Mental Health Problems and Support for Trainee Psychologists

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Abstract

Internationally, discussion of graduate student has garnered attention in recent years, with research showing poor mental health outcomes. Among these groups of graduate students, graduate psychology students have also been shown to have poor mental health outcomes in a limited number of conducted studies, and there has been no research to explore the well-being of graduate psychology trainees in Aotearoa New Zealand.

A quantitative cross-sectional survey design was used to investigate well-being and factors that may impede well-being in trainee psychologists in New Zealand that was delivered through an online survey. The survey consisted of measures for depression, anxiety, stress, burnout, alcohol consumption, and substance use. Additional questions were asked regarding demographics, suicidal behaviour, sleep, supervisor relationship and barriers experienced when accessing mental healthcare. Following exclusions there were 122 participants in the final sample.

Of the trainee psychologists who participated, 37.7% reported depressive symptoms, 29.5% reported anxiety symptoms, 78.7% reported stress, and 38.6% reported burnout. 33.7% reported hazardous alcohol consumption and 5.7% reported substance abuse. Self-harm was reported by 7.5% of trainee psychologists during their degree with 29.5% experiencing ideation. Participants of an ethnic minority, particularly Māori, reported higher levels of stress and symptoms of anxiety, and LGBTQIA+ students reported higher levels of burnout. Participants also reported significant barriers to mental healthcare.

The current study supports that idea that trainee psychologists experience high levels of mental health problems and highlights the need for additional research in this area.

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Abbreviations List

AUDIT	Alcohol Use Disorders Identification Test
CBI	Copenhagen Burnout Inventory
DAST-10	Drug Abuse Screening Test (10-item)
DSM	Diagnostic and Statistical Manual of Mental Disorders
GAD-7	Generalised Anxiety Disorder scale (7-item)
MDD	Major Depressive Disorder
MDMA	3,4-Methylenedioxymethamphetamine, otherwise known as ecstasy
MHP	Mental Health Professional
NZ	Aotearoa New Zealand
PhD	Doctor of Philosophy
PHQ-9	Patient Health Questionnaire (9-item)
PSS-10	Perceived Stress Scale (10-item)
STEM	Science, Technology, Engineering, Mathematics

Chapter One: Introduction

To date, research in tertiary education has focused primarily on undergraduate students (Akhtar et al., 2020). Graduate students have been overlooked, even though graduate school is a uniquely challenging environment. Students must attend to the workload of their programme, as well as research, placements, and any work or additional obligations that they have outside of their programme. Alarmingly, research shows that 32% of doctoral candidates are at risk for developing a mental health problem (Levecque et al., 2017). Mackie and Bates (2019) note environmental factors unique to graduate school that contribute to poor well-being such as workload, supervisor relationship, financial strain, frequent evaluation, career planning and a competitive atmosphere. A meta-analysis from Satinsky et al. (2021) reported a prevalence rate in doctoral students of 24% for depression and 17% for anxiety, but despite this, only approximately one in four students were seeking help for mental health problems. These rates mean that graduate students are more than six times likely to experience depression and anxiety when compared to the general population (Evans et al., 2018). Despite the elevated rates of mental health problems in this population, students may experience barriers to mental healthcare (El-Ghoroury et al., 2012).

Trainee psychologists are often required to completed advanced graduate degrees to be able to practice. However, there is a limited amount of research specifically examining the well-being of this population. With existing studies in graduate students suggesting higher rates of mental health problems than the general population (Levecque et al., 2017; Rummell, 2015), it is likely that trainee psychologists also experience higher rates of mental health problems. Furthermore, only a single study explores graduate student well-being within NZ. Therefores, the primary aim of the current study was to examine prevalence rates of mental health problems in trainee psychologists within NZ. It was hypothesized that they would experience prevalence rates higher than the general population. Relationships with a supervisor and barriers to healthcare were included to assess their relationship with mental health problems.

The current study was quantitative in method, with trainee psychologists who participated completing an anonymous survey. The survey included demographic questions, measures of depression, anxiety, stress, burnout, alcohol consumption and substance abuse, as well as questions pertaining to suicidal behaviour, sleep, supervisor relationship and barriers to accessing mental healthcare. The aim of this study is to inform well-being with trainee psychologists, a subsample of graduate students. This information could be used to enhance the support provided for students, aiding in creating positive outcomes for the training process but also for the practicing workforce.

The contents of the rest of the thesis will proceed so: the subsequent chapter, Chapter 2, will review the literature surrounding the well-being of graduate students, detailing graduate psychology students in particular. Chapter 3 will discuss the rationale for the current study and the hypothesis that will be tested. Chapter 4 will explain the methodology used for this study. Chapter 5 will present the findings of the current study, and Chapter 6 will discuss those findings within the context of the existing literature, as well as the future directions, limitations and clinical implications that are highlighted, before concluding.

Chapter Two: Literature Review

The Mental Health of Graduate Students

The following chapter examines the breadth of research that explores graduate student well-being across a number of areas of mental health. The existing literature on student well-being focuses heavily on high school and undergraduate experiences, or samples that consist of both undergraduate and graduate students (H. Scott & Takarangi, 2019). This is problematic because the experience of graduate students can differ significantly from that of undergraduate students, and there has been growing discussion around graduate well-being amid calls from graduate students that are struggling with their mental health (Schueth, 2022). The majority of the existing research in this area comes from the United States of America and the United Kingdom, with research in other populations limited due to the burgeoning discussion around graduate mental health happening over the last few years.

Within the Aotearoa New Zealand (NZ) context, there is a single study by Winter et al. (2021) that examines graduate student well-being, that will be discussed here in conjunction with population data for the NZ population. To the best of my knowledge there is no other study in NZ that examines graduate well-being in such a direct manner. Winter et al. (2021) conducted a longitudinal study of undergraduate students that moved into a doctorate in philosophy (PhD), using the Warwick-Edinburgh Mental Well-Being Scale (WEMWBS; Tennant et al., 2007) to measure well-being initially in 2011, and then as a follow up three years later in 2014. Winter et al. (2021) reported a small increase in standard deviation (0.07) of well-being from those that did not enter a PhD, and a small decrease (-0.17) from those that did enter a PhD. The size of this change is dissimilar from international research that evinces PhD students experience well-being approximately 1.5 standard deviations lower while completing their PhD programme as compared to their undergraduate degree (Marais et al., 2018). Winter et al. (2021) did differ in their approach, utilising a measure that takes a positive approach to mental health as opposed to most studies (e.g El-

Ghoroury et al., 2012; Garcia-Williams et al., 2014; Park et al., 2021; Peluso et al., 2011) employing measures of depression or anxiety through a negative lens. The small decrease in well-being suggested by Winter et al. (2021) contrasts with a report from UC Berkley (Panger et al., 2014) that found that for graduate students in the Arts & Humanities, 64% of students reached the cut-off on the CES-Depression scale to be considered depressed, with 43-46% of STEM (Science, Technology, Engineering, Mathematics) students and 37% of law students reaching the same cut-off. Additionally, 46% of graduate students feel overwhelmed often or all of the time, with 45% of students having problems with stress during the past year (Hyun et al., 2006), with PhD students 2.43 times more likely to develop a psychological disorder than highly educated individuals in the general population (Levecque et al., 2017) and six times more likely than the general population to experience anxiety or depression (Evans et al., 2018). Specifically in samples of graduate psychology students there have been reported rates of one in students meeting criteria for depression (Park et al., 2021; Peluso et al., 2011), anxiety and stress (Park et al., 2021).

Depression

Depression is a common illness globally, with approximately 4.4% of the world's population suffering from it (World Health Organization, 2017) and with a lifetime prevalence of 16% (Kessler et al., 2003). It can interfere with social, occupational and physiological functioning (Hammar & Årdal, 2009). Within NZ, 9% of the population experience depression (Wilson & Nicolson, 2020), with Māori, Pacific Islanders and Asians more likely than New Zealand Europeans to score at risk of depression (Lee et al., 2017). Students in tertiary education are a group that are thoughts to be at a higher risk than the general population to be at risk for developing mood disorders such as depression (Stewart-Brown et al., 2000), with graduate students being found to be six times more likely than the general population to have depression (Evans et al., 2018). This is thought in part to be due to the number of stressors that students face in graduate education, such as academic performance, financial pressure, work-life balance and maintaining relationships with peers, family and faculty

(Peluso et al., 2011). In a systematic review and meta-analysis Satinsky et al. (2021) reported a pooled prevalence of depression in PhD students of 24% at a rate that far exceeds what can be expected from the general population. The most used measures of depression that have been used for assessing graduate students have been the Patient Health Questionnaire-9 (PHQ-; Kroenke et al., 2001) and variations of the Center for Epidemiologic Studies - Depression scale (CES-D; Radloff, 1977).

Anxiety

Anxiety affects approximately 3.6% of the global population (World Health Organization, 2017). It can be as debilitating as depression in how it impacts social, occupational and physiological functioning. Within NZ, 6.4% of the population is reported to experience general anxiety (Wilson & Nicolson, 2020), with Māori, Pacific Islanders and Asians more likely than New Zealand Europeans to score at risk of anxiety (Lee et al., 2017)With some individual studies having reported past week prevalence rates as high at 37% (Park et al., 2021) or 41% (Evans et al., 2018), Satinsky et al. (2021) in a meta-analysis report an estimate of 17% of PhD students having anxiety, with the seven item Generalised Anxiety Disorder Scale (GAD-7; Spitzer et al., 2006) being the most commonly used anxiety scale for measuring anxiety in samples of PhD students. However, there are a number of important differences between the aforementioned studies. While both studies contained both master's and PhD students (90% PhD and 10% Master's, Evans et al., 2018; 77.4% PhD and 22.6% Master's, Park et al., 2021), Park et al. (2021)'s sample was from a single Canadian University that only used psychology students, with Evans et al. (2018) having participants from 26 countries and 234 institutions and did not restrict their data to fields of study. This trend of heterogeneous participants used carries through the literature, for instance with Allen et al. (2022b) finding rates of anxiety at 23% with a sample of master's and doctoral students of any subject matter gathered at two universities in the United States of America, and Hobaica et al. (2021) reporting rates of 23.1% in American clinical

psychology doctoral students. Nonetheless, with participants of different graduate degrees and subjects, the literature paints a bleak picture of anxiety among graduate students.

The GAD-7 has been the most commonly used anxiety scale for measuring anxiety in samples of PhD students (Satinsky et al., 2021). On an individual level, women are more likely to suffer from anxiety than men (World Health Organization, 2017), and LGBTQIA+ students are more likely to experience anxiety than their heteronormative counterparts (Evans et al., 2018).

Stress

In comparison to undergraduate students, for graduate students' completion of the degree is often only one component that is academic picture. Graduate students not only have to attend to their programme, but must juggle multiple roles as a teacher, a researcher, a supervisee, or a parent. Each of these roles brings their own challenges, as well as dealing with challenges as a student, balancing coursework, relationships, faculty, academic and extraneous pressures. Coursework brings with it a high workload, deadlines to meet, a competitive atmosphere and frequent evaluation (Schmidt & Hansson, 2018; Stubb et al., 2012). Relationships with peers, friends, family, supervisor(s) and faculty need to be maintained, each of which takes up time and could be a source of stress (Martinez et al., 2013). Faculty requires not only maintaining relationships with members of faculty, but understanding the unwritten rules that govern academic, social and cultural conduct (Levecque et al., 2017). This hidden curriculum can be hostile to those of marginalised identity that might not have had any experience in such an environment before (Pensky et al., 2021). Academic challenges are on top of coursework, with pressure to publish, attend conferences, role conflicts, and networking with peers so that one can position themselves best for after their graduate degree where uncertain career prospects within academia await them (Mackie & Bates, 2019; Schmidt & Hansson, 2018). Extraneous pressures can be finances, relocation, and maintaining a work-life balance (El-Ghoroury et al., 2012; Kersting et al., 2015; Wyatt & Oswalt, 2013), especially as working in the evenings or weekends is

common for PhD students and those in academia (El-Ghoroury et al., 2012). As a result of the unique demands of graduate school, graduate students experience more stress than undergraduate students (Wyatt & Oswalt, 2013) and the general public (Allen et al., 2021; Bidwal et al., 2015), with 73.6% of graduate students feeling stressed (Oswalt & Riddock, 2017).

Barkham et al. (2019) found that a lot of graduate students' mental health problems predated their entry into graduate school or even entry into university, and suggested that a framework in which graduate student mental health could be understood through is the diathesis-stress model (Monroe & Simons, 1991). The diathesis-stress model suggests a theory as to the origin of mental disorders, through a combination of the nature versus nurture debate. Diathesis is a predisposition to a disorder and is most seen genetically but can also include other events that would predispose you to developing a mental disorder such as adverse childhood events. The diathesis requires environmental stressors to develop a mental disorder, however the amount of stress that each person can cope with will differ. Everyone will have a different predisposition, given that some diatheses will increase risk more than others, and that each person will have a differing number of diatheses. It is important to consider protective factors, such as coping strategies, therapy, and strong social support. The diathesis-stress model works as a useful framework through which to understand graduate student mental health because in the model, stress is the variable that can best be controlled, giving direction for supporting graduate students. Given that levels of stress rise upon entering university (Bewick et al., 2010; Bidwal et al., 2015), it would make sense to promote better understanding of mental health and coping strategies pre-university to make the transition from high school to tertiary education smooth. It also makes evident that universities could better support their students in areas that cause needless stress for students and with policy that impacts students' well-being such as the supports that are available to them during their time in tertiary education. Improved mental health support has been shown to improve outcomes for doctoral students, but the majority of the time students

struggle to get the help that they require (Eisenberg et al., 2007). Understanding and working to remove the barriers that exist to students' seeking help would work to help students be able to better cope during their education.

Burnout

Burnout is a form of exhaustion that occurs when you have been in a chronically stressful or emotionally draining role for a long period of time. As being a graduate student comes with high levels of stress for extended periods of time, graduate students are prime candidates for developing burnout. The Copenhagen Burnout Inventory (Kristensen et al., 2005) evaluates burnout across three subscales as personal burnout, work-related burnout and client-related burnout. These all occur in the context of the interpersonal relationships that occur, which for graduate psychology students includes the number of relationships which they are trying to maintain as well as the one-way therapeutic relationships which they are starting to engage in. Personal burnout refers to emotional and physical exhaustion that occurs when a person has reached their capacity to expend emotional and physical energy and they feel depleted and with prolonged exhaustion. Work-related burnout refers to negative attitudes regarding the work that they do and comes with questioning the validity and worth of their work. It comes with a detachment and indifference towards their work. Client-related burnout refers to feelings that the working that you are doing is overwhelming coupled with the belief of personal incompetence, and with it can come with a decline in performance.

Graduate students have been reported to present with severe burnout (Boren, 2013; Cornér et al., 2017), with Park et al. (2021) reporting in their sample of graduate students that 59.67% of them were experiencing clinically significant burnout. The high levels seen are problematic due to emotional exhaustion being linked to intention to leave academia (Devine & Hunter, 2016), although this can be moderated by receiving supervision from several different supervisors (Cornér et al., 2017). In medical students, burnout is associated

with other mental health difficulties as well as undesirable patient care (Salyers et al., 2015; N. K. Thomas, 2004).

Suicidal behaviour

While suicidal ideation is clinically significant, it is not by itself classified as a mental disorder, with completed research showing a predisposition to focusing on prevalence rates of mental disorders such as depression or anxiety. NZ had a suspected suicide rate of 10.2 per 100,000 population over the 2021/2022 period (Office of the Chief Coroner of New Zealand, 2022). Gender, ethnicity and age all contain higher risk groups of individuals. Māori were at greater risk than non-Māori, with 15.9 deaths per 100,000 Māori population, and males had a rate of suspected suicide at 14.9 per 100,000, contrasted with 5.5 per 100,000 for females. Individuals aged 20-24 were at the highest risk with a rate of suspected suicide of 21.4 deaths per 100,000 population, which has a large amount of overlap with the age of individuals who are completing graduate programmes. In turning to graduate students specifically, there are a range of reported rates of suicidal ideation. Bolotnyy et al. (2022) found in a sample of American economics PhD students that suicidal ideation was approximately 3 times higher than the general population, and 1.5 times higher than the general population who were aged 18 to 25, with a prevalence rate of 11.3 measured over the previous two weeks. An increase in ideation over time in a graduate programme was also reported, from 8.1% in the first year to 23.3% in year 6 or later. However, their participants were drawn from highly ranked economics programmes from prestigious universities, where the university whose share of students from the top 20% of wealth in the United States of America was UC San Diego, with 40% of their students (The New York Times, n.d.). It is possible that this could attribute to the rate of suicidal ideation being either higher or low: students could experience more significant levels of mental distress given the competitive environment that they are in, or students could aid distress by using the resources at hand to better seek help. Garcia-Williams et al. (2014) reported a slightly lower previous two-week rate of suicidal ideation at 7.3% and planning at 2.3% from a single

American university, although they saw a low response rate in a non-random sample that limits the generalisability of their results.

A participant group of clinical psychology students, also from the US, reported rates of suicidal ideation of 16.8% (Hobaica et al., 2021), although this was over the course of their degree and not within the previous two weeks. Hobaica et al. (2021) also reported rates of non-suicidal self-injury at 5.7%, suicide planning at 4.1%, and suicide attempts at 0.7%, all measured across the course of the degree. These were higher than rates of non-suicidal self-injury reported by Garcia-Williams et al. (2014) at 1.7%, suicide planning at 2.3%, and lifetime suicide attempts at 9.9%. This is to be expected though, given the differences of time period covered in the questions, and the limited ability to generalise outside of the single university for Garcia-Williams et al. (2014) and a limited ability to generalise outside of clinical psychology graduate students in particular for Hobaica et al. (2021). An additional study, by Rummell (2015), that was not specifically looking at suicidal ideation or planning, did find that 23.4% of clinical and counselling psychology programmes had some level of death-related thoughts, with 10% of students thinking about death on a regular basis.

The limited and disparate information relating to suicidal behaviour or thinking as shown evidence the need for further research into this area, an idea also noted by Satinsky et al. (2021) after a meta-analysis that included suicidal ideation of PhD students. Nonetheless, the ranges of suicidal behaviour and thinking that has been reported sit well above the annual prevalence of suicidal ideation in American adults of approximately 4% (Piscopo et al., 2016) which would suggest that it is likely that graduate students experience higher rates of suicidal ideation and behaviour than the general population. This could be plausible, as suicidal behaviour is related to depression and anxiety (Mejia-Lancheros et al., 2021) and negatively associated with well-being, both of which are seen in graduate students as explored in previous sections.

Alcohol consumption

Alcohol is the most harmful drug to the NZ population (Crossin et al., 2023). 18.8% of New Zealanders displayed hazardous alcohol consumption in 2020/2021 (Ministry of Health, 2022), with Māori (33.2%) and Pacific (21.7%) peoples displaying higher rates of use than NZ Europeans (20.1%) or Asians (6%). Individuals aged18 to 24 display the highest rates of hazardous drinking (Ministry of Health, 2021a), and it aligns with Cranford et al. (2009) reporting that 51.1% of American undergraduate students had engaged in binge drinking (defining it as 5 or more drinks at once if male or 4 or more drinks if female at one time) over the previous two weeks at a rate higher than graduate students (34.7%). On the contrary, in an American sample of graduate students, Allen et al. (2022b) reported that while 85% of their sample had drunk alcohol within the past year, only 7% were engaging in high-risk alcohol consumption (defining high-risk alcohol consumption the same as the binge drinking definition used above). In comparison to those not at university, Johnston et al. (2016) reported that university students drank more alcohol and more often engaged in binge drinking. While Pedrelli et al. (2016) has found binge drinking to be positively associated with Major Depressive Disorder (MDD), Cranford et al. (2009) found frequent binge drinking to be negatively associated with MDD, and others have found binge drinking to not be associated with depressive symptoms at all (Kenney et al., 2013; Merrill et al., 2014), with Walters et al. (2018) noting the variability of the relationship between alcohol consumption and depressive symptoms. Cranford et al. (2009) found that there is a positive relationship between binge drinking and generalised anxiety disorder, while Kenney et al. (2013) found that there was no relationship between the two.

Substance use

The patterns of substance use in NZ are thought to diverge from patterns commonly seen in other Western countries, with lower levels of cocaine, heroin and MDMA use compared to international standards yet having higher levels of methamphetamine use (Lai et al., 2017). Cannabis use sits between 11-15% within a 12-month period (Ministry of

Health, 2015) with 40% of users using it to self-medicate pain or other ailments. Given that substance use has a relationship with lower academic performance (Cox et al., 2007) and that graduate students will typically have a record of academic prowess, it could be assumed that graduate students use substances at lower rates than undergraduates or the general population. Despite that, Johnston et al. (2016) noted that in an American sample individuals attending university had similar rates of past year substance use as those that did not attend university at approximately 43%. They also reported that university students used amphetamines at higher rates than their non-university counterparts (Johnston et al., 2016). In a British sample of undergraduate students, Bennett and Holloway (2014) reported a substance use rate of 22.2% over the past year, with cannabis (21%), ecstasy (6.9%), mephedrone (3.3%), cocaine (5.8%) and ketamine (3.2%) being the most used drugs. This is a similar rate of cannabis use as an American graduate sample with 1 in 5 people using over the past year (Allen et al., 2022b), as well as 7% prescription drugs for non-medical use over the same period. The most common type of prescription drugs used non medically were stimulants (4%), tranquilizers (3%), analgesics (2%) and sedatives (2%) (Allen et al., 2022b), although Silvestri et al. (2015) reported more than double the past year prevalence of nonmedical use of prescription drugs at 14.6%, although their sample was with undergraduate students. This difference in rates can be explained in part to differing populations in towns of participants, the country the participant lives in, preferences that have developed in the location the participant lives in, and ease of access to each drug. For instance, NZ's patterns of drug use are thought to differ to other Western countries due to its geographical isolation, lack of land borders and strict border control, and smaller market of buyers than other countries (Lai et al., 2017).

When it comes to the relationship between mental health and substance use in graduate students, there are several contrary findings. While Allen et al. (2022a) showed substance use increased exhaustion, cynicism and inefficacy, they did not show a significant relationship between substance use and burnout. They did speculate that experiencing any

of the three domains could increase substance use (Allen et al., 2022a). Cannabis has been reported to be positively associated with both depressive symptoms (Buckner et al., 2010) and MDD, as well as having no association to MDD at all (Cranford et al., 2009). It has been associated with greater anxiety (Buckner et al., 2010) and increased likelihood of developing an anxiety disorder (Keith et al., 2015). Cocaine, hallucinogens, amphetamines, and sedatives all have a positively correlated relationship with depressive symptoms (Valentiner et al., 2004; Zullig & Divin, 2012), with ecstasy and depressive symptoms being marginally related (Ramo et al., 2013). Cocaine, hallucinogens, amphetamines, sedatives, and ecstasy are all also associated with anxiety symptoms (Ramo et al., 2013; Valentiner et al., 2004).

When speculating on the use of substances in this population, beyond general experimentation with drugs, there are two probable possibilities that are both related to the high stress environment of graduate study. The abuse of non-prescription medication could be to assist in performance; sedatives to assist sleep, analgesics to allow for greater working capacity, and stimulants to allow for greater working capacity and focus (Abreu et al., 2021). The other possibility would be using drugs as an unhealthy and unorthodox coping strategy (Felner et al., 2020) as a form of self-care, supplementing more traditional forms of self-care.

Sleep

Sleep plays an important restorative function in cognition, health and well-being (Chow, 2020). 7 hours is the least amount of recommended sleep that 18- to 64-year-olds should be getting (Ministry of Health, 2021c), and while 25.7% of adults in NZ get less than 7 hours sleep per night, in contrast Allen et al. (2021) report that almost double (51%) the number of students are not getting the recommended amount of hours of sleep. University students are also easily affected by poor sleep quality and quantity (Becker et al., 2018; Wang & Bíró, 2021), with poor quality sleep experienced by approximately half of students (Allen et al., 2021; Lund et al., 2010). Sleep quality is commonly measured by four metrics: time it takes to fall asleep, how often one wakes up during the night, how long you spend

awake if you wake up during the night, and the amount of time spent asleep. This has been demonstrated as waking up more times per night is suggestive of adverse physiological, psychosocial and psychological effects (Frey et al., 2007), as well as total time spent asleep (Allen et al., 2021) and how often one wakes up during the night (Becker et al., 2018). As a result of poor sleep quality, Buboltz et al. (2001) reported that 31% of students are fatigued in the morning after waking up, with poor sleepers reporting diminished daytime functioning (Alapin et al., 2000) and a lower GPA on average (Gaultney, 2010). When faced with deadlines and stress, students report even worse sleep (Campbell et al., 2018; Guastella & Moulds, 2007). Schlarb et al. (2012) reported that 7.7% of students suffer from insomnia, which is significantly correlated with depression and anxiety (Taylor et al., 2013) as well as it being more common to be stress and have a lower quality of life (Sing & Wong, 2010; Taylor et al., 2013). While not specifically looking at insomnia, recent studies of medical students (K. M. Johnson et al., 2017) and college students (Lund et al., 2010) have highlighted the relationship of sleep quality with stress, burnout, depression, decreased quality of life and lower academic success.

Accessibility of Support

Graduate students have several sources of support that they can draw on: professional support, friends, family, peers, their supervisor or their faculty. PhD students can complain of social isolation (González-Betancor & Dorta-González, 2020), so involvement within these spheres can be important, with Mantai (2019) recommending integration into the academic environment through peer support and regular supervision to be important to establish a support network. Social support is often mentioned as an effective and the primary coping strategy for students (El-Ghoroury et al., 2012), and can influence a student's motivation and coping ability within their degree (El-Ghoroury et al., 2012; Sverdlik & Hall, 2020). El-Ghoroury et al. (2012) reported that in a sample of graduate students, over half of them utilized friends, family, peers, exercise, and hobbies as forms of self-care, with some lesser utilized self-care being psychotherapy (48.3%), more time spent

on university work (47.2%), mentoring and supervision (37.2%), spirituality (33.3%) and seeking assistance from a physician (25.4%). While support from friends and family can be effective and is seen as more helpful than support from their supervisor or faculty, the students' supervisor and faculty play an important supportive role in helping the student adjust to their new environment (El-Ghoroury et al., 2012). When students' wish to seek professional support, they face several barriers that they do not face when seeking support from utilizing free support from the people around them. The largest stressor that graduate students face is financial insecurity (Mackie & Bates, 2019), given that they carry not insignificant amounts of debt used to fund their education, coupled with rising costs of living, which impacts their ability to seek professional help when required. Hobaica et al. (2021) reported that while 82.6% of their sample of clinical doctoral psychology students wanted to see a mental health professional (MHP), only 57% of those that wanted to see a MHP actually saw one. They found both resource issues to seeking help and barriers to using university provided services. Students reported that a lack of time was the most common issue, followed by finances, lack of available services, possible stigma, and other issues (Hobaica et al., 2021).

A lack of time is also the most common reason for psychologists not seeking help, along with privacy concerns, and guilt and embarrassment (Bearse et al., 2013; Jones, 2013). Additional reasons for not seeking assistance are not knowing what might happen, lack of motivation or energy, shame, guilt or embarrassment, confidentiality concerns, lack of knowledge around available resources, inadequate social support, and hopelessness (El-Ghoroury et al., 2012). When seeking assistance from services provided through the university, students also found barriers to care. Hobaica et al. (2021) reported that 67.4% of their sample did not want to use campus services because they were staffed partially with students from their programme, for 28.7% of students their services only provided triage services, that 10% were not allowed to use campus services and 10.5% could only use them while not working there, and 13.6% had other assorted barriers. An additional barrier would

be that in the course of their study they would be learning from and interacting with teaching staff that are also service providers, giving rise to dual relationships if they were to seek help from services that were provided on campus. Students face a number of distinct barriers that inhibit their ability to seek help while experiencing a unique and extremely stressful period of their lives (Levecque et al., 2017).

Supervisor relationship

Supervisors play an important role in the education of psychologists. Students engage with supervisors in both academic and practicum capacities, consisting of complex engagement as the supervisor helps to guide and encourage the student through their training. Given the seemingly significant role that the supervisor plays in the student's life, there has been a lot of focus on the relationship, with 15% of the research on doctoral study examining the relationship between the supervisor and student (Jones, 2013). Ultimately there appears to be a contrast in how students experience their relationship with their supervisor; the relationship can either play a role in student well-being and achievement (Gube et al., 2017; Martinsuo & Turkulainen, 2011) or it can be a source of anxiety, depression, stress and burnout (Delamont et al., 2004; Pyhältö et al., 2012; Stubb et al., 2011). The division of this dichotomy is unequal; while most students have productive relationships that help them to grow, there is a small subset of students for which their relationship with their supervisor is a significant source of stress (Park et al., 2021).

Understanding expectations upon supervisors as to their supervision is important in defining a positive or negative supervisory relationship. M. V. Ellis et al. (2014) lay out the boundary as to what is the minimal amount of clinical supervision to be considered adequate; proper credentials for relevant profession, appropriate knowledge for clinical supervision and awareness of personal limitations, obtains consent for supervision or uses a supervisory contract, minimum one hour face to face per week, provides feedback that is respectful, ongoing and honest, promotes and is invested in the supervisee's well-being and development, is attentive to diversity and culture, maintains confidentiality, and is aware of

the power differential and its impact. While created with clinical supervision in mind, the criteria listed are mostly appropriate for both academic and clinical supervision.

Along with support from friends, family and peers, supervisors play a central but modest role in their students' academic journeys (McAlpine & McKinnon, 2013) given their central role to the students' studies. Student's satisfaction with their programme is related to their satisfaction with their relationships with their supervisors (Dericks et al., 2019; Gube et al., 2017), and the more they thought their supervisor helped them develop competencies and was supportive of them the higher their persistence in competing their academic programme (Jones, 2013; Sverdlik & Hall, 2020). Although the emotional facet of student well-being has been given limited attention despite the centrality that emotions have in graduate study (De Clercq et al., 2019), it is suggested that emotional state can be improved by improving the quality of relationship between supervisor and supervisee (Dhirasasna et al., 2021), and that appropriately given supervision can reduce emotional exhaustion (Rigg et al., 2013). Being supervised by a team of multiple supervisors also helps to decrease burnout (Cornér et al., 2017).

It has been suggested that it is common to find inadequate supervision or supervision from supervisors that are inexperienced (Delamont et al., 2004), with supervisors not receiving appropriate formal training and having workloads that do not allow them to provide each student with a suitable amount of time (Park et al., 2021). Poor quality supervision is linked in students to burnout and emotional exhaustion (De Clercq et al., 2019; Pyhältö et al., 2019), depression (Delamont et al., 2004), and anxiety (Stubb et al., 2011). Doctoral students that are unsatisfied with their advisors are more likely to consider withdrawing from their programme or go through with withdrawing (Lovitts, 2001). Supervisors and students have different ideas as to what constitutes a breakdown in relationship. The primary source of conflict for supervisors is students not being able to manage their time or not having developed skills they should already have (Adrian-Taylor et al., 2007; Sellers et al., 2016) while students report both lack of feedback from supervisors (Adrian-Taylor et al., 2007) in

the content and tone of feedback (Can & Walker, 2011) as well as supervisor disorganisation (Devine & Hunter, 2016). These are likely sources of conflict given that students need more supervision at the start of their research when they are relying on the experience of their supervisor when developing research questions as opposed to when they are writing their thesis (Ali & Kohun, 2007). Providing more support at the beginning of the supervisory relationship grows confidence in the student (Odena & Burgess, 2017) that promotes engagement and motivation as they continue through their study (Sverdlik et al., 2018).

Students often adapt their behaviour to act in a manner that they believe will provide them the most benefit in their relationship with their advisor and in the future. When an individual feels as though there is incongruence between their own beliefs, values and ideas and those of their supervisor that could cause conflict, they sometimes engage in facades of conformity (Hewlin, 2003). This involves masking their values and ideas to act in a manner that is more conforming to the values held by the supervisor or perceived expectations of behaviour (Perrigino & Jenkins, 2022). Acting in such a manner can cause anxiety and stress in dealing with their supervisor (Devine & Hunter, 2017), negatively impacting the student's relationship with their advisor and their degree. Acting inauthentically can either be impression management (gaining approval for career advancement) or facades of conformity (suppressing one's ideas or values), and over 90% of doctoral students employ these for various reasons (Devine & Hunter, 2017). In the latter, students typically wish to avoid confrontation with their supervisor and as such will agree to ideas that they may internally disagree (Devine & Hunter, 2017; Pyhältö et al., 2012). Students are also aware of the power dynamic that exists between supervisors and supervisees, and that they may need to rely on their supervisor for either their word-of-mouth reputation or formal reference in the future (Devine & Hunter, 2017; Pyhältö et al., 2012). Not all the impression management is self-serving though, as respect for the experience that the supervisor has is another reason why students would agree with their supervisor while internally disagreeing (Devine & Hunter, 2017). When suppressing their own ideas, students raise themes such as the want

to finish their degree, differences in personal values, and different academic goals for their work (Devine & Hunter, 2017). In wanting to present an image that students believe will allow them the most opportunities, they can be hesitant to disclose mental distress to supervisors (Grice et al., 2018) when being transparent would likely provide more support.

There are also supervisor relationships where the power that the role has over the student is actively abused: verbal abuse, sexual discrimination, academic abuse, authorship issues and ethical violations (Pyhältö et al., 2012), with up to 43% of graduate researchers experiencing bullying (Moran et al., 2020). This is exacerbated for international students, ethnic minorities and sexual minorities, stemming from exclusionary practice that is systematic. It is not possible to decouple one's identity from themselves as a scholar, and when professors use their established pedestal to speak out against cultural knowledge to promote the idea that only Eurocentric knowledge can be classified as science (Nowak, 2021) it can be invalidating to student's identities and acts to reinforce the disparities that are seen in the academic ivory tower (Thomson et al., 2021). As a result of this, Black students withdraw from graduate education at higher rates than Asian or white students (Joice & Tetlow, 2020).

Within NZ universities, similar themes are present to the body of international literature. PhD students Otago University in NZ reported that they engage in facades of conformity and impression management (Cornwall et al., 2019), due in part to a lack of confidence that is generated by apprehension that others will perceive their ability to be lacking. A common theme was that supervisory relationships became stressed when there was a perceived poor lack of availability, or that supervisors were distracted by other matters that detracted from supervision (Cornwall et al., 2019). Given that universities have been making cuts to staffing numbers that stretch existing staff further over more tasks (F. Ellis, 2023; Gibbens, 2023), this is unsurprising. Being able to invest time into a supervisee as required is important, as it can help create closer relationships within the supervisory relationship through perceived care and genuine interest in the supervisee and their

research topic (Khosa et al., 2023), while perceived lack of care or interest can negatively impact the motivation and well-being of the student. Students find that perceived competence of their supervisor had a positive effect on their motivation and well-being (Khosa et al., 2023), likely because they felt more supported and invested in when the supervisor could contribute relevantly to knowledge of the literature, the analysis and writing. A considerable portion of the supervisory relationship appears to stem from the degree of formality within the relationship. Khosa et al. (2020) detail four different supervisory relationship types within PhD students with varying degrees of structure and support; contractual (high support and structure), directorial (high structure and low support), pastoral (low structure and high support) and laizzez-faire (low support and low structure). The most common relationship type was contractual with high support and structure, providing the student with mentoring and support on a more personal level as well as professionally. This is collaborated by Khosa et al. (2023) where students reported better well-being in informal and more personal relationships with their supervisor as they felt that they could maintain a more open dialogue about their day-to-day progress and well-being, keeping the supervisor better informed about anything that could impact their PhD progress. High levels of formality and a lack of clear expectations both impacted upon supervisee well-being (Dhirasasna et al., 2021; Khosa et al., 2023). It should be noted that Khosa et al. (2020) and Khosa et al. (2023) were qualitative studies conducted with participants from both Australian and NZ universities, and that their results are limited to the context of the disciplines of the students as well as the countries. Additionally, supervision provided by those in the academic field of psychology or those with the credentials to practice may well differ from other disciplines presupposing a more sensitive disposition to well-being given their field of practice.

The Mental Health of graduate Psychology Students

Although some of the research has been touched on earlier, this section will discuss the research that has been conducted into the well-being of graduate psychology students specifically. In NZ, while all trainee psychologists are graduate students, not all graduate psychology students are trainee psychologists. It varies from pathway to pathway, but it is standard to complete an undergraduate degree followed by either an honours degree or master's degree, before finally completing a training programme that can either be a doctorate or masters but will most commonly be a graduate diploma. To the best of my knowledge, there is no research that assesses the rates of depression, anxiety, stress, burnout or other metrics for well-being in graduate psychology students within NZ, which is of note as these students are placed under unique stressors that pertain to their training. They must manage multiple contrary roles in a day; researcher and therapist or supervisee and teacher, all while having to struggle with the typical demands of higher education. As well as managing their relationships with their supervisor, peers, family, and friends, students must juggle demanding coursework that aims to develop competency in the classroom, in research and in practical settings. While students will have an understanding of skills to do with emotional regulation and coping with stress, there is no guarantee that they will be able to put them into practice as required (Hobaica et al., 2021). In practicum settings, students can be exposed to emotionally intense content that they are not adequately prepared to deal with, and their already heavy workload can lead to neglect of self-care in favour of other tasks that are deemed to be more important in the present (Tay et al., 2018). This can lead to impairment in judgement and ability to be able to practice competently as a student, leading to malpractice and unethical behaviour. This will be discussed further in depth later in the thesis. Given the juggling of a heavy graduate workload with emotionally intense content in practical work, it is peculiar in contrast to graduate students in general how little is known about the mental health of graduate psychology students, specifically those in training. Albeit limited, existing research would suggest that prevalence of mental distress symptomology for graduate psychology students is higher than both the general population

as well as medical students, of which there is a significant body of research examining their levels of burnout, stress, depression, and anxiety (Rummell, 2015).

Graduate psychology students have been reported to have varying rates of depressive symptoms that are widely similar to graduate students as a whole. Most of the measures used can only comment on the prevalence of symptoms of mental distress, and while some of the scales will have validated cut off points, they cannot be used as official diagnoses. In 2015, Rummell found that a sample of 119 doctoral students either enrolled in clinical or counselling psychology programmes reported 49.11% of students having three of more symptoms of anxiety, and 39.29% of students having five or more symptoms of depression per their self-made questionnaire, and according to the DSM-5 (Rummell, 2015). 34.82% of the total sample displayed both anxiety and depressive symptoms, and 23.4% of students reported some thoughts of death, and for approximately half of those students it was on a regular basis.

Financial strain in psychology graduate students is not uncommon, especially as the cost of living continues to rise. Over one-third of America clinical psychology doctoral students reported no income left over after paying for standard living expenses, that that 80% were taking on additional debt in order to be able to get by (Szkody et al., 2023). Many students are unable to afford basic essentials for living, as well additional expenses related to healthcare (Szkody et al., 2023), which is likely to have a negative impact upon mental health. Students also experience concern over delaying major life milestones such as having children or buying a house, not only due to the debt that they are taking on but because salaries have remained relatively stagnant (Doran et al., 2016), raising questions around the benefit of entering graduate education in psychology. In NZ, there is already a severe shortage of psychologists, with estimates of an additional 1,000 to meet current need (NZ Psychology Society, NZ College of Clinical Psychologists and NZ Psychologists Board, 2023), although the need continues to rise. Trainee psychologists in NZ have in the past petitioned for maximum loan requirements to be removed for trainee psychologists (Harvey,

2021) with students resorting to taking on debt from loan sharks, taking on extra work that impacts their study, or taking a break from study to be able to save money to afford the rest of it.

In a group of graduate psychology students (doctoral, psyd, masters) that had students from a wide range of fields, El-Ghoroury et al. (2012) found that 70.5% of respondents reported a personal or professional stressor that impacted their functioning. There were four stand out stressors; “academic responsibilities or pressures (68.1%), finances or debt (63.9%), anxiety (60.7%), and poor work/school-life balance (58.7%)” (Rummell, 2015, p. 127). There were eight stressors that were reported by a minority of the students; “family issues (44.9%), research responsibilities or pressures (43.1%), burnout or compassion fatigue (38.2%), professional isolation or lack of social support (36.3%), depression (35.1%), physical health issues (33.7%), marital/ relationship issues (33.0%), other interpersonal issues (32.6%), and death, loss, or grief (27.7%)” (Rummell, 2015, p. 127). The least supported stressors were ethical issues (2.6%), ethical issues (3.0%), alcohol or substance abuse (4.1%), and suicidal ideation (5.6%). Discrimination was only reported as a stressor for 12.6% of students, but ethnic/racial minority students reported it as a greater stressor than white students. There were no significant differences in gender, race/ethnicity, type of degree or age in those who reported experiencing a stressor versus those who did not report experiencing a stressor. However, the study is limited in its generalisability with participants being doctoral students in APA accredited programmes in clinical or counselling psychology. Additionally, out of 190 programmes contacted, there were 119 participants, potentially indicating self-selection bias with a low response rate.

In a sample exclusively of British clinical psychology trainees, (Grice et al., 2018) 67% of respondents reported lived experience with 29% experiencing at least one mental health problem at the time they responded to the survey. Anxiety (43%) and depression (39%) were the most common, with social phobia (16%), eating disorder (14%), specific phobia (12%) and panic disorder (11%) being less common. Other past or current

experiences were Post Traumatic Stress Disorder, Obsessive Compulsive Disorder, alcohol or drug dependence, adjustment disorder, one off psychotic episode, borderline personality disorder and bipolar disorder. Self-selection bias was likely, as the study was concerning lived experience and stigma, so it is possible that those with lived experience were more likely to participate.

Contrary to the previous two studies that gathered samples of trainees, Park et al., (2021) reported on a sample of graduate Canadian students from a single university that were completing either their masters or doctoral programme. Of the sample, 59.67% reported clinically significant burnout, with 79.03% of the sample meeting the cut off for the exhaustion subscale, 51.61% of the sample meeting the cut off for the cynicism subscale and 37.10% of the sample meeting the cut off for the professional inefficacy subscale. A one-way ANOVA did not find any differences between masters and doctoral students, or the types of degrees that each student was doing regarding the subscales of burnout. According to cut offs in the Depression, Anxiety and Stress Scale – 21 (DASS 21; Lovibond & Lovibond, 2011), 32.26% of students reported moderate depression or worse, 37.10% reported moderate anxiety or worse, and 33.87% reported moderate stress or worse. The scores between all three subscales of the DASS-21 were moderately correlated. Financial stress was associated with an increased likelihood of burnout. They also got respondents to rank stressful aspects of graduate school. Based on mean rank, they were ordered as following from most stressful: thesis or research work, class work, finances, balancing work and family, balancing work and social life, clinical training, teaching, relationships with supervisors, and relationships with peers. Although the relationships with supervisors ranked the second lowest, it was ranked in the top 3 stressors by 19.35% of students. While it appears that most students have a good relationship with their supervisor, it appears that for a subset of students it is a great source of stress. Given that Park et al. (2021) was recruited from a single programme at a single university, it is unsure how generalisable the results are.

In a sample of Canadian graduate clinical, counselling, education and experimental psychology programmes, Peluso et al. (2011) reported similar rates to Park et al. (2021) with 33% of their sample were above the cut off score for depression, with educational psychology reporting the highest rates, followed by experimental, clinical and then counselling. Within the sample, 6% reported depressive symptoms at a level that would indicate significant clinical impairment. Peluso et al. (2011) found that for experimental programme students that a decline in satisfaction of the supervisory relationship was associated with an increase in depression, and that there was a trend that suggested that the more hours worked was associated with an increase in depression as well. There was not found to be statistically significant variance in these areas for any of the students in clinical, counselling, or educational programmes, although these are tempered by self-selection bias in a cross-sectional design.

Hobaica et al. (2021) used a sample of American students in clinical psychology graduate programmes. Mental health problems were reported by 36.8% of students before graduate school, with the most commonly reported mental health problems being anxiety (58.3%) and depression (48.2%). Other reported mental health problems were reported as 5% or lower included substance abuse, personality disorders, autism spectrum disorders, posttraumatic stress disorder, obsessive-compulsive disorder, attention deficit and hyperactivity disorder, and bipolar disorder. During graduate school, 23.1% of students reported anxiety and 17.4% of students reported depression, both based on moderate to severe cut off scores for the GAD-7 and PHQ-9 respectively. 12.2% of students reported a high risk of alcohol abuse and 12.4% of students reported moderate to severe drug use. While 5.7% of students reported non-suicidal self-injury, 16.8% of students reported suicidal ideation, with 0.7% of students having attempted suicide during their graduate programme and 4.1% of students having had made a suicide plan during their graduate programme. Students reported on average that they slept 6.85 hours per night and struggled to get to sleep or stay asleep for 2.76 nights of the week. Symptoms of anxiety and depression were

strongly related to both each other and to suicidal ideation, suicide plans and non-suicidal self-injury, but not to alcohol consumption. Alcohol and drug use were associated with each other, and to suicidal ideation; drug use was also related to symptoms of depression and having a suicide plan. Symptoms of depression, anxiety, suicide (ideation, plan, attempt), and drug use during graduate school were related to greater access to care. Having a pre-existing mental health problem was associated with less access to care and symptoms of depression and anxiety, drug use, non-suicidal self-injury (NSSI), SI, suicide planning, and suicide attempts. Participants with pre-existing mental health problems were 6.94 times more likely to have non-suicidal self-injury, 3.71 times more likely to have suicidal ideation, and 9.26 times more likely to have a suicide plan when compared to those that did not have pre-existing mental health problems. Between white and ethnic minority students, white students reported significantly more alcohol consumption, but ethnic minority students reported more depressive symptoms. Ethnic minority students were also 1.57 times more likely to experience suicidal ideation than white students when controlling to pre-existing mental health problems. LGBT students reported significantly more symptoms of depression than non-LGBT students, as well as more drug use. LGBT students were 2.38 times more likely to engage in NSSI and 1.83 times more likely to have experienced suicidal ideation than non-LGBT students. Although still a cross sectional design, Hobaica et al. (2021) assessed symptoms as a product of frequency across the duration of graduate school instead of over a period of two-weeks which is more commonly seen, which could either amplify the prevalence rates given the greater period of time measured or under-represent the rates if the majority of the reported problems were chronic issues.

Victor et al. (2022) contacted American and Canadian graduate students and postdoctoral trainees that were in accredited clinical, counselling or school psychology programmes. From all the respondents, 82.2% reported a mental health problem at some point in their life, and 47.53% reported having received a diagnosis for a mental health problem. For everyone that reported a mental health problem at some point in their life,

83.07% reported onset before graduate school and 55.85% reported that their mental health problem was in the past and not currently affecting them. Depression, anxiety and suicidal thoughts or behaviours were the most common problems experienced. Cisgender women were more likely than cisgender men to have experienced a mental health problem, and bi- and homosexual participants were more likely to have experienced a mental health problem compared to heterosexual participants.

All the existing studies are cross-sectional, examining well-being at a singular point in time. This has the potential to have an impact upon the results given that graduate mental health is likely prone to fluctuations over the course of the school year and the demands that different parts of that year bring. However, these still play an important role in developing the literature base concerning the well-being of graduate psychology students before utilising longitudinal experimental designs or qualitative methods. They show that in a number of graduate psychology programmes across the Americas and Europe that students have elevated rates of mental distress, substance abuse and suicidal ideation compared to the general population. Even with minor differences in the structure of the training, and cultural differences, it is likely that given similar high stress environments in psychology training programmes within NZ, similar trends concerning well-being exist as well.

Stigma Surrounding Disclosure of Mental Health

The field of psychology has been suggested to be hypocritical (Victor et al., 2022) in its pursuit for understanding the prevalence of mental health problems, possible treatments, and reduction of stigma in all fields but failing to look inwards at itself. The prevalence of mental disorders has been researched in a wide range of professions: the police (Syed et al., 2020), lawyers (Krill et al., 2016), welders (Almasi et al., 2020) and teachers (Desouky & Allam, 2017). Psychological research has cast a wide net towards other professions in its efforts to reduce rates of mental distress and stigma, which stands in stark contrast with its efforts to look within (Dattilio, 2015). In order to be accepted into a training programme, one has to have applied and interviewed for a place in that programme. A number of American

admission guides make common reference to not talking about your mental health, implying, or outright stating that talking about personal experience with mental health creates the impression that your functioning is impaired, and you are not able to complete a training programme, or that it is unprofessional and inappropriate (Devendorf, 2022). Appleby & Appleby (2006) posit definitively that discussion of mental health problems indicates untreated illness or instability, and that discussion will decrease chances of admission. Given that students want to maximise their chances of getting into a programme that they have already committed a significant amount of time to, they are likely to seek out these guides to assist in maximising their chances of success of entry to their programme. Even though a number of these guides are written by or distributed by American institutions or authors, students globally would be likely to come across them given the accessibility of the internet. This sort of messaging makes it clear that lived experience is not acceptable within academia or professional psychology (Victor et al., 2022), and many do feel like they can not discuss their own mental health in an academic environment for the fear that they may be actively discriminated against or disadvantaged in the future (Garelick, 2012; Schueth, 2022). This messaging may leave students feeling like their mental health problems are not something that can be discussed. This is contrary to research that shows that greater understanding of mental distress can help to decrease stigma and increase help-seeking behaviours (Batterham et al., 2013). Psychology graduate students and psychology faculty should be perfectly placed to reduce stigma around help seeking behaviour given their knowledge of psychopathology, assessment and intervention of mental disorders; however, it is not clear whether or not such a culture is being curated. Tay et al. (2018) speculate that a culture that does not actively promote discussion around personal experiences of mental disorders could result in students, faculty, and registered professionals viewing mental health problems as a flaw in themselves, because they work in the mental health field. Additionally, they can face the same judgement from friends and family, that they should be resilient and better equipped to cope with situations due to involvement in the psychological field (Garelick, 2012).

Additionally, the amount of stigma that is experienced is associated with the mental disorder that the student is experiencing. Disorders such as schizophrenia, psychosis or drug addictions are often seen as more dangerous and are typically more noticable to others that might not otherwise be aware of their existence compared to anxiety, depression and eating disorders which are less stigmatized due to being viewed as less unpredictable (Avery et al., 2013; Feldman & Crandall, 2007). Trainee psychologists anticipate this, expecting that there will be higher levels of stigma for disorders such as schizophrenia compared to major depression or phobias if disclosed (Grice et al., 2018). Although schizophrenia and bipolar disorder are disclosed at higher rates than less stigmatised disorders in the workplace (Bos et al., 2009) and to mental health professionals, supervisors are least likely to have it disclosed to them (Grice et al., 2018). Students are more likely to disclose to supervisors if the mental disorder that they have is current rather than historic, given the comparative utility of disclosure (Grice et al., 2018). When seeking support from friends and family, students are more likely to disclose anxiety or depression, and the problem being current or historic made no difference (Grice et al., 2018). There is likely a difference between supervisors compared to friends and family when it comes to disclosing historic conditions given the different supportive roles that each of them takes.

Hesitation to seek help does not only apply to students though. Bearse et al. (2013) reported that 59% of a sample of psychologists had several instances where they admitted that they should have sought help for issues that they were experiencing but did not. Professional neglect of mental health problems can lead to issues around functioning and ethical practice (Tay et al., 2018). It is important to openly talk about the mental health of trainee psychologists, so that universities and other training institutions can take steps to better support students and work towards cultivating environments that produce adaptable and resilient psychologists that do not hesitate to seek appropriate care if required.

Ethical Obligations of Well-being and Self-care

The Code of Ethics for Psychologists Working in Aotearoa New Zealand (Code of Ethics; New Zealand Psychologists Board, 2008) sets out principles and values by which psychologists should identify with in their everyday work and should consider when making ethical decisions concerning professional practice or research. The Code of Ethics (New Zealand Psychologists Board, 2008) is structured by and identifies four main ethical principles: (1) Respect for the dignity of persons and peoples, (2) Responsible caring, (3) Integrity of relationships, and (4) Social justice and responsibility to society. Within the broad principle of responsible caring, section 2.2 competence deals with psychologists reaching and maintaining competence in their roles. It states that "psychologists have responsibility to monitor their ability to work effectively to avoid conditions that could result in impaired judgement and interfere with their ability to practice safely. They seek appropriate help and/or discontinue scientific or professional activity for an appropriate period of time if a physical or psychological condition reduces their ability to work effectively and maintain safe practice" (New Zealand Psychologists Board, 2008, Section 2.2.7, p. 16). It goes on to comment that "such conditions may include burnout, addictions, acquired disability, distress from significant life events, etc" (New Zealand Psychologists Board, 2008, Section 2.2.7, p. 16). In comparison, the Canadian Code of Ethics for Psychologists (Canadian Psychological Association, 2017, p. 20) states that psychologists "engage in self-care activities that help to avoid conditions (e.g., burnout, addictions) that could result in impaired judgement and interfere with their ability to benefit and not harm others". Although self-care and reflective practice are core competencies for trainee psychologists (Santana & Fouad, 2017), the New Zealand psychology Code of Ethics does not expressly discuss self-care beyond the principle of competence implying self-care through monitoring one's ability to work effectively. Emphasising self-care is important, as failing to manage one's mental health appropriately can lead to emotional exhaustion (McCormack et al., 2018), loss of enthusiasm (Taris, 2006), loss of compassion for clients (Benson & Magraith, 2005; Sprang et al., 2007), neglect of physical well-being (Kelifa et al., 2021) and an impairment in decision making that

can become a risk to their clients (Lesage et al., 2013). Utilising self-care strategies can assist trainee psychologists in attempting to manage the balance between their personal and professional lives, mitigating stress and burnout and promoting favourable mental, physical, spiritual, and social well-being (Santana & Fouad, 2017). Self-care behaviours are associated with better outcomes in well-being, mood and coursework (Zahniser et al., 2017) as well as contributing to professional functioning that is competent. Irrespective of this when having mental health difficulties, approximately 50% of graduate students do not seek help (Piscopo et al., 2016). This can be due to a number of reasons, such as a lack of knowledge as to the services that are available to them, a lack of resources to be able to access help when needed (e.g., financial difficulties, lack of time), or stigma (Krause & Harris, 2019; Rudick & Dannels, 2018). Additionally, psychology graduate programmes often offer little in the way of directing students towards self-care or help when needed, in the way of written material, hosted self-care activities, or the atmosphere that faculty cultivate within the programme itself (Munsey, 2006).

It is common for psychologists to neglect self-care practices despite noticeable impact on their functioning (Dattilio, 2015), or to not seek help when it would be beneficial (Bearse et al., 2013). Psychologists have noted that privacy concerns, a lack of time, shame, guilt, and embarrassment are all impediments to seeking help when needed (Williams et al., 2020). Graduate programmes should aim to instil self-care practices for students to create an environment where students can effectively manage their mental health and maintain their level of professional functioning.

Chapter Three: Summary and Hypotheses

Rationale for the Current Study

There is a growing awareness of the unique stressors that graduate students, specifically trainee psychologists, face. The above literature review details findings of prevalence rates of mental distress among graduate students and some of the factors that could affect student well-being. Following this review there are several gaps in the literature that are apparent. There is a lack of research into the well-being of graduate psychology students, as well as a lack of research into the well-being of graduate students in NZ. Consequently, this study looks to add to both areas of research by examining the well-being of trainee psychologists in NZ and investigating some factors which may have a relationship with student well-being. Additionally, the findings in international literature are contradictory to the findings of the study conducted in NZ. Therefore, this study seeks to add understanding of trainee psychologist well-being within NZ, furthering the body of evidence that examines graduate well-being within the context of NZ. The current study includes 8 hypotheses and 6 exploratory questions.

Current hypotheses:

Hypothesis one: Trainee psychologists will present with higher prevalence and severity of depressive symptoms (as measured by the PHQ-9) than the general population of NZ.

Hypothesis two: Trainee psychologists will present with higher prevalence and severity of anxiety (as measured by the GAD-7) than the general population of NZ.

Hypothesis three: Trainee psychologists will present with higher prevalence and severity of alcohol consumption (as measured by AUDIT) than the general population of NZ.

Hypothesis four: Trainee psychologists get less hours of sleep per night and experience a worse quality of sleep than the general population of NZ.

Hypothesis five: Compared to students that identify as NZ European, trainee psychologists that are of an ethnic minority background will experience higher prevalence and severity of:

H4a. Depressive symptoms.

H4b. Anxiety symptoms.

H4c. Burnout.

H4d. Stress.

H4e. Alcohol consumption.

H4f. Substance use.

Hypothesis six: Compared to non-LGBTQIA+ students, trainee psychologists that identify as being LGBTQIA+ will experience higher prevalence and severity of:

H4a. Depressive symptoms

H4b. Anxiety symptoms

H4c. Burnout

H4d. Stress

H4e. Alcohol consumption

H4f. Substance use

Hypothesis seven: There will be a negative correlation between the supervisor relationship and:

H7a. Depressive symptoms

H7b. Anxiety symptoms

H7c. Burnout

H7d. Stress

H7e. Alcohol consumption

H7f. Substance use

Hypothesis eight: Trainee psychologists within NZ that have wanted to see a therapist, counsellor, or psychologist during their graduate education but have not been able to see one when compared to trainee psychologists within NZ that have wanted to a therapist, counsellor, or psychologist during their graduate education and have been able to see one will have higher rates of:

H8a. Depressive symptoms

H8b. Anxiety symptoms

H8c. Burnout

H8d. Stress

H8e. Alcohol consumption

H8f. Substance use

Current exploratory questions:

Exploratory question one: What is the prevalence and severity of stress for trainee psychologists within NZ?

Exploratory question two: What is the prevalence and severity of burnout for trainee psychologists within NZ?

Exploratory question three: What is the prevalence and severity of substance use for trainee psychologists within NZ?

Exploratory question four: What are the prevalence rates of self-harm, suicidal ideation, suicide planning, and lifetime attempts for trainee psychologists within NZ?

Exploratory question five: What aspects of their lives do trainee psychologists within NZ find stressful?

Exploratory question six: What barriers are experienced by trainee psychologists within NZ when they attempt to access mental healthcare through their university or an external provider?

Chapter Four: Methodology

Predicated on the foundation of research that demonstrates that there are elevated rates of mental health problems among graduate psychologists, this study will explore the rates of depression, anxiety, stress and burnout as the main mental health variables in a sample of trainee psychologists from Aotearoa New Zealand. Alcohol consumption and substance use will also be examined, with supplementary exploration into suicidal behaviour, sleep, supervisor relationship and access to mental healthcare.

Participants

Participants were selected as any student at an educational organisation that was completing an accredited training programme as determined by the New Zealand Psychology Board that upon graduation would result in a registration as a general, clinical, counselling, or educational psychology. This resulted in eighteen degrees across seven different universities (Auckland University of Technology, Massey University, the University of Auckland, the University of Canterbury, the University of Otago, the University of Waikato and Victoria University of Wellington) that were eligible: PGDipCounsPsych; PGDipRehabPsych; DClinPsych; MClinPsych; PGDipEdDevPsych; PGDipPsychPrac; DClinPsych; PGDipAppPsych(ABA); PGDipClinPsych; PGDipHlthPsych; PGDipChFamPsych; PGDipClinPsyc; PGDipCIPs; PGDipPsych(Clin); PGDipPracPsych(ABA); PGDippracPsych(Comm); PGDipClinPsych; PGDipEPP. It excluded a single graduate diploma in Industrial and Organisational Psychology as well as two supervision to registration programmes that are run through the New Zealand Defence Force and the New Zealand Department of Corrections. These exclusions were on the basis of including psychology pathways that are traditionally therapeutic in nature, as well as excluding the two supervision to registration programmes given the additional requirements of the programmes, such as completing basic training for the New Zealand Defence Force.

Contact information for each of the programme directors for each of the eligible programmes was collected from each respective university's website. All the programme

directors agreed to assist in the research with the exception of one whose programme was no longer running (PGDipRehabPsych), reducing the number of eligible courses down to seventeen. The programme directors that agreed to assist in recruitment sent students in their programme an email that advertised the current study and asked for interested participants, including a link to the information sheet and the survey. The information sheet described the current study, the requirements to participate, and what participating would consist of (see Appendix A). To be eligible in the study, participants needed to be enrolled in one of the degrees that were part of the inclusion criteria. Within the email, there was a link to the survey.

An initial request for participation and recruitment was sent to the programme directors on the 22nd of August 2022, with an attached letter that they could forward to their students. All of the programme directors agreed to take part in the research with the exception of one whose programme was no longer running, taking the total number of eligible courses down to eighteen. A request for a reminder email was sent to programme directors on the 14th of September 2022. Between the initial email and the reminder email, there were social media postings made on Facebook in graduate psychology pages for students at the seven universities. These posts with the information sheet and a link to the survey went up between the 30th of August 2022, and the 7th of September 2022. The survey was open from the 19th of August 2022 to the 13th of October, 2022. Participants were eligible to enter a drawing for one of twelve NZD$50 (New Zealand Dollars) gift cards for a grocery store in NZ.

Ethics

The study was approved by the Massey University Ethics Committee: NOR 22/21. The ethical application process was rigorous to ensure the safety of participants. The information sheet stated that completion and submission of the survey implied consent for collection and use of their responses. Another ethical barrier was that the supervisor to this thesis is a lecturer in the clinical programme at Massey University. Given the interconnected

nature of the academic community and the limited number of universities from which to gather participants, participant information was anonymised as to protect the identity of the participants. When participants reached the end of the survey, they were given the choice to exit the survey or to provide their email and select if they would like a copy of the results and/or enter the prize draw to win one of twelve NZD$50 grocery vouchers. It was explained that the results of the main survey could not be linked to information given for a summary of the results or the gift draw. Additionally, given that the survey asked questions that participants might find distressing due to questions about mental health status, mental health history and suicidality, they were given several support options that were on the Participant Information Sheet along with relevant contact details and were presented at both the start and end of the survey.

Survey

The survey was distributed through Qualtrics (Qualtrics, 2020). The questionnaire (see Appendix A) consists of 97 items in total, split into 11 sections containing a measure or set of questions that pertain to the same subject matter. The demographic questions were asked at the beginning, followed by the four mental health measures. These were placed at the beginning to lessen any impact that survey fatigue might have on them. These were followed by the suicidality questions, the alcohol and substance use measures, sleep questions, supervisor relationship questions and finally barriers to healthcare.

Demographic Questions

Participants were asked demographic questions such as age, sex at birth, current identified gender, sexual orientation, and ethnicity.

Measures

Depression

Depressive symptoms were measured by the 9-item Patient Health Questionnaire (PHQ-9). The PHQ-9 is a 9 item self-report instrument that measures depressive symptom

severity over the previous two weeks, with each item based on one of the nine diagnostic criteria for major depressive disorder in the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV; American Psychiatric Association, 1994). It was developed from the depression module of the Primary Care Evaluation of Mental Disorders (PRIME-MD; Spitzer et al., 1994). Participants rate how often in the last two weeks they have been bothered by items such as “feeling down, depressed, or hopeless”, “poor appetite or overeating”, “feeling tired or having little energy” or “trouble falling or staying asleep or sleeping too much”. Participants rated each of these questions on a 4-point Likert scale (0 “not at all”; 1 “several days”; 2 “more than half the days”; 3 “nearly every day”) which are summed to give a score from 0 to 27. The scores of 5, 10, 15 and 20 represent cutoff points for “mild”, “moderate”, “moderately severe” and “severe” symptoms of depression respectively (Kroenke et al., 2001). Kroenke et al. (2001) suggest that 10 or higher is suitable for a cut-off to diagnose major depressive disorder, however a more recent meta-analysis suggests that using any value from 8 to 11 is also acceptable (Manea et al., 2016).

The PHQ-9 was constructed and validated originally by Kroenke et al. (2001) using two 3,000 person samples, the first being eight primacy care clinics and the second being seven obstetrics-gynaecology clinics. The internal reliability was excellent, with the primary care participants having a Cronbach’s alpha of 0.89 and the obstetrics-gynaecology participants having a Cronbach’s alpha of 0.86. Construct validity was assessed by independent interview from a mental health professional in a sample of 580 of the primary care participants and established a strong association between the PHQ-9 results and functional status and symptom related difficulty. External validity was assessed and achieved by replicating the findings across the two samples of primary care patients and obstetrics-gynaecology patients.

The PHQ-9 has been further validated across a wide range of population groups and cultures (Aslan et al., 2020), and is reliable in discriminating between depressed and non-depressed individuals (Martin et al., 2006). It is a commonly used screening tool for

depression in primary care (Ford et al., 2020). The PHQ-9 is recommended by the Ministry of Health as a measure to assess the severity of depression in NZ (New Zealand Guidelines Group, 2008), and has been validated as reliable and valid within a NZ population (Arroll et al., 2010). Cronbach's alpha was .88 for the current study.

Anxiety

Anxiety symptoms were measured using the 7-item General Anxiety Disorder scale (GAD-7; Spitzer et al., 2006). The GAD-7 is a 7 item self-report instrument that measures anxiety symptoms over the previous two weeks, with items based on diagnostic criteria for generalised anxiety disorder in the DSM-IV. Participants answer each of the 7 questions on a 4-point Likert scale how often they have been bothered by items such as "trouble relaxing", worrying too much about different things" or "becoming easily annoyed or irritable". These are rated on a 4-point Likert scale (response options: 0 "not at all"; 1 "several days"; 2 "more than half the days"; 3 "nearly every day") which are summed to total a score between 0 and 21. The scores of 5, 10 and 15 represent cutoff points for "mild", "moderate", "moderately severe" and "severe" symptoms of anxiety respectively. Spitzer et al. (2006) recommend a cut-off of 10 or higher, with a meta-analysis also showing an acceptable cut-off of 8 (Plummer et al., 2016).

The GAD-7 was tested and validated by Spitzer et al. (2006) with 2740 participants from 15 primary care clinics. 965 of the participants had a telephone interview with a mental health professional within a week. Construct validity was assessed though this interview, as there was a positive relationship between GAD-7 scores and functional impairment as assessed by the mental health professional. The GAD-7 was shown to have excellent internal consistent with a Cronbach's alpha of .92, and good test-retest reliability with a correlation of 0.83.

Since then, the GAD-7 has been validated across a large variety of countries (Ahn et al., 2019; Shevlin et al., 2022) and different populations (Löwe et al., 2008; Rutter & Brown,

2017) and can discriminate well between those who are anxious and those who are not (S. U. Johnson et al., 2019). Cronbach's alpha was .88 for the current study.

Stress

The Perceived Stress Scale 10-item (PSS-10; Cohen et al., 1983) is a 10-item self-report instrument used to assess the stress over the previous month. Participants answer items such as "In the last month, how often have you felt nervous and stressed?", "In the last month, how often have you found that you could not cope with all the things that you had to do?", or "In the last month, how often have you been angered because of things that happened that were outside of your control?". These were answered on a 5-point Likert scale (0 "Never"; 1 "Almost never"; 2 "Sometimes"; 3 "Fairly often"; 4 "Very often") that are summed to 40. While the authors have no suggested a cut-off, scoring 0-13 as low stress, 14-26 as moderate stress and 27-40 as high stress has become common (Perera et al., 2017).

The PSS-10 has been reported to have adequate internal consistency with a Cronbach's alpha of .78 (Cohen & Williamson, 1988) which has been replicated (Barbosa-Leiker et al., 2013; Reis et al., 2010) alongside convergent validity (Mitchell et al., 2008; Wu & Amtmann, 2013). Cronbach's alpha was .88 for the current study.

Burnout

The Copenhagen Burnout Inventory (CBI; Kristensen et al., 2005) is a 19-item self-report instrument that was used to measure burnout. It measures burnout across three domains: personal-related burnout, work-related burnout, and client-related burnout. The personal-related burnout domain has 6 items asks questions such as "how often are you physically exhausted?" or "how often do you feel worn out?". These are answered on a 5-point Likert-scale (response options: 100 "Always"; 75 "Often"; 50 "Sometimes"; 25 "Seldom"; 0 "Never/almost never"). The work-related burnout domain has 7 items, with questions such as "do you feel worn out at the end of the working day?" or "do you have

enough energy for family and friends during leisure time?". The client-related burnout has six items such as "Are you always tired of working with clients?" or "Do you feel that you give more than you get back when you work with clients?". These are all answered on a 5-point Likert-scale (response options: 100 "Always"; 75 "Often"; 50 "Sometimes"; 25 "Seldom"; 0 "Never/almost never"). The scores from each domain can be averaged individually or summed together and then averaged. Scores from 0-49 indicate no burnout, 50-74 are considered moderate, 75-99 are high and 100 is indicative of severe burnout (Borritz et al., 2006).

The CBI was tested against data of burnout of employees in the service sector (n=1914; Borritz et al., 2006), with a reported Cronbach's alpha of .85 (Kristensen et al., 2005). It has been tested in a range of populations, showing negative correlations with sick days, sleep problems, intention to quit, mental well-being and job satisfaction (Kristensen et al., 2005; Winwood & Winefield, 2004), showing that the CBI measures the intended constructs and suggesting good validity. Cronbach's alpha was .89 for the current study.

Alcohol consumption

The Alcohol Use Disorders Identification Test (AUDIT; Babor et al., 2001) is a 10 question self-report test used to identify hazardous and harmful patterns of alcohol consumption. The AUDIT asks about volume of consumption and consequences from consumption. The questions are laid out so that questions 1 to 3 ask about hazardous alcohol consumption, questions 4 to 6 ask about dependence symptoms, and questions 7 to 10 ask about harmful alcohol consumption. AUDIT asks questions such as "How often do you have six or more drinks on one occasion?", "During the past year, how often have you had a feeling of guilt or remorse after drinking?" and "Have you or someone else been injured as a result of your drinking?". Scored from 0 to 40, scores of 8 or more are typically recommended as the cutoff for harmful alcohol consumption. Such higher scores are only indicative of harmful drinking, but greater scores could also indicate alcohol dependence as well. Broadly, the scores have been broken into 4 zones upon which future direction can be

taken: Zone I from 0 to 7 requires alcohol education, Zone II from 8 to 15 requires simple advice, Zone III from 16 to 19 requires simple advice plus brief counselling and continued monitoring, and Zone IV requires referral to a specialist for diagnostic evaluation and treatment.

AUDIT was constructed from a cross-national study administered in Australia, Bulgaria, Kenya, Mexico, Norway and the United States of America specifically for the purpose of identifying early alcohol problems in individuals. AUDIT has been used in a large variety of populations, including the unemployed, primary care patients, emergency room cases, elderly hospital patients, drug users, and university students, to name a few (Isaacson et al., 1994; Skipsey et al., 1997). It has also been demonstrated to be applicable across cultures (Conigrave et al., 1995; Ivis et al., 2000; Lapham et al., 1998; Steinbauer et al., 1998) as well as across genders (Conigrave et al., 1995; Steinbauer et al., 1998). It is consistent with the International Classification of Diseases 10th Revision (ICD-10; World Health Organization, 1993). Cronbach's alpha was .82 for the current study.

Drug Abuse

The Drug Abuse Screening Test 10-item (DAST-10; Skinner, 1982) is a 10 item self-report measure used to screen for drug abuse problems. The DAST was developed and copyrighted by Dr. Harvey Skinner (© Copyright 1982, 2019 by the test author Dr. Harvey Skinner, York University, Toronto, Canada and by the Centre for Addiction and Mental Health (CAMH), Toronto, Canada), and permission was sought and obtained for use in the current study (H. Skinner, personal communication, January 24, 2022). The DAST-10 has 10 yes or no items, examining multiple drug use and outcomes of drug use with questions such as "Have you used drugs other than those required for medical reasons?", "Have you ever had blackouts or flashbacks as a result of drug use?" and "Have you ever experienced withdrawal symptoms (felt sick) when you stopped taking drugs?". While the questions are normally posed in the context of the previous 12 months, the question was reworded to ask over the duration of their time in their graduate programme. The DAST-10 was developed

as a short form version of the original DAST that had 28 items, correlating highly (r = .98) with the original and having good internal consistency with a Cronbach's alpha of .74 (Skinner, 1982). The DAST-10 is positively related to depressive symptoms and interpersonal problems and has been shown to differentiate between individuals with and without drug abuse problems (Maisto et al., 2000). The results of the 10 questions are scored as yes = 1 and no = 0, except for question 3 which is reverse scored. An interpretation guide to characterise the severity of drug use is as follows; 0=none, 1-2=low, 3-5=moderate, 6-8=substantial, 9-10=severe. A cut-off score of 3 is suggested by the author (Skinner, 1982) to warrant further investigation. In review, the DAST-10 has been found to have excellent internal consistency and reliability (Giguère & Potvin, 2017; Yudko et al., 2007). Cronbach's alpha was .68 for the current study.

Supplementary questions

Suicidal behaviour

The participants were asked 4 questions about suicide related behaviour. The questions used were similar in nature to those used previously (Garcia-Williams et al., 2014; Hobaica et al., 2021). Three questions asked about frequency of events on a 4-point Likert scale: "How often during your current degree have you thought of taking your own life?"; "How often during your current degree have you made suicide plans?"; "How often during your current degree have you engaged in self-harm without intent of suicide?". The fourth question asked if the participant had ever attempted suicide in a yes or no format.

Quality of sleep

The participants were asked 3 questions that were adapted from the Pittsburgh Sleep Quality Index (PSQI; Buysse et al., 1989). Sleep quality was assessed with two questions: how they rate their quality of sleep in general, and how many times they wake up per night on average. Participants rated their quality of sleep on a 5-point Likert scale from "very poor", "poor", "average", "good" and "very good", and answered in an open text box for how

many times they wake up per night on average. Sleep quantity was assessed by asking participants how many hours of sleep they believe they sleep on average.

Quality of supervisory relationship

The participants answered 5 questions concerning the perceived quality of supervision and the level of involvement of the supervisor in the participant's education. The questions asked about the overall quality of the relationship, if the relationship with the supervisor was important, if the supervisor provides enough interaction to maximise learning, overall satisfaction level and if the participant felt like the supervisor was committed and involved to a desirable level. Each of the questions were answered on a 5-point Likert scale, e.g., "Disagree", "Somewhat disagree", "Neither agree or disagree", "Somewhat agree", "Agree". The questions were formulated from the literature that emphasised the perceived quality of the relationship and the perceived level of involvement as being important in the student feeling supported and more motivated with better well-being outcomes (Khosa et al., 2023). The individual questions were averaged to provide a score that represented their relationship with their supervisor.

Barrier to mental healthcare questions

The participants answered 4 questions concerning barriers to mental healthcare that they had experienced. These 4 questions were replicated from Hobaica et al. (2021) with permission from the first author (S. Hobaica, personal communication, August 2, 2022). Participants are asked if during their graduate education they have wanted to see a therapist, counsellor, or psychologist and if they have seen a therapist, counsellor, or psychologist. They answer a question on barriers to mental healthcare, with barriers to therapists, counsellors, or psychologists if they have wished to see one but have been unable to, and a question on barriers experienced when using university mental health services. Suggested options for barriers to mental healthcare include financial barriers, time

barriers, lack of service, stigma, and lack of knowledge about available services, as examples, as well as a text box for any additional responses.

Further data collection

On the 30th of August 2022, I submitted information requests under relevant legislation (OIA; Official Information Act 1982) to each of the seven universities requesting information on the total number of students that were enrolled in each of the programmes that they ran at are listed above. I reached out to the University of Canterbury directly via email and submitted the remainder of the requests through a third-party OIA request website, FYI. Each of the universities responded with the number of students that were enrolled in each respective programme at that time (Doherty, 2022; Ferguson, 2022; Kennard, 2022; Mercer, 2022; C. O'Connell, personal communication, September 27, 2022; J. Scott, 2022; Watt, 2022).

On the 30th of August 2022, I emailed Te Whatu Ora (New Zealand public health agency) requesting information regarding a microdata access application for the 2018 Mental Health Monitor. I engaged in the application process for data access over email, and once granted received a copy of summary statistics and prevalence data (F. Carroll, personal communication, November 24, 2022).

Chapter Five: Results

All data analyses were carried out using IBM SPSS Statistics-29 (IBM Corp, 2021) for Windows.

Data Screening

There were 135 responses obtained through the survey, that were then screened. Seven participants declined to participate in the survey after reading the information sheet and were directed away. A number of participants (N=22) excluded at least one entire scale or section. Of these participants, four did not answer any questions, one partially answered demographic questions, one only answered demographic questions, one quit after the PHQ-9, four quit after the CBI, and two quit after the DAST-10. Once these had been excluded, Qualtrics flagged another five responses as either duplicate responses or responses from a bot.

This reduced the initial number of collected responses of 135 down to a total sample of 122. The PSS and the DAST-10 include reverse scored items, and these were reverse scored prior to data analysis.

Missing data for the PHQ-9, GAD-7 and PSS were filled in with averages of the remaining items, as that is acceptable for the PHQ-9 for up to two missing values (Kroenke et al., 2010), the GAD-7 with up to one missing value (Kroenke et al., 2007), and the CBI so long as there isn't classification as a non-respondent (Kristensen et al., 2005). It was decided that the rest of the data would be handled using pairwise deletion as to retain as much data as possible given the already small sample size. The only data that was otherwise excluded were two answers to healthcare that answered that they did not want to receive healthcare but had. While possible that they could have been legally required to (Mental Health (Compulsory Assessment and Treatment) Act 1992), this appears unlikely, so they have been excluded as plausible errors.

An a priori power analysis was conducted using G*Power (Version 3.1.9.4). For the ANOVAs with an estimated $f = 0.40$ and an alpha of 0.05, a minimum sample size of 66 total was required to reach a power of 0.95, suggesting that adequate power had been achieved. Due to the small sample size of some of the ethnic and identity groups, there was inadequate power to examine these individually. As such, group differences would be based on the majority vs the minority (i.e., LGBTQIA+ vs non-LGBTQIA+ and NZ European/Pākehā vs ethnic minority). For the independent-sample t-tests, with $d = 0.8$ and an alpha of 0.05, a minimum sample size of 52 was required.

No post hoc corrections were applied, as although a number of analyses were conducted, each test result is being used to determine a single null hypothesis and since that provides a single chance for a Type I error per hypothesis, the alpha levels of the tests are unchanged (Rubin, 2021).

Outliers

Outliers in the data were assessed by inspection of a boxplot. Suspected outliers are values that are more than 1.5 times the Interquartile Range bigger than the upper quartile or smaller than the lower quartile, and outliers are values that are more than 3.0 times the Inter Quartile Range bigger than the upper quartile or smaller than the lower quartile (Sarma & Vardhan, 2019). There were 38 suspected outliers across 16 of the 18 ANOVAs, as well as 8 outliers. When examining the responses, all the outliers and suspected outliers were scored within range of the scale being used and there were no obvious response patterns in their answers (e.g., giving the same answer to each question within the scale). Given the small sample size and the legitimacy of the responses in being true outliers, all the outliers and suspected outliers were left in the sample.

Normality

Normality was assessed by Shapiro-Wilk's test. The GAD-7 score, the PSS-10 score, and the CBI score were normally distributed for the LGBTQIA+ and non-LGBTQIA+ groups

(p > .05). The PSS score and the CBI score were normally distributed for the NZ European vs ethnic minority group (p > .05). The PSS-10 score, and the CBI score were normally distributed for the achieved care, did not achieve care, and did not want care groups (p > .05). The rest of the ANOVAs data that was distributed non-normally, however ANOVAs are considered robust to non-normality (Blanca et al., 2017) and it does not markedly affect the rates of Type I errors.

Descriptive statistics

The participants were current students that enrolled in graduate psychology programmes that had a practical training component run by tertiary providers in NZ. Table 1 details descriptive statistics of the participants, regarding their ethnic, gender and sexual identities, as well as their programme and their duration through it.

Table 1

Demographic Characteristics

Demographic variable	n	%
Sex assigned at birth		
Male	10	8.2
Female	111	90.9
Gender identity		
Male	11	9.0
Female	110	90.2
Nonbinary	1	0.8
Sexual orientation		
Heterosexual	90	73.8
Homosexual	2	1.6
Bisexual	19	15.6
Queer	6	4.9
Asexual	2	1.6
Other	2	1.6

Demographic variable	n	%
Age		
20-29	75	61.5
30-39	27	22.1
40-49	8	6.6
50-59	2	1.6
Ethnicity		
NZ European/Pākehā	79	64.8
Māori	13	10.7
Tongan	1	.8
Chinese	1	.8
Indian	1	.8
Other	21	17.2
Semester in program		
1	19	15.6
2	27	22.1
3	26	21.3
4	19	15.6
5	5	4.1
6	15	12.3
Other	11	9.0
Employment status		
Unemployed	54	45.0
Part-time	59	49.1
Full-time	7	5.8
Program		
Clinical	84	68.9
General	26	21.3
Educational	11	9.0
Counselling	1	.8

Note: N = 122. Missing data not shown. All figures are rounded to 1 decimal place.

Table 2 details statistics of the main mental health variables as well as two substance use variables (PHQ-9, GAD-7, CBI, PSS-10, DAST-10 and AUDIT). Prior to their current graduate programme, approximately one-quarter (26.1%) of the sample reported mental health concerns. Over half of the people with mental health concerns prior to their current programme reported multiple problems, with the most common concerns being anxiety (n = 24) and depression (n = 20). Other pre-existing concerns included attention deficit and hyperactivity disorder (ADHD), posttraumatic stress disorder (PTSD), eating disorders, personality disorders, and obsessive-compulsive disorder (OCD).

Table 2

Responses for Measures, Sleep and Suicidal Behaviour

Mental health variable	n	%	M	SD
Pre-existing mental health problem	44	26.1		
PHQ-9			8.5	5.9
None/Minimal	39	32.0		
Mild	37	30.3		
Moderate	29	23.8		
Moderately Severe	10	8.2		
Severe	7	5.7		
GAD-7			7.1	4.8
None/Minimal	43	35.3		
Mild	43	35.3		
Moderate	24	19.7		
Severe	12	9.8		
CBI			46.2	15.1
None/low	75	61.5		
Moderate	43	35.3		
High	4	3.3		
Severe	0	0		
Personal Burnout			59	20.09
None/Low	37	30.3		

Mental health variable	n	%	M	SD
Personal Burnout continued				
Moderate	55	45.1		
High	27	22.1		
Severe	3	2.5		
Work Burnout			53	16.81
None/Low	48	39.3		
Moderate	45	36.9		
High	59	48.3		
Severe	0	0		
Client Burnout			28	18.95
None/Low (sub 50)	103	84.4		
Moderate (50-74)	17	13.9		
High (75-99)	2	1.6		
Severe (100)	0	0		
PSS-10			19.4	6.9
Low	26	21.3		
Moderate	77	63.1		
High	19	15.6		
DAST-10			0.8	1.2
None	69	56.5		
Low	46	37.7		
Moderate	5	4.1		
Substantial	2	1.6		
Severe	0	0		
AUDIT			6.1	5.0
0-7	81	66.4		
8-15	34	27.9		
16-19	4	3.3		
20+	3	2.5		
Sleep				
Hours per night			7.1	1.1
Average wakeup			1.6	1.2

Mental health variable	n	%	M	SD
Sleep continued				
Rating of sleep quality			2.2	1.0
Self-harm and suicidality				
Thoughts	36	29.5		
Plans	9	7.4		
Self-harm	9	7.4		
Lifetime attempt	11	9.0		

During their current graduate programme, approximately one-third to one-quarter reported mental health symptoms as seen in Table 2. The most reported concern was stress by 78.7% of the participants, followed by 38.6% for burnout, 37.7% for symptoms of depression, and 29.5% for symptoms of anxiety. While only 5.7% reported substance abuse, 33.7% reported hazardous and harmful alcohol consumption. 7.4% of students reported engaging in self-harm over the duration of their degree, with the same amount reporting planning within the same period, and 29.5% having thought of suicide. Participants also reported on average 7 hours of sleep, waking up approximately once per night with a poor overall quality of sleep. Burnout scores were also broken down by their subscales, which can be seen in Table 2. 85.2% of students reported personal burnout, followed by 69.7% reporting personal burnout and 15.5% reporting client burnout.

It was hypothesized that students would present with a higher prevalence and severity of depression and anxiety than the general population of NZ. A Welch students independent-samples t-test was used to determine this, using general population data requested from Te Whatu Ora (F. Carroll, personal communication, November 24, 2022). Participants had a statistically significantly greater rates of depression (M = 8.5, SD = 5.9) as opposed to the general population (M = 3.2, SD = 7.2), a statistically significant mean increase of 5.3, $t(156.8) = 9.2$, $p < .001$, $d = 0.8$. Participants also had a statistically significantly greater rates of anxiety (M = 7.1, SD = 4.8) as opposed to the general

population (M = 2.4, SD = 3.6), a statistically significant mean increase of 4.7, $t(156.8) = 10.6$, $p < .001$, $d = 1.1$.

Correlations among the mental health variables are shown in Table 3. Symptoms of depression, anxiety, stress, and burnout had strong, positive correlations between them, and alcohol consumption and drug use had a moderate positive relationship. Self-harm had a moderate positive relationship with symptoms of depression, and weak positive relationships with symptoms of anxiety, stress, and burnout. Self-harm, suicidal ideation and suicide planning were all moderately positively correlated. Age had a weak negative relationship with symptoms of depression, anxiety, stress, and burnout. Supervisor relationship had a very weak negative relationship with drug use and a weak negative relationship with stress and was not significantly related to any of the other main mental health variables. This is contrary to the hypothesis that the supervisory relationship would be associated with mental distress.

Participants reported on average 4.93 stressors, with every participant reporting at least one stressor. The stressors can be seen in Table 4, with the prominent ones being university course load (77.9%), time management and multitasking (69.7%), and finances (55.7%). The other options were primarily combinations of the other options, with lack of non-punitive support, lack of bicultural learning, and excessive workload and expectations that cannot be managed within a study-work-life balance impacting other areas of functioning. 16 participants (13.1%) noted discrimination as a stressor with ‘participant x’ reaching out over email to share the following (participant x, personal communication, August 24, 2022), which has been used with permission:

I would be interested in detailing my experience of the university including experiences of bullying and discrimination. Let me know if you are conducting interviews … I am in the (…) [programme type] Psychology programme at (…) [enrolled university]. A toxic culture has been noted by many other students also.

Table 3

Correlations for Measures, Suicidal Behaviour and Supervisor Relationship

Variable	1	2	3	4	5	6	7	8	9	10	11
1.PHQ	-										
2.GAD	.713**	-									
3.PSS	.750**	.714**	-								
4.CBI	.649**	.618**	.719**	-							
5.DAST	.106	.165	.174	.199*	-						
6.AUDIT	.155	.125	.223*	.257*	.507**	-					
7.SH	.411**	.342**	.321**	.349**	-.035	.031	-				
8.SI	.281**	.174	.194*	.077	.088	.132	.563**	-			
9.SP	.217*	.134	.172	.280**	-.089	.127	.510**	.478**	-		
10.SR	-.087	-.080	-.230*	-.166	-.181*	-.071	-.052	-.112	-.009	-	
11.PE	-.116	-.159	-.159	-.120	-.192*	-.064	-.246**	-.214*	-.258**	.170	-
12.Age	-.230*	-.340**	-.228*	-.332**	-.166	-.123	.104	.071	-.031	-.145	.027

Note. PHQ, Depression; GAD, Anxiety; PSS, Stress; CBI, Burnout; DAST, Drug use; AUDIT, Alcohol consumption; SH, Self-harm; SI, Suicidal ideation; SP, Suicide plans; SR, Supervisor relationship; PE, Pre-existing mental health. *$p < .05$ two tailed. **$p < .01$ two tailed.

Table 4

Stressors Experienced by Participants

Stressor	n
University course load	95
Time management and multitasking	85
Finances	68
Work	49
Unclear programme expectations	44
Health issues	38
Career planning	29
Partner relationship	26
Living arrangements	26
Extended Family	23
Lack of social support	22
Domestic and international current events	20
Conflict with the university	18
Other	17
Discrimination	16
Children	13
Grief	12

ANOVAs

Mental Health of Ethnic Minority Students

Six one-way ANOVAs were conducted to determine if there was a difference in the mental health and substance use variables for groups of different ethnic status. It was hypothesized that participants of an ethnic minority would experience higher levels of mental distress and substance use than those that are part of the ethnic majority. Participants were classified into two different groups: NZ European/Pākehā (n = 77) and ethnic minority (n = 39). There was a statistically significant difference in anxiety score with ethnic minority students reporting higher levels of anxiety symptoms, $F(1, 123) = 4.498$, $p = 0.036$, as well

as significantly higher levels of stress, $F(1, 123) = 4.598$, $p = 0.034$. There was no significant difference between the groups for depression, burnout, drug use or alcohol consumption as shown in Table 5. In the statistically insignificant results, ethnic minority participants experienced on average higher rates of depression, burnout, and drug use, however ethnic majority participants experienced higher rates of alcohol consumption.

Mental Health of LGBTQIA+ Students

Six one-way ANOVAs were conducted to determine if there was a difference in the mental health and substance use variables for groups of different sexual and gender identity. It was hypothesized that participants of a LGBTQIA+ identity would experience higher levels of mental distress and substance use than those that are not LGBTQIA+. Participants were classified into two different groups: LGBTQIA+ (n = 30) and non-LGBTQIA+ (n = 91). There was a statistically significant difference in burnout score with LGBTQIA+ students reporting high levels of burnout, $F(1, 123) = 4.817$, $p = 0.030$. There was no significant difference between the groups for depression, anxiety, stress, drug use or alcohol consumption as shown in Table 5. In the statistically insignificant results, LGBTQIA+ participants experienced on average higher rates of depression, anxiety, stress, alcohol consumption and drug use.

Table 5

Differences in Ethnicity and LGBTQIA+ for Mental Health Variables, Alcohol Consumption and Drug Use

	Ethnicity			LGBTQIA		
	NZ European	Minority		LGBTQIA+	Non-LGBTQIA+	
	Mean ± SD	Mean ± SD	P value	Mean ± SD	Mean ± SD	P value
PHQ-9	7.70 ± 5.45	9.84 ± 6.61	0.570	9.35 ± 5.12	8.14 ± 6.20	0.329
GAD-7	6.44 ± 4.43	8.30 ± 5.29	0.040	7.68 ± 4.58	6.90 ± 4.88	0.439
CBI	44.72 ± 14.12	49.02 ± 16.83	0.136	51.00 ± 14.58	44.62 ± 15.15	0.43
PSS-10	18.42 ± 6.98	21.07 ± 6.63	0.044	20.55 ± 6.31	18.95 ± 7.14	0.269
DAST-10	.75 ± 1.17	.79 ± 1.26	0.848	1.03 ± 1.33	.67 ± 1.15	0.148
AUDIT	6.37 ± 5.02	5.46 ± 5.14	0.346	6.75 ± 5.83	5.81 ± 4.78	0.374

Accessibility of Mental Healthcare

Six one-way ANOVAs were conducted to determine if there was a difference in the mental health and drug use variables for groups with different mental healthcare outcomes. Participants were classified into three groups: did not want to see a mental health professional and did not (“no/no”, n = 14), did want to see a mental health professional and did not (“yes/no”, n = 41) and wanted to see a mental health professional and did (“yes/yes”, n = 64). The results are displayed in Table 6. There were statistically significant differences between groups for depressive symptoms, $F(2, 116) = 5.684$, $p = 0.004$, for anxiety symptoms, $F(2, 116) = 5.264$, $p = 0.006$, for burnout, $F(2, 116) = 5.005$, $p = 0.008$, and for

stress, $F(2, 116) = 7.831$, $p = <.001$. The differences between groups for drug use and alcohol consumption were not statistically significant.

Table 6

Differences in Mental Health Variables, Alcohol Consumption and Substance Use Between Different Mental Healthcare Outcomes

	Yes/Yes	Yes/No	No/No	
	Mean ± SD	Mean ± SD	Mean ± SD	P value
PHQ-9	9.64 ± 6.47	8.21 ± 4.92	4.00 ± 3.66	.004
GAD-7	7.20 ± 4.81	8.19 ± 4.55	3.50 ± 3.98	.006
CBI	47.99 ± 15.18	46.65 ± 13.78	35.02 ± 15.10	.012
PSS-10	20.17 ± 6.85	20.12 ± 6.24	12.86 ± 6.32	<.001
DAST-10	.81 ± 1.11	.73 ± 1.29	.43 ± 1.16	.545
AUDIT	6.30 ± 5.24	5.91 ± 4.61	4.29 ± 4.14	.381

Post hoc comparisons were done using the Tukey HSD test as shown in Table 7. For each of the depression, anxiety, burnout and stress ANOVAs, the no/no group differed significantly from the yes/yes group and the yes/no group. The yes/no and yes/yes groups did not differ from each other significantly. These findings indicate that students that have not felt the need to seek mental healthcare experience lower levels of depressive, anxiety, burnout, and stress symptoms than those that do feel the need to seek mental healthcare. They also indicate that there is no significant difference for students that wanted to seek healthcare between if they received it or not.

Table 7

Post Hoc Comparisons Between Differing Mental Healthcare Groups

	Mean difference	Confidence Interval		P value
		Lower Bound	Upper Bound	
PHQ-9				
Yes/Yes vs Yes/No	1.43	-1.25	4.10	0.418
Yes/Yes vs No/No	5.64*	1.65	9.63	0.003
Yes/No vs No/No	4.21*	0.03	8.40	0.048
GAD-7				
Yes/Yes vs Yes/No	-0.991	-3.16	1.18	0.527
Yes/Yes vs No/No	3.70*	0.47	6.94	0.021
Yes/No vs No/No	4.69*	1.30	8.09	0.004
CBI				
Yes/Yes vs Yes/No	1.34	-5.53	8.21	0.889
Yes/Yes vs No/No	12.97*	2.73	23.22	0.009
Yes/No vs No/No	11.64*	0.89	22.38	0.030
PSS-10				
Yes/Yes vs Yes/No	0.05	-3.04	3.14	0.999
Yes/Yes vs No/No	7.31*	2.71	11.91	<0.001
	Mean difference	Confidence Interval		P value
		Lower Bound	Upper Bound	
PSS-10				
Yes/No vs No/No	7.26*	2.44	12.09	0.001
DAST-10				
Yes/Yes vs Yes/No	0.03	-0.45	0.51	.987
Yes/Yes vs No/No	-0.41	-1.13	0.30	0.355
Yes/No vs No/No	-4.5	-1.19	0.30	0.337
AUDIT				
Yes/Yes vs Yes/No	0.39	-1.91	2.70	0.913
Yes/Yes vs No/No	2.02	-1.42	5.45	0.347
Yes/No vs No/No	1.62	-1.98	5.22	0.535

Students also experienced many barriers in seeking help, both in general and within their university's mental health services. For students that have wanted to seek help but have been unable to, difficulties that they have encountered can be seen in Table 8. There were 228 replies across 41 individuals for an average of 5.6 barriers to care per person. Half of the written replies as other were to do with dual relationships or conflict of interest in accessing support from people that you will likely come across again.

Table 8

Barriers to accessing mental healthcare

Barrier	n
Financial barriers	66
Time barriers	52
Lack of service/availability	44
Stigma	17
None	16
Lack of knowledge about available resources	10
Cultural differences	10
Other	9
Difficulty with transport	4

Barriers to accessibility of university mental health services can be seen in Table 9. There were 212 answers across 117 respondents for an average of 1.8 barriers to accessibility per person. Almost all the other responses were to do with conflict of interest or preservation of privacy with staff or other students staffing them and wanting to avoid the stigma of being seen using those services.

Table 9

Barriers to accessing university mental healthcare

Barrier	n
Lack of service/availability	45
Lack of knowledge about available resources	27
None	32
Time barriers	26
Centre only providing triage or limited service	25
Other	19
Practicum students from programme staffing center	12
Financial barriers	10
Stigma	9
Cultural differences	3
Difficulty with transport	3
Not allowed to use these services	1

Chapter Six: Discussion

Overview

The current study sought to collect information pertaining to the mental health of trainee psychologists within NZ and the barriers that they experience when attempting to access mental healthcare. It reflects similar findings in other samples that show that trainee psychologists experience high levels of psychological distress when compared to the general population. This chapter begins with a summary of the findings, followed by a more detailed discussion of each factor.

Sample Characteristics

The primary demographic characteristics of the sample were that they were female (90%) and NZ European (66.4%), studying clinical psychology (68.9%), and non-LGBTQIA+ (75%). While the sample represents the common features of the industry, some features are over or underrepresented. Demographics for registered psychologists in NZ report approximately 77% female (FigureNZ, 2018; Psychology Workforce Task Group, 2016), 90% Caucasian (Psychology Workforce Task Group, 2016), and 65.8% studying clinical psychology. This sample was found to consist of a higher proportion of females, less NZ Europeans with more Māori (10.7% instead of 3% (Psychology Workforce Task Group, 2016)), and very similar breakdowns to the degrees that were enrolled in during recruitment; 68.9% in the clinical sample with 65.8% in the population, 21.3% in the general sample with 23.4% in the population, 9% in the educational sample with 6.7% in the population and .8% in the counselling sample with 4% in the population. While the common features of the industry population are broadly represented, the sample has some differences in proportions seen in the workforce. It is possible that rates of distress reported in this study are higher than the real rates, given that this study has higher rates of females and ethnic minorities, specifically Māori, both of which are reported to experience higher rates of distress than males or NZ Europeans.

There were 122 responses, which made up 32.8% of applicable students at the time of recruiting. This is more than seen by Tay et al. (2018) and Victor et al. (2022) who saw 19% and 22.8% response rates respectively, but less than Park et al. (2021) who had a 60.8% response rate, albeit within the same graduate programme at the same university.

Depression

Results from the 2018 New Zealand Mental Health Monitor (Wilson & Nicolson, 2020) show that 9% of the population have depression. Relative to this, the sample experienced statistically significant higher levels of depression, with 37.7% of the current study reporting depression. It is important to note that the proportion of New Zealand's population experiencing mental distress continues to rise every year (Ahern & Manathunga, 2003; Wilson & Nicolson, 2020), and that the numbers have been rising since 2011 when the New Zealand Health Surveys started getting published yearly. In addition, COVID-19 lockdowns saw approximately one-third of the population seeing a marked increase in psychological distress (Every-Palmer et al., 2020). While these factors may contribute in part to the difference seen, it is unlikely that the entire gap is explained by these. While not statistically significant, ethnic minority and LGBTQIA+ participants reported higher levels of depression than their counterparts. Of the ethnic groups that received more than one reply, Māori had on average higher rates of depression (10.2) than students that answered as 'other' (9.4), followed by NZ European students (7.7).

Compared to samples of psychology graduate students, the rate of depression of 37.7% is quite similar to other reported studies such as 32.26% (Park et al., 2021), 33% (Peluso et al., 2011), 35.1% (El-Ghoroury et al., 2012) and 39.29% (Rummell, 2015), even with each study utilising a different method of measuring depression.

Anxiety

Results from the 2018 New Zealand Mental Health Monitor (Wilson & Nicolson, 2020) show that 6.4% of New Zealand's population have generalised anxiety. Of the current

sample, 29.5% reported generalised anxiety, which was a statistically significant higher rate of anxiety. The prevalence of anxiety in the current sample was lower than reported findings, with Park et al. (2021) reporting 37.10% and Rummell (2015) reporting 49.11% within their respective samples. Ethnic minority students reported a statistically significant difference in anxiety over NZ European students. Of the ethnic groups that received more than one reply, Māori had on average higher rates of anxiety (8.9) than students that answered as 'other' (7.9), followed by NZ European students (6.4). LGBTQIA+ participants also reported higher levels of anxiety than non-LGBTQIA+ participants, although this was statistically insignificant.

Stress

The findings of the current study are markedly higher than Park et al.'s (2021) findings, which showed 66.13% of respondents scoring as normal or mild levels of stress, and 33.87% scoring as moderate, severe, or extremely severe. In the current study, 21.3% of participants responded as low levels of stress, and 78.7% responding as moderate or high levels of stress, appearing to experience higher levels of stress. It should be noted again that different scales were used, however the disparity in results may reflect a genuine difference in levels of perceived stress by students.

The stressors experienced by participants were consistent with previous findings in the literature (El-Ghoroury et al., 2012; Oswalt & Riddock, 2017; Park et al., 2021; Rummell, 2015). Course load, managing time and work life balance, and finances were common as stressors for students. Rates of employment outside of university obligations may give some insight into the financial stress that participants are experiencing. 49.1% of participants are employed part-time, while 5.8% of students are employed full-time.

Ethnic minority students reported a statistically significant difference in stress over NZ European students. Of the ethnic groups that received more than one reply, Māori had on average higher rates of stress (21.5) than students that answered as 'other' (20.6),

followed by NZ European students (18.4). LGBTQIA+ participants also reported higher levels of stress than non-LGBTQIA+ participants, although this was statistically insignificant.

Burnout

Within the current study, 38.5% of the current sample displayed burnout. However, this is a summed total of the subscales that are used. When looking at the individual subscales, 69.7% of the sample displayed personal burnout, 85.2% of the sample displayed work burnout, and 15.5% of the sample displayed client burnout. The difference can potentially be explained given the varied progress through degree some of the students may have not encountered practical placements yet, as well as everyone being relatively early in their careers so no one having worked extensively with clients yet regardless. Compared to burnout reported in Park et al. (2021; 59.97% with burnout), the current sample is lower. However, Park et al. (2021) used a different scale compared to the one that was used in the current study, hence the differences being attributable to the different scale being used rather than any differences in the sample. The exhaustion subscale that Park et al. (2021) used is quite strongly correlated with the personal burnout and work burnout subscales used in the current study, and their sample had 79.03% of participants scoring above cut-off in that subscale which is not dissimilar to the 69.7% and 85.2% respectively that were found in the current study.

LGBTQIA+ participants reported a statistically significant difference in burnout over non-LGBTQIA+ participants. Ethnic minority participants also reported higher levels of stress than NZ European participants, although this was statistically insignificant. Of the ethnic groups that received more than one reply, Māori had on average higher rates of burnout (50.1) than students that answered as ‘other’ (46.9), followed by NZ European students (44.7).

Alcohol consumption

33.7% of the current sample engaged in hazardous alcohol consumption, as determined by a score of 8 or higher on AUDIT. Using the same measure, the New Zealand Health Survey 2021/2022 (Ministry of Health, 2022) showed that 18.8% of adults display the same hazardous alcohol consumption, with the rate of hazardous alcohol consumption remaining stable since the New Zealand Health Survey 2015/2016. Compared to alcohol consumption reported in the study by Allen et al. (2022b; 6.7% high risk alcohol consumption), the current study's sample display higher rates of hazardous alcohol consumption. However, Allen et al. (2022b) used a different scale and scoring method compared to the current study. In fact, Allen et al. (2022b) reported that their sample had on average 5.9 drinks a month, with a mean of 2 drinks per drinking occasion. The current study reported drinking approximately 2-4 times a month on average, with a mean of 1 drink per occasion (data not shown). While these differences are due to measurement being used and obfuscate a comparison, in regard to the NZ population the current sample displays almost double the amount of hazardous alcohol consumption, which is a worrying increase.

While there was no statistically significant difference in ethnicity or identity for alcohol consumption, ethnic majority participants reported higher rates of consumption than ethnic minority participants, and LGBTQIA+ participants reported higher rates of alcohol consumption than non-LGBTQIA+ participants. Of the ethnic groups that received more than one reply, Māori had on average higher rates of hazardous drinking (6.8) than NZ European students (6.4), followed by students that answered as 'other' (4.9).

Substance use

Findings showed that 43.4% of the sample in the current study had some level of problems related to drug abuse (excluding alcohol) during graduate school, with 56.6% of the total sample having not used drugs for non-medical reasons or exceeding prescription during their time in graduate school. Of the 43.45%, 86.8% reported low levels of problems related to drug use, meaning that they reported either 0 or 1 problems related to usage. The

other 13.2% reported moderate or substantial levels of problems related to drug abuse, detailing 2 to 4 and 5 to 7 problems relating to drug use respectively.

According to the Cannabis use 2012/2013: New Zealand Health Survey (Ministry of Health, 2015), cannabis consumption in NZ sits between 11-15% within a 12-month period, with 40% of users using it to self-medicate pain or other medical ailments, such as anxiety, sleep, or depression (Azcarate et al., 2020). Findings from other samples of graduate students showed 20.3% of students having used cannabis within the past year, and 7.1% of students using prescription drugs for nonmedical use within the past year (Allen et al., 2022b). Although the current study did not look at specific drugs being used, it appears that the rate of any usage is higher than in previous studies. 5.7% of the total sample reported moderate or substantial problems related to drug use, which is slightly higher than findings from El-Ghoroury et al. (2012) that reported that 4.1% of their sample of psychology graduate students experienced moderate, significant or severe disruption to their functioning as a result of alcohol or drug use. While it is important to note that the comparisons are marred by differing measurements used looking at differing types of substance, it would appear that the substance use in the current study is higher than the general population and similar samples of graduate students, with a concerning amount of substance use occurring.

While neither LGBTQIA+ or ethnic minority participants had statistically significant higher rate of substance use than their counterparts, both of them reported higher rates of substance use. Of the ethnic groups that received more than one reply, students that answered as ‘other’ had the highest rate of substance use (0.851) when compared to Māori (0.846), followed by NZ European students (0.747).

Suicidal Behaviours

Compared to the levels of suicidality and self-injurious behaviour reported by Garcia-Williams et al. (2014), the current sample experienced considerably higher rates of suicide planning (7.4% vs 2.3%) and self-harm (7.4% vs 1.7%), and similar rates of suicidal ideation

(7.4% vs 7.3%) and lifetime suicide attempts (9.0% vs 9.9%). Hobaica et al. (2021) reported higher rates of ideation at 16.8% and lower rates of self-harm at 5.7%. Some of the variation will be due to questions being worded slightly differently, but the rate of non-suicidal self-injury over the previous two weeks at time of response in the current sample is alarmingly high.

Sleep

The average duration of sleep, in hours per night, was reported in the current sample to be 7.1 hours, with 28.1% getting less than 7 hours which is the least amount of recommended sleep for 18- to 64-year-olds (Ministry of Health, 2021b). 20.5% of the current sample rated their sleep quality as very poor or poor, 41.8% rated it as average and 37.7% rated their sleep as good or very good. The findings are consistent with population data within NZ, with the New Zealand Health Survey 2021/2022 (Ministry of Health, 2022) reporting that the average sleep duration in hours per night was 7.3, with 25.7% of adults getting less sleep than recommended. The results are not too dissimilar to those of Allen et al. (2021) that reported in graduate students that there was an average sleep duration of 6.4 hours, with 51% getting less than the recommended amount of sleep. 38% of Allen et al. (2021) rated their sleep quality as fairly poor or very poor with 62% rating their sleep quality as fairly good or very good.

Access to Healthcare

Results from the New Zealand Health Survey 2021/2022 (Ministry of Health, 2022) show that 16.2% of adults aged 15-24 and 15.6% of adults aged 25-34 in NZ have an unmet need for professional mental healthcare regarding their mental health or substance use. Within the current sample, 34.4% of students reported that they wished to visit a mental health professional during their graduate education but did not result in seeing anyone, as well as 11.8% not wishing to see anyone, and 53.8% wanting to and eventuating in seeing someone. The prevalence of students wanting to but not seeing a mental health professional

is sitting between reported rates of 20% (Stecker, 2004) and 36.1% (Hobaica et al., 2021). The primary barriers to care experienced by participants when seeking professional help outside of their university were financial barriers, time barriers and a lack of service and availability, which is the same reported as Hobaica et al. (2021) and similar to El-Ghoroury et al. (2012). The barriers to care with using university mental health services with the top two selected options being lack of availability and lack of knowledge about services, with the third most common option being no issues with university services. Hobaica et al. (2021) reported in their sample that their most common barriers to care were fellow practicum students working and triage or limited services. The findings in the current study are promising, given the number of students finding no issue with the university services and the barriers being some of the easier ones to be able to overcome.

Supervisor relationship

A correlation revealed that the supervisory relationship had a very weak negative relationship with drug use, a weak negative relationship with stress and was not significantly related to any of the other main mental health or alcohol consumption variables. These findings are considerably smaller than findings from other studies. This could be down to the questions used to assess the quality of the supervisory relationship, or there could genuinely be no effect.

Findings from Park et al. (2021) show that 19.35% of participants rated their relationship with their supervisor as one of their three most stressful aspects of graduate school. There is a likelihood that as in Park et al. (2021), the majority of students enjoy their relationship with their supervisor, while a minority of students find it to be one of the worst parts of graduate school. While the current study did not rank order stressors, 9.8% of participants rated their relationship with their supervisor as negative, finding similar trends of the majority of students having good relationships with their advisors and a minority perceiving the relationship to be disproportionally burdensome (Devine & Hunter, 2017; Pyhältö et al., 2012; Rummell, 2015).

Limitations

The current study has several limitations through which the results need to be interpreted.

Firstly, the study was cross-sectional in design with data collection occurring over 56 days primarily in September 2022. The mental health of students could be prone to fluctuation over the course of the year, but the results will reflect how they were during this specific period. In a similar fashion, questions were often in the context of “in the last two weeks” or “in the last month”, and so answers might not be representative of the entire graduate school experience. Also, given the nature of the cross-sectional design used and the analysis conducted, there are no causal inferences drawn.

Secondly, the sample size generated some data that contained outliers and was not normally distributed. While the outliers were legitimate answer, they may have served to increase the error variance (Kovach & Ke, 2016), skewing the results towards rates that are higher than actuality. Additionally, due to limited numbers of ethnic minority and LGBTQIA+ participants, all ethnic minorities and LGBTQIA+ participants were grouped into the same group for analysis and as such statistical comparisons for different ethnic or LGBTQIA+ groups were not able to be made.

Thirdly, some of the questions on the survey were potentially vague which could have resulted in answers that were interpreted in a dissimilar way between participants. For example, the questions regarding relationship with supervisor did not specify which supervisor, as some participants could have multiple academic and clinical supervisors at the time of answering. While the term was intentionally not defined as to not exclude participants that had only one supervisor or the other at the time of answering, there is no way of knowing for sure how the question was interpreted.

Finally, the study relied on self-report measures that are prone to bias in response. Additionally, participation bias cannot be ruled out. The survey could have looked to expand

on areas in a more detailed manner, such as specific substances used, however the survey was already quite long and while responses did not taper off towards the end which would have been indicative of survey fatigue, 22 answers did have to be deleted for not answering at least one section. Making the survey longer would have likely had further impact on participation rate.

Future directions

These results add to expanding literature regarding heightened mental health concerns for trainee psychologists. As the quantitative evidence develops and improves, employing either longitudinal or qualitative methodology to better understand this as an issue within NZ. Longitudinal research could even span the entire academic journey to provide insight into the stressors that are experienced. Supportive factors and personality factors could also be assessed, providing for causality to be made between variables of interest. Given the smaller amount of trainee psychologists at any given time, qualitative research that is anonymised could provide deeper insight from a student's perspective into issues with tertiary institutions and training programmes than could be gleaned from internal feedback within those systems.

While the differences in the mental health, alcohol consumption and substance use for LGBTQIA+ vs non-LGBTQIA+ and NZ Europeans vs ethnic minorities were mostly insignificant, the higher rates being reported by LGBTQIA+ participants and ethnic minorities draws attention to future research continuing to examine this difference within graduate communities. When comparing between ethnic groups, Māori had higher rates depression, anxiety, stress, burnout, and alcohol consumption than their peers. These rates are worrying, and warrant further exploration as how to best support Māori students through psychology training.

A question that arises from this study is how do we improve the mental health of those that are training to be psychologists? especially given the role that they will play in

serving those seeking mental healthcare once practicing. Future research could direct some attention towards institutional factors that work to worsen stress and impede the ability to seek for help, of which qualitative research could be beneficial. Hand in hand with this, it would be beneficial for future research to examine interventions that could be implemented that would stand to benefit students as they study. More attention should also be directed towards faculty and their well-being, to see if there if they have an impact on student's well-being from their own experiences training and practicing.

Implications

The findings of this study should be of interest to tertiary institutions and their training programmes. The results highlight high levels of depression, anxiety, stress, burnout, and suicidal behaviour among trainee psychologists, as well as alcohol consumption. The Vice-Chancellor of Massey University Jan Thomas once said that "it is our [tertiary institutions] responsibility to support them [students] by any means we can, to ensure they are successful in overcoming the challenges they face and reap the benefits offered by higher education" (J. Thomas, 2021).

While graduate psychology training programmes will always be rigorous and demanding in nature, given the main stressors among the sample were related to the course load and work/life balance for students, programmes should act to ensure that the workload and expectations being placed upon the students are as reasonable as possible while being within the professional requirements demanded of that training programme. Attempting to balance the courseload evenly across the course of the year and degree, as well as ensuring that the assessments and requirements are not excessive in nature while providing flexibility where required could help in reducing avoidable distress among trainees.

When attempting to access university healthcare, students pointed out that primary barriers are that there is a lack of service and knowledge of services provided. When attempting to contact professionals outside of university services, students directed attention

to financial and time barriers as the main constraints on accessing healthcare. Finances are important, as the cost of living in NZ continues to increase (Szkody et al., 2023), students can become more stretched for money, unable to seek help, and must take on additional work to pay for the cost of living, adding additional stress on top of their existing workload. Increasing scholarship opportunities for students could aid in tempering this negative cycle. Psychology programmes should aim to ensure that students are able to access care through services provided by the university that are not excessive in wait time, and also pose no conflict of interest, as well as ensuring the students are well informed as to the services that are available to them, as failing to do so and making it difficult to find what resources are available can impede a student's ability to seek care.

Conclusion

The current study supports the idea that a significant portion of trainee psychologists have poor mental health, which is especially concerning given the sample of participants, and the knowledge and resources of mental health that they should have access to.

The participants reported moderate rates of depression, anxiety, burnout, and alcohol consumption between 30 and 40 percent. Almost 80% of participants reported levels of stress that was impacting their functioning. Substance use was reported at 5.7%, and self-harm over the duration of the current degree was reported at 7.4% with 29.5% experiencing ideation. LGBTQIA+ and ethnic minority students, particularly Māori, are carrying this disproportionally, reporting higher rates across almost every mental health measure, alcohol consumption, or substance use variable. Students also reported on a range of barriers that they experience when attempting to seek help that significantly impeded that process.

The findings of the study demonstrate a need for training programmes, institutions, and the government to work to prioritise mental health within tertiary institutions so that the mental health workforce of NZ can be supplemented with new psychologists that are at their best.

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Appendix A: Survey

Start of Block: Information page

Mental health problems and support for trainee psychologists in accredited training programmes

Information Sheet

My name is Theo Bennett and as part of my master's Thesis in Psychology, I am doing research into mental health problems and supports that are experienced by postgraduate psychology students that are currently completing accredited training programmes in New Zealand for registration in psychology.

Project Description and Invitation

The impact of postgraduate education on mental health has been identified as a high-risk factor for developing psychological distress. Although research into this area has been ongoing, the unique experiences of postgraduate students have been neglected as a lot of research has taken place with mixed groups of undergraduate and graduate level students. Additionally, postgraduate psychology students in particular have been overlooked as a group that can have a unique education experience given their training in psychopathology, assessment and intervention. The findings of this research would contribute to the understanding of mental health in postgraduate psychology students. Results from this research can be used by tertiary providers to be able to strengthen their approach to student well-being and support.

Invitation and eligibility to participate

You must be currently enrolled for one of the following degrees at one of the New Zealand universities:

AUT

PGDipCounsPsych

PGDipRehabPsych

Massey University

DClinPsych

MClinPsych

PGEdDevPsych

PGDipPsychPrac

University of Auckland

DClinPsych

PGDipAppPsych(ABA)

PGDipClinPsych

PGDipHlthPsych

PGDipChFamPsych

PGDipClinPsyc

University of Canterbury

PGDipCHFamPsych

PGDipClinPsyc

University of Otago

PGDipCIPs

University of Waikato

PGDipPsych(Clin)

PGDipPracPsych(ABA)

PGDipPracPsych(Comm)

Victoria University of Wellington

PGDipClinPsych

PGDipEPP

What would you be asked to do?

If you wish to take part, you can follow the provided link to the survey. It is recommended that you do it in a quiet environment where you are unlikely to be disturbed. It will take approximately 15 minutes to complete. The main survey will be completely anonymous. At the end, you will be able to enter an email address to go into a draw for one of 12 x NZD$50 Countdown supermarket vouchers in recognition of your time.

Data Management

Your confidentiality and privacy is important and therefore you will not be asked your name or identifying information at any point in the main survey. Upon completion of the survey, you will have the option to fill out a separate survey that asks if you wish to participate in a prize draw and if you would like to receive a copy of the information resulting from the research project, both of which will ask for identifying information. This secondary survey can not be linked to the main survey. All data will be stored in a secure cloud system, with any downloaded files stored on a local password protected computer.

Participant's Rights

You are under no obligation to accept this invitation. If you decide to participate, you have the right to:

Decline to answer any particular question

Withdraw from the study at any time up to the submitted completion of the survey. If you change your mind, you can stop answering the survey at any point

Ask any questions about the study at any time during participation

Provide information on the understanding that your name will not be used unless you give permission to the researcher

Be given access to a summary of the project findings when it is concluded

Contact information

If you have any questions or queries regarding this project, please don't hesitate to contact the following:

Researcher

Theo Bennett

School of Psychology

Massey University

Auckland

New Zealand

Email: theo.bennett.1@uni.massey.ac.nz

Supervisor

Associate Professor Matthew Shepherd

School of Psychology

Massey University

Auckland

New Zealand

+64 9 213-6094

Email: M.Shepherd1@massey.ac.nz

This project has been reviewed and approved by the Massey University Human Ethics Committee: Northern, Application NOR 22/21.

If you have any concerns about the conduct of this research, please contact A/Prof Fiona Te Momo,

Chair, Massey University Human Ethics Committee: Northern,

telephone 09 414 0800, x 43347, email humanethicsnorth@massey.ac.nz

End of Block: Information page

Start of Block: Support pages

SUPPORT SERVICES

The survey may raise issues that you find particularly upsetting. If this is the case, it is encouraged that you reach out to professional help such as your own university's student counselling service, or your personal support systems.

Mental health services – Where to get help

There's a range of resources and services available to help including phone and online services and information, as well as face to face support.

Most services are free, and provide information and confidential advice from trained

professionals.

If you're told that there is a waiting time for a service, please still reach out and make contact.

Other supports can be put in place – ask what you can try in the meantime.

Helplines

Need to talk? Free call or text 1737 any time.

Talk to a trained counsellor or call:

The Depression helpline – 0800 111 757

Alcohol drug helpline – 0800 787 797

Gambling helpline – 0800 654 655

Healthline – 0800 611 116 – to get help from a registered nurse 24/7.

Lifeline – 0800 543 354

Samaritans – 0800 726 666

End of Block: Support pages

Start of Block: Consent

Consent

By completing and submitting this survey, I consent to the following:

I confirm that I have read and understood the Participant Information Sheet.

I confirm that I have had the opportunity to ask questions and the researcher has answered any questions to my satisfaction

I understand that my participation is voluntary and I am able to withdraw from the project at any time before completion of the survey.

I understand that any information recorded in the research will remain confidential.

I consent to the use of the data in research, publication, sharing and archiving.

Consent I have read and understood the information sheet for this study and consent to collection of my responses.

(Please click on the 'Yes' choice if you wish to proceed.)

Yes

No

End of Block: Consent

Start of Block: Demographics

Dem_hdr **Section 1 - Demographics**

Age What is your age?

(A number in years)

_____

Gender What was your gender assigned at birth?

Male

Female

Gender_Ident To what gender do you currently identify?

Male

Female

Nonbinary

Other _____

Sex_orient What is your sexual orientation?

Heterosexual

Homosexual

Bisexual

Queer

Asexual

Other _____

Page Break

Ethnicity Which ethnic group do you belong to? *(If your answer includes more than one ethnic group, please indicate which one you consider to be your primary ethnicity).*

NZ European

Māori

Samoan

Cook Island Māori

Tongan

Niuean

Chinese

Indian

Other _____

Empl_status Employment Status

(outside of course related work e.g. internship)

Not currently employed

Employed part time

Employed full time

Page Break

Intl_stud Do you hold...

New Zealand Citizenship

Permanent Residence

Other _____

Semester_count How many semesters through your program are you?

1

2

3

4

5

6

Other _____

Study_status Are you studying part-time or full-time?

Part-time

Full-time

Page Break

Marital What is your marital status?

Single

In a relationship

Married

Divorced/Widowed/Separated

Children Do you have children?

Yes

No

Child_No If yes, how many children?

_____

Page Break

Psych_Regn What pathway are you taking to registration as a psychologist?

Clinical Psychology

General Psychology

Educational Psychology

Counselling Psychology

Page Break

Pre_MH_prob Did you have a pre-existing mental health problem before entering Graduate school?

Yes

No

MH_prob If yes, what mental health problem?

_____

MH_meds Are you currently on prescribed medication to do with your mental health?

Yes

No

End of Block: Demographics

Start of Block: Section 2

Sect2_hdr **Section 2**

Sect2 Over the last 2 weeks, how often have you been bothered by any of the following problems?

	Not at all	Several days	More than half the days	Nearly every day
Little interest or pleasure in doing things				
Feeling down, depressed or hopeless				
Trouble falling or staying asleep, or sleeping too much				
Feeling tired or having little energy				

Poor appetite or overeating	
Feeling bad about yourself - or that you are a failure or have let yourself or your family down	
Trouble concentrating on things, such as reading the newspaper or watching television	
Moving or speaking so slowly that other people could have noticed? Or the opposite — being so fidgety or restless that you have been moving around a lot more than usual	

Thoughts that you would be better off dead or of hurting yourself in some way

Page Break

Sect2_10 How difficult have these problems made it for you to do your work, take care of things at home, or get along with other people?

Not at all

Somewhat difficult

Very difficult

Extremely difficult

End of Block: Section 2

Start of Block: Section 3

Sect3_hdr **Section 3**

Sect3 Over the last 2 weeks, how often have you been bothered by any of the following problems?

	Not at all	Several days	More than half the days	Nearly every day

Feeling nervous, anxious or on edge
Not being able to stop or control worrying
Worrying too much about different things
Trouble relaxing
Being so restless that it’s hard to sit still
Becoming easily annoyed or irritable
Feeling afraid as if something awful might happen

End of Block: Section 3

Start of Block: Section 4

Sect4_hdr **Section 4**

Sect4a

The questions in this scale ask you about your feelings and thoughts during the last month.

In each case, please select the option which indicates how often you felt or thought a certain way.

	Always	Often	Sometimes	Seldom	Never/almost never
How often do you feel tired?					
How often are you physically exhausted?					
How often are you emotionally exhausted?					
How often do you think: “I					

can’t take it anymore”?	
How often do you feel worn out?	
How often do you feel weak and susceptible to illness?	

Page Break

Sect4b

The questions in this scale ask you about your feelings and thoughts during the last month.

In each case, please select the option which indicates to what level to which you agree.

	To a very high degree	To a high degree	Somewhat	To a low degree	To a very low degree
Is your work emotionally exhausting?					
Do you feel burnt out because of your work?					
Does your work frustrate you?					

Page Break

Sect4c

The questions in this scale ask you about your feelings and thoughts during the last month. In each case, please select the option which indicates how often you felt or thought a certain way.

	Always	Often	Sometimes	Seldom	Never/almost never
Do you feel worn out at the end of the working day?					
Are you exhausted in the morning at the thought of another day at work?					
Do you feel that every working hour is tiring for you?					
Do you have enough energy for					

family and friends during leisure time?	

Page Break

Sect4d The questions in this scale ask you about your feelings and thoughts during the last month.

In each case, please select the option which indicates to what level to which you agree.

	To a very high degree	To a high degree	Somewhat	To a low degree	To a very low degree
Do you find it hard to work with clients?					
Do you find it frustrating to work with clients?					
Does it drain your energy to work with clients?					
Do you feel that you give more than you get back when you work with clients?					

Page Break

Sect4e

The questions in this scale ask you about your feelings and thoughts during the last month. In each case, please select the option which indicates how often you felt or thought a certain way.

	Always	Often	Sometimes	Seldom	Never/almost never
Are you tired of working with clients?					
Do you sometimes wonder how long you will be able to continue working with clients?					

End of Block: Section 4

Start of Block: Section 5

Sect5_hdr **Section 5**

Sect5

The questions in this scale ask you about your feelings and thoughts during the last month. In each case, please select the option which indicates how often you felt or thought a certain way.

	Never	Almost never	Sometimes	Fairly often	Very often
In the last month, how often have you been upset because of something that happened unexpectedly?					
In the last month, how often have you felt that you were unable to control the important					

things in your life?	
In the last month, how often have you felt nervous and stressed?	
In the last month, how often have you felt confident about your ability to handle your personal problems?	
In the last month, how often have you felt that things were going your way?	
In the last month, how often have you found that you could not cope with all the	

things that you had to do?	
In the last month, how often have you been able to control irritations in your life?	
In the last month, how often have you felt that you were on top of things?	
In the last month, how often have you been angered because of things that happened that were outside of your control?	
In the last month, how often have you	

felt difficulties were piling up so high that you could not overcome them?

Page Break

Sect5_stress What aspects of your life do you find stressful at the moment?

Select all that apply

University course load

Work

Career planning

Finances

Time management and multitasking

Health issues

Domestic and international current events

Children

Partner relationship

Extended family

Living arrangements

Discrimination

Grief

Lack of social support

Conflict with University

Unclear programme expectations

Other _____

End of Block: Section 5

Start of Block: Section 6

Sect6_hdr **Section 6**

Sect6_1 How often during your current degree have you thought of taking your own life?

Never

Seldom

Sometimes

Often

Sect6_2 How often during your current degree have you made suicide plans?

Never

Seldom

Sometimes

Often

Sect6_3 How often during your current degree have you engaged in self-harm without intent of suicide?

Never

Seldom

Sometimes

Often

Sect6_4 Have you ever attempted suicide?

Yes

No

End of Block: Section 6

Start of Block: Section 7

Sect7_hdr **Section 7**

Sect7_1 Have you used drugs (not including alcohol) either for non-medical use or in excess of a medical prescription?

Yes

No

Page Break

Sect7 The following questions concern information about your possible involvement with drugs not including alcoholic beverages during the past 12 months.

Carefully read each statement and decide if your answer is “Yes” or “No”. Then, select the appropriate response beside the question.

In the statements “drug abuse” refers to (1) the use of prescribed or over the counter drugs in excess of the directions and (2) any non-medical use of drugs.

The various classes of drugs may include: cannabis (e.g., marijuana, hash), solvents, tranquillizers (e.g., Valium), barbiturates, cocaine, stimulants (e.g., speed), hallucinogens (e.g., LSD) or narcotics/opiods (e.g., heroin, fentanyl, oxycodone - oxyz). Remember that the questions do not include alcoholic beverages.

If you have difficulty with a statement, then choose the response that is mostly right.

	No	Yes
Do you abuse more than one drug at a time?		
Are you unable to stop abusing drugs when you want to?		
Have you ever had blackouts or flashbacks as a result of drug use?		
Do you ever feel bad or guilty about your drug use?		

Does your spouse (or parents) ever complain about your involvement with drugs?
Have you neglected your family because of your use of drugs?
Have you engaged in illegal activities in order to obtain drugs?
Have you ever experienced withdrawal symptoms (felt sick) when you stopped taking drugs?
Have you had medical problems as a result of your drug use (e.g. memory loss, hepatitis, convulsions, bleeding)?

End of Block: Section 7

Start of Block: Section 8

Sect8_hdr **Section 8**

Sect8_1 How often do you have a drink containing alcohol?

Never

Monthly or less

2-4 times a month

2-3 times a week

4 or more times a week

Page Break

Sect8_2 How many standard drinks containing alcohol do you have on a typical day when drinking?

1 standard drink is equivalent to 330ml beer at 4% alcohol, 100ml wine at 12.5% alcohol, or 30ml of spirits at 42% alcohol

1 or 2

3 or 4

5 or 6

7, 8 or 9

10 or more

Page Break

Sect8

These questions are a self-assessment of alcohol consumption.

Answer as best suits.

	Never	Less than monthly	Monthly	Weekly	Daily or almost daily
How often do you have six or more drinks on one occasion?					
During the past year, how often have you found that you were not able to stop drinking once you had started?					
During the past year, how often have you failed to do what was					

normally expected of you because of drinking?
During the past year, how often have you needed a drink in the morning to get yourself going after a heavy drinking session?
During the past year, how often have you had a feeling of guilt or remorse after drinking?
During the past year, have you been unable to remember what happened the

night before because you had been drinking?

Page Break

Sect8_9 Have you or someone else been injured as a result of your drinking?

No

Yes, but not in the past year

Yes, during the past year

Sect8_10 Has a relative or friend, doctor or other health worker been concerned about your drinking or suggested you cut down?

No

Yes, but not in the past year

Yes, during the past year

End of Block: Section 8

Start of Block: Section 9

Sect9_hdr **Section 9**

Sect9_1 How many hours on average do you think you sleep per night?

_____

Sect9_2 On average, how many times do you wake up during the night?

0

1

2

3

4+

Sect9_3 In your opinion, how would you rate your quality of sleep?

Very good

Good

Average

Poor

Very poor

End of Block: Section 9

Start of Block: Section 10

Sect10_hdr **Section 10**

Sect10_1 How would you rate the overall quality of your relationship with your supervisor(s)?

Very poor

Poor

Fair

Good

Excellent

Sect10_2 Your relationship with your supervisor(s) is important to you.

Disagree

Somewhat disagree

Neither agree or disagree

Somewhat agree

Agree

Page Break

Sect10_3 Your supervisor(s) provide enough interaction to maximize your learning and understanding.

Disagree

Somewhat disagree

Neither agree or disagree

Somewhat agree

Agree

Sect10_4 How satisfied are you with the quality of the mentorship you receive from your supervisor(s)?

Not at all satisfied

Slightly satisfied

Moderately satisfied

Very satisfied

Completely satisfied

Sect10_5 Do you feel that your supervisor(s) are committed and involved to a desired level in your education?

Disagree

Somewhat disagree

Neither agree or disagree

Somewhat agree

Agree

End of Block: Section 10

Start of Block: Section 11

Sect11_hdr **Section 11**

Sect11_1 During postgraduate education, have you seen a therapist, counsellor, or psychologist?

Yes

No

Sect11_2 During postgraduate education, have you wanted to see a therapist, counsellor, or psychologist?

Yes

No

Page Break

Sect11_3 If you wanted to see a therapist, counsellor or psychologist but have not, what difficulties have you experienced with achieving that goal?

Lack of knowledge about available resources

Financial barriers

Time barriers

Lack of service/availability

Stigma

Cultural differences

Difficulty with transport

⊗None

Other _____

Page Break

Sect11_4 What difficulties have you experienced with your university's mental health services?

Lack of knowledge about available resources

Not allowed to use these services

Practicum students from program staffing centre

Centre only providing triage or limited service

Financial barriers

Time barriers

Lack of service/availability

Stigma

Cultural differences

Difficulty with transport

⊗None

Other _____

End of Block: Section 11

Start of Block: End Block

Ta Tēnā koe

Thank you so much for spending your time to participate in this research.

Selecting the 'Prize draw/Results' option and clicking ‘Submit’ will redirect you to another survey, upon which you can participate in a prize draw in a show of appreciation for your time and to give an email if you would wish to receive a summary of findings upon completion of the research. It should be stressed that the contact details provided in the second survey are not linked to answers given in this current survey.

Txfer_draw **Entry for supermarket Prize Draw or Request a summary of results**

As an appreciation for your participation, we are offering you the chance to win one of 12 x $50 Countdown supermarket vouchers.

You may also request a summary of results at the completion of the analysis.

If you wish to enter the draw, or receive the results please select the 'Prize draw/Results' option below, before clicking on the '**Submit**' button to complete this survey and be transferred to a separate webpage to enter your contact details.

Your survey data will still remain anonymous. If you are a winner, we will contact you to arrange delivery of your prize.

Prize draw/Results

Exit

End of Block: End Block