. While my doctoral thesis offers the generation of new empirical knowledge like many other candidates of the programme, I have noticed that this is where it tends to start and pause among many professionals practicing clinical psychology. When I think about the lectures on how we implement the scientist-practitioner model, they tend to focus more on how we can 'use' research to support our practice and less on how we can develop research to solve clinical

problems. In fact, Cooper and Turpin (2007) found that up to 75% of doctoral theses completed in the United Kingdom are left unpublished. Newman and McKenzie (2011) suggest that these low publication rates might represent the lack of identification with the role of 'researcher' and perhaps clinical psychologists identify more as consumers of research. Other barriers include lack of time, staff, resources, and the perception that research is not a primary quality of the role.

The lack of research output became apparent to me in one of the training workshops at my internship. The workshop was on the theory and treatment of individuals who had sexually offended. Like many others in the room, I noticed the dearth of recent literature in the efficacy of treatment programmes pertaining to sexual offending, and general offending behaviours more broadly. As a result, many of our questions were unable to be answered with clarity. Due to the volume of work and limited funding at the department and across district health boards, it is clear why research projects are not always prioritised. This highlights an interesting question. The scientist-practitioner model has been presented as largely an independent responsibility and commitment to the use of empiricism in our work. I wonder how we able to fulfil its full expectation to conduct research when we might work in environments that are less likely to prioritise this due to resource and funding limitations.

I understand that it is infeasible for every psychologist to have the same frequency of research output, therefore, the scientist-practitioner framework offers flexibility in the way that it may be engaged with. Being trained to consume, critique, and create research not only provides tools to conduct evidence-based practice, it also provides skills in consulting with other professionals, assists clinical and general decision making, and encourages advocacy for intentional and purposeful practice (Rupp & Beal, 2007). The scientist-practitioner model is not just a model, but a mindset; a lens that refocuses our practice and purpose.

Finally, engaging with clients this year at The Department of Corrections has been a wonderful privilege. Working collaboratively to make sense of a person's life appears to be incredibly instrumental in bringing about change. Additionally, seeing these changes accelerate through the strengthening of the therapeutic relationship has been rewarding. This internship has allowed me to contextualise not only my learnings from the doctoral programme, but practically utilise meta-theory and critical realism to guide important aspects of my clinical work. Learning how research and practice have come together this year has solidified the scope of the profession and expectations within the scientist-practitioner framework.

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